



JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR

Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere

Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in

An Autonomous Institute, with NAAC "A" Grade

Affiliated to DBATU, RTMNU, MSBTE, Mumbai

Department of Civil Engineering

Session 2022-23



VISION

- ❖ To shape professional Leaders of Global Standards in Civil Engineering.

MISSION

- ❖ To provide quality Education and Excellent Learning Environment for the overall development of students.
- ❖ Making sustainable efforts for integrating academics with industry.

1.1.3 Details of courses offered by the institution that focus on employability/ entrepreneurship/ skill development during the year.

Name of the Course	Course Code	Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development
Communication Skills	HU1T001	Regular Session on weekly basis.
CRT	CE6P004	Regular Session on weekly basis.
Innovation and Entrepreneurship Development	CE4T007	Regular Session on weekly basis.
Skill Development	CE6P005	Online Certified Courses such as NPTEL, SWAYAM, Coursera, edX, Udacity, FutureLearn
Internship	CE8P002	Full Semester

employability	
entrepreneurship	
skill development	

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1.2.1 Details of courses introduced across all programmes offered during the year

Branch: Civil Engineering		Branch Code: CE										
1ST Semester												
Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit	
				L	T	P	CA	MSE	ESE/Ext.Pra.	Total		
1	HSMC	HU1T001	Communication Skills	2	0	0	20	20	60	100	2	
2	BSC	MA1T002	Vector Calculus & Probability	3	1	0	20	20	60	100	4	
3	BSC	CE1T002	Engineering Chemistry	3	1	0	20	20	60	100	4	
4	ESC	CE1T003	Engineering Graphics	1	0	0	20	20	60	100	1	
5	HSMC	HU1L001	Communication Skills Lab.	0	0	4	60	0	40	100	2	
6	BSC	CE1L002	Engineering Chemistry Lab	0	0	2	60	0	40	100	1	
7	ESC	CE1L003	Engineering Graphics Lab	0	0	4	60	0	40	100	2	
8			Induction Programme	3 Weeks								
9	ESC	CE1T004	Basic Civil and Mechanical Engineering	2	0	0	10	15	25	50	Audit	

				11	2	10					16
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2nd Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	HSMC	HU2T002	Introduction to Computer programming	2	0	0	20	20	60	100	2
2	BSC	MA2T003	Statistics & Difference Calculus	3	1	0	20	20	60	100	4
3	BSC	CE2T005	Engineering Physics	3	1	0	20	20	60	100	4
4	ESC	CE2T006	Energy and Environment Engineering	3	0	0	20	20	60	100	3
5	HSMC	HU2L002	Introduction to Computer programming Lab	0	0	4	60	0	40	100	2
6	ESC	WS2L001	Workshop Practices	0	0	4	60	0	40	100	2
7	BSC	CE2L005	Engineering Physics Lab	0	0	2	60	0	40	100	1
8		FY2P001	Societal Internship/ Field Training	Report submission						50	1
9	ESC	CE2T007	Basic Electrical and Electronics Engineering	2	0	0	10	15	25	50	Audit
				13	2	10					19
				25							

III Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	HSMC	CE3T001	Civil Engineering - Societal & Global Impact	2	0	0	20	20	60	100	2
2	BSC	CE3T002	Engineering Mathematics-III	2	1	0	20	20	60	100	4
3	ESC	CE3T003	Building Drawing and Drafting	2	1	0	20	20	60	100	3
4	ESC	CE3T004	Mechanics of Rigid bodies	2	1	0	20	20	60	100	4
5	ESC	CE3T005	Energy Science and Engineering	3	0	0	20	20	60	100	3
6	PCC	CE3T006	Basic Geology and Geotechnical Engineering	3	0	0	20	20	60	100	3
7	ESC	CE3L001	Building Drawing and Drafting Lab	0	0	4	60	0	40	100	2
8	ESC	CE3L002	Mechanics of Rigid Bodies Lab	0	0	2	60	0	40	100	1
9	PCC	CE3L003	Basic Geology and Geotechnical Engineering Lab	0	0	2	60	0	40	100	1
10	PROJECT	CE3F004	Internship/Field Visit	0	0	0	0	0	50	50	1
11	MC	CE3T007	Innovation and Entrepreneurship Development	2	0	0	10	15	25	50	AU
				16	3	8					24

IV Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	BSC	CE4T001	Life Science	2	0	0	20	20	60	100	2
2	PCC	CE4T002	Hydrology & Water Resource Engineering	2	1	0	20	20	60	100	3
3	PCC	CE4T003	Concrete Technology & Design of RCC Building Elements	2	1	0	20	20	60	100	3
4	PCC	CE4T004	Solid Mechanics	2	1	0	20	20	60	100	3
5	PCC	CE4T005	Surveying and Geomatics	2	0	0	20	20	60	100	2
6	PCC	CE4T006	Materials, Testing & Evaluation	2	0	0	20	20	60	100	2
7	PCC	CE4L001	Concrete Technology & Design of RCC Building Elements Lab	0	0	2	60	0	40	100	2
8	PCC	CE4L002	Solid Mechanics Lab	0	0	2	60	0	40	100	1
9	PCC	CE4L003	Surveying and Geomatics Lab	0	0	4	60	0	40	100	2
10	PROJECT	CE4F004	Internship/Field Visit II	0	0	0	0	0	50	50	1
11	MC	CE4T007	Universal Human Values	3	0	0	10	15	25	50	AU
				15	3	8					21

V Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	HSMC	CE5T001	Professional Practice, Law & Ethics	2	0	0	20	20	60	100	2
2	PCC	CE5T002	Fluid Mechanics	2	1	0	20	20	60	100	3
3	PCC	CE5T003	Structural Analysis	2	1	0	20	20	60	100	3
4	PCC	CE5T004	Transportation Engineering	3	0	0	20	20	60	100	3
5	OEC	CEOEC1	Open Elective-I	4	0	0	20	20	60	100	4
6	PCC	CE5L001	Fluid Mechanics Lab	0	0	2	60	0	40	100	1
7	PCC	CE5L002	Structural Analysis Lab	0	0	2	60	0	40	100	1
8	PCC	CE5L003	Transportation Engineering Lab	0	0	2	60	0	40	100	1
9	PROJECT	CE5P004	Mini Project & Seminar	0	0	2	60	0	40	100	1
10	PROJECT	CE5F005	Field Visit III	0	0	0	60	0	40	100	1
11	MC	CE5T005	Consumer Affair	2	0	0	10	15	25	50	AU
				15	2	8					20

VI Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	PCC	CE6T001	Design of Steel Structures	2	1	0	20	20	60	100	3
2	PCC	CE6T002	Environmental Engineering	3	0	0	20	20	60	100	3
3	PEC	CE5TE01	Professional Elective I	3	0	0	20	20	60	100	3
4	PEC	CE6TE02	Professional Elective-II	3	0	0	20	20	60	100	3
5	OEC	CEOEC2	Open Elective-II	4	0	0	20	20	60	100	4
6	PCC	CE6L001	Design of Steel Structures Lab	0	0	2	60	0	40	100	1
7	PCC	CE6L002	Environmental Engineering Lab	0	0	2	60	0	40	100	1
8	PROJECT	CE6P003	Mini Project & Seminar	0	0	2	30	0	20	50	1
9		CE6P004	Campus Recruitment Training (CRT)	0	0	2	50	0	0	50	1
10		CE6P005	Skill Development	0	0	2	15	0	35	50	1
11	MC	CE6T004	Research Methodology	2	0	0	10	15	25	50	AU
				17	1	10					21

VII Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	PCC	CE7T001	Engineering Economics, Estimating and Costing	3	0	0	20	20	60	100	3
2	PEC	CE7TE01	Professional Elective III	2	1	0	20	20	60	100	3
3	PEC	CE7TE02	Professional Elective IV	2	1	0	20	20	60	100	3
4	PEC	CE8TE01	Professional Elective V	3	0	-	20	20	60	100	3
5	OEC	CEOEC3	Open Elective-III	4	0	0	20	20	60	100	4
6	PCC	CE7L001	Engineering Economics, Estimation and Costing Lab	0	0	2	60	0	40	100	1
7	PROJECT	CE7P002	Project-1	0	0	6	75	0	75	150	5
8	MC	CE7T002	IPR (Intellectual Property Rights)	2	0	0	10	15	25	50	AU
				16	2	8					22

VIII Semester											
Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	PEC	CE8TE01	Professional Elective VI	3	0	-	20	20	60	100	3
2	OEC	CEOEC4	Open Elective-IV	4	0	-	20	20	60	100	4
3	PROJECT	CE8P001	Project-2	0	0	4	50	0	50	100	3
OR											
4	PROJECT	CE8P002	Internship (Full Semester)	0	0	0	225	-	75	300	10
				7	0	4					10

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SYLLABUS

Course Code: HU1T001

Course Name: Communication Skills

Unit	Content	Duration
I	Communication and Communication Processes Introduction to Communication, Types and functions of Communication, Barriers to Communication and overcoming them, Role of Communication Skills in Society Reading: Introduction to Reading, Barriers to Reading, Types of Reading: Skimming, Scanning, Intensive and Extensive, Strategies for Reading Comprehension. Listening : Importance of Listening, Types of Listening, Barriers to Listening	06 Hrs
II	Study of Sounds in English and Vocabulary Building Introduction to phonetics, Study of Speech Organs, Study of Phonemic Script, Articulation of Different Sounds in English. Vocabulary Building: The concept of Word Formation, Root words from foreign languages and their use in English, Use of prefixes and suffixes from foreign languages in English to form derivatives, Synonyms, antonyms, and standard abbreviations	06 Hrs

III	English Grammar Grammar: Forms of Tenses, Articles, Prepositions, Use of Auxiliaries and Modal Auxiliaries, Sentence Structures, Use of phrases and clauses in sentences, Importance of proper punctuation, Common Errors. Misplaced modifiers	06 Hrs
IV	Professional Verbal Communication Components of an effective talk, Idea of space and time in public speaking, Tone of voice, Body language, Timing and duration of speech, Audio-Visual Aids in speech. Presentation Skills, Group Discussion and Job Interviews	06 Hrs
V	Developing Business Writing Skills, Styles and Practice Writing Emails, Report Writing: Format, Structure and Types, Letter Writing: Types, Parts, Layouts, Writing Job Application Letter and Resume. Nature and Style of sensible Writing and Practice: Describing, Defining, Classifying, Providing examples or evidence, writing introduction and conclusion, Writing Practices: Comprehension, Précis Writing, Essay Writing	06 Hrs

Course Code: CE6L003

Course Name: Campus Recruitment Training (CRT)

Unit	Content	Duration
PART I: QUANTITATIVE ABILITY		
I	Speed Maths Calculation, Number Systems, Ratio & Proportion, Percentage	03
II	Profit – Loss & Discount, Simple Interest & Compound Interest, Simple Equation and Age's	03
III	Averages Mixture & Allegation, Time and work, Time Speed & Distance, Permutation – Combination & Probability.	03
PART II: - REASONING ABILITY		
I	Coding Decoding, Blood Relation, Direction sense, Number Series, Analogy	03
II	Sitting Arrangement, Puzzles.	03

III	Syllogism, Statement course of action, Statement arguments, Statement Assumptions, Miscellaneous Type of Reasoning	03
PART III: - EMPLOYABILITY SKILLS		
I	Presentation Skills: What is a presentation? Essential characteristics of Good presentation. Preparation of presentation: Identify the purpose, Analyze the audience, Design and organize the information, Medium of presentation and Visual aids. Delivering Presentation: rehearsal, body Language, Handling questions, Tips to fight stage fear.	02
II	Job Interview Skills Types of interviews, Focus of interview, dress code, importance of body language. Probable interview questions, Telephonic and video interview, Strategies for success at interview.	02
III	Resume Building Meaning, Difference among Bio-data, Curriculum vitae and Resume. CV writing tips, The content of Resume, Structure of Resume.	02

Course Code: CE4T007

Course Name: Innovation and Entrepreneurship Development

Unit	Content	Duration
I	Innovation: Concept of creativity, innovation, invention, discovery. Methods for development of creativity, convergent & divergent thinking etc. Introduction to Intellectual Property Rights (IPR), Patent and laws related to patents.	06 Hrs
II	Entrepreneurship: Concept of entrepreneurship, its relations in economic developments, Eventuation of concept of entrepreneur, characteristics of an Entrepreneur, Types of entrepreneurs, Qualities of entrepreneur, Factors affecting growth of entrepreneurship	06 Hrs
III	Role of Entrepreneurial Bodies: Theory of achievement, motivation, Medalland"s. Experiment, Women entrepreneurship, Role of SSI, its advantages & limitations, policies governing small scale industries, Procedure to set up small scale industrial unit, Advantages and limitations of SSI.	06 Hrs

IV	Role of Entrepreneurial Support: Factors governing project selection, Market survey, Preparation of project report. Financial, technical & market analysis of project. Entrepreneurial support systems, Role of consultancy organization like, District Industrial Centre, State Industrial Development Corporation, Financial institution, Latest SSI schemes of DIC (to be confirmed from DIC from time to time).	06 Hrs
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VISION	MISSION
To be recognized for excellent engineering, developing global leaders both in educational and research in the domain of computer science and wireless engineering.	<ol style="list-style-type: none"> 1. To create self-learning environment by facilitating leadership qualities, team spirit and ethical responsibilities. 2. To improve department-industry collaboration, interaction with professional society through technical knowledge and internship program. 3. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering.

**Program: B. Tech. in Computer Science & Engineering
5th Semester Computer Science & Engineering**

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit	Teaching Mode
				L	T	P	CA	MSE	ESE	Total		
1	ESC	CS51001	Internet of Things	3	0	0	20	20	60	100	3	PPT, Board, Chalk,
2	PCC	CS51002	TCP/IP	3	0	0	20	20	60	100	3	PPT, Board, Chalk,
3	PCC	CS51003	Design and Analysis of Algorithm	2	1	0	20	20	60	100	3	PPT, Board, Chalk,
4	PCC	CS50001	Open Elective-1	3	1	0	20	20	60	100	4	PPT, Board, Chalk,
5	PEC	CS51E01	Elective -1	3	0	0	20	20	60	100	3	PPT, Board, Chalk,
6	ESC	CS5L004	Internet of Things (Lab)	0	0	2	60	0	40	100	1	PC, PPT
7	PCC	CS5L005	TCP/IP(Lab)	0	0	2	60	0	40	100	1	PC, PPT
8	PCC	CS5L006	Design and Analysis of Algorithm (Lab)	0	0	2	60	0	40	100	1	PC, PPT
9	PROJECT	CS5P007	Mini Project	0	0	0	25	0	25	50	1	PC
10	PROJECT	CS5P008	Field Training/Industrial Visit	0	0	0	30	0	20	50	1	-
11	MC	CS51009	Innovation and Entrepreneurship Development	2	0	0	15	10	25	50	Audit	PPT, Board, Chalk,
				16	2	6	350	110	490	950	21	

Open Elective-1 : OSOS (Open Source Operating System)

Elective-1

Code	Subject
CS5TE01A	Augmented Reality
CS5TE01B	Block Chain
CS5TE01C	3D Printing & Design


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Program: B.Tech. in Computer Science & Engineering

Semester	Course Code	Name of the course	L	T	P	Credits
V	CS5L008	Field Training/ Industrial Visit	0	0	2	1

Prerequisites for the course

1.	Understand the visiting companies shall be relevant and suitable ones to the specialization and academic requirements.
2.	Learning Important tool for attracting investment and technology.

Prior Reading Material/useful links

1.	https://www.quora.com/What-are-some-good-places-for-an-industrial-trip-of-CSE-students
2.	https://www.suas.ac.in/industrial-visit-for-computer-science-and-information-technology-5th-sem-students/

Course Outcomes:

Sr. No	Course Outcome number	CO statement
1	CO1	Students will able to functional opportunity in different sectors.
2	CO2	Students will able to helps to combine theoretical knowledge with industrial knowledge.
3	CO3	Students will able to provide an insight into the real working environment,
4	CO4	Students will able to get to learn a lot of things that will help in their development and also for the future.
5	CO5	Students will able to acquire and apply fundamental principles of science and engineering.

Industrial visits are an integral part of Engineering and acknowledgement of technology upgrades. The purpose of industrial visits for students is to provide technical knowledge with the technological development in the industry and to understand the gap between theoretical and practical knowledge that could be passed in future.

This experience can help students to provide information regarding the functioning of various industries and associated problems and limitations.


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Program: B.Tech. in Computer Science & Engineering

Semester	Course Code	Name of the course	L	T	P	Audit
V	CS5T009	Innovation and Entrepreneurship Development	0	0	0	

Prerequisites for the course

1.	Basics of Universal Human Value and entrepreneurial behaviour.
2.	Knowledge of the social, ethical and culture and Consumer Affairs

Prior Reading Material/useful links

1	https://www.google.co.in/books/edition/Entrepreneurship and Economic Development/deeFDAAAQBAJ?hl=en&gbpv=1&dq=Innovation+and+Entrepreneurship+Development&printsec=frontcover
2	https://www.google.co.in/books/edition/The Role of Innovation and Entrepreneurs/kIZYEAAAQBAJ?hl=en&gbpv=1&dq=Innovation+and+Entrepreneurship+Development&printsec=frontcover
3	https://www.google.co.in/books/edition/Innovation and Entrepreneurship/OiuDBAAAQBAJ?hl=en&gbpv=1&dq=Innovation+and+Entrepreneurship+Development&printsec=frontcover

Course Outcomes:

Sr. No	Course Outcome number	CO statement
1	CO1	Discuss the attitudes, values, characteristics, behaviour, and processes associated with possessing an entrepreneurial mindset and engaging in successful appropriate entrepreneurial behaviour.
2	CO2	Discuss what is meant by entrepreneurship and innovation from both a theoretical and practical perspective, and the role of the entrepreneur in the new enterprise creation process.
3	CO3	Describe the ways in which entrepreneurs perceive opportunity, manage risk, organise resources and add value.
4	CO4	Develop a plan for implementing entrepreneurial activities in a globalised and competitive environment being responsible for the social, ethical and culture issues.
5	CO5	Critique a plan for implementing entrepreneurial activities in a globalised and competitive environment being mindful of the social, ethical and culture issues.

30-
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Syllabus:

Course Contents		Hours
Unit I	Innovation Concept of creativity, innovation, invention, discovery. Methods for development of creativity convergent & divergent thinking etc. Introduction to Intellectual Property Rights (IPR), Patent and laws related to patents.	06
Unit II	Entrepreneurship Concept of entrepreneurship, its relations in economic developments, Eventuation of concept of entrepreneur, characteristics of an Entrepreneur, Types of entrepreneurs, Qualities of entrepreneur, Factors affecting growth of entrepreneurship.	07
Unit III	Role of Entrepreneurial Bodies Theory of achievement, motivation, Medelland's experiment, Women entrepreneurship, Role of SSI, it's advantages & limitations, policies governing small scale industries, Procedure to set up small scale industrial unit, Advantages and limitations of SSI.	06
Unit IV	Role of Entrepreneurial Support Factors governing project selection, Market survey, Preparation of project report. Financial, technical; market analysis of project. Entrepreneurial support systems, Role of consultancy organization like, District Industrial Centre, State Industrial Development Corporation, Financial institution, Latest SSI schemes of DIC (to be confirmed from DIC from time to time.	09
Unit V	Entrepreneurial Thermodynamics, Entrepreneurship and Employment, Start-up Case Studies.	06

Text Books

1.	Entrepreneurship Development, S. S. Khanka, S. Chand Publishers
2.	Creativity Innovation & Entrepreneurship, Zechariah James Blanchard, Needle Rat Business, Publishers.

Reference Books

1.	Innovation and Entrepreneurship, Theory, Policy and Practice By <u>Elias G. Carayannis</u> , <u>Elpida T. Samara</u> , <u>Yannis L. Bakouros</u> · 2014
2.	Institutional Reform for Innovation and Entrepreneurship An Agenda for Europe By <u>Niklas Elert</u> , <u>Magnus Henrekson</u> , <u>Mikael Stenkula</u> · 2017
3.	Creativity and Innovation in Entrepreneurship By <u>S S Khanka</u> · 2021


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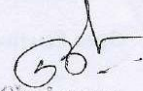
VISION	MISSION
To be recognized for excellent engineering, developing global leaders both in educational and research in the domain of computer science and wireless engineering.	<ol style="list-style-type: none"> 1. To create self-learning environment by facilitating leadership qualities, team spirit and ethical responsibilities. 2. To improve department-industry collaboration, interaction with professional society through technical knowledge and internship program. 3. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering.

Program: B.Tech. in Computer Science & Engineering

6th Semester Computer Science & Engineering

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit	Teaching Mode
				L	T	P	CA	MSE	ESE	Total		
1	PCC	CS6T001	Artificial Intelligence & Robotics	3	0	0	20	20	60	100	3	PPT, Board, Chalk
2	PCC	CS6T002	Neural Networks and Machine Learning	3	0	0	20	20	60	100	3	PPT, Board, Chalk
3	PEC	CS6TE02	Elective -II	3	0	0	20	20	60	100	3	PPT, Board, Chalk
4	PEC	CS6TE03	Elective-III	3	0	0	20	20	60	100	3	PPT, Board, Chalk
5	OEC	CS6O002	Open Elective-2	3	1	0	20	20	60	100	4	PPT, Board, Chalk
6	PCC	CS6L003	Neural Networks and Machine Learning(Lab)	0	0	2	60	0	40	100	1	PC, PPT,
7	PCC	CS6L004	Full Stack Development(Lab)	0	0	2	60	0	40	100	1	PC, PPT,
8	PCC	CS6L005	Advance Java Programming(LAB)	0	0	2	60	0	40	100	1	PC, PPT,
9	PROJECT	CS6P006	Mini Project	0	0	2	25	0	25	50	1	PC, PPT,
10	PROJECT	CS6P007	CRT(Campus Recruitment Training)	0	0	2	50	0	0	50	1	PPT, Board, Chalk
11	PROJECT	CS6P008	Skill Development	0	0	2	15	0	35	50	1	PPT, Board, Chalk
12	MC	CS6T009	Intellectual Property Rights	2	0	0	15	10	25	50	Audit	PPT, Board, Chalk
				17	1	12	385	110	505	1000	22	

Open Elective-2 : SE (Software Engineering)


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CS6P007

Campus Recruitment Training

1 Credit

About CRT Training Campus Recruitment training (CRT) it is designed to aid candidates in their preparation for Recruitment through Campuses or outside campuses (i.e On campus or off campus). Students in their final step of graduation looking for placement in reputed organizations can make use of this training to get trained to deliver their best in the selection processes of organizations.

COURSE OBJECTIVES

1. To enhance the problem solving skills, to improve the basic mathematical skills and to help students who are preparing for any type of campus recruitment drive.
2. To groom the students to the corporate level
3. To ensure that all eligible students are employed by the end of the final year of study.

COURSE OUTCOMES

At the end of the course students will be able to

1. Solve the problems easily by using Short-cut method with time management which will be helpful to them to clear the competitive exams for better job opportunity.
2. Analyze the Problems logically and approach the problems in a different manner.
3. Students will be able to apply mathematical analysis of data to make connections, draw conclusions and solve problems.
4. Students will learn a series of techniques through practical activities to develop presenting skills and enhance confidence to expand the potential of the individual.
5. Students can produce a resume that describes their education, skills, experiences and measurable achievements with proper grammar, format and brevity.
6. Students demonstrate an ability to target the resume to the presenting purpose
7. Demonstrate professional behavior(s) including preparedness, professional attire, and respectful presentation during interviews.

PART I: - QUANTITATIVE ABILITY

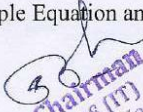
Unit 1: - 03 hrs

Speed Maths Calculation, Number Systems, Ratio & Proportion, Percentage

Unit 2: - 03 hrs

Profit – Loss & Discount, Simple Interest & Compound Interest, Simple Equation and Age's

Unit 3:- 03 hrs


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Averages Mixture & Allegation, Time and work, Time Speed & Distance, Permutation – Combination & Probability

PART II: - REASONING ABILITY

Unit 1: - 03 hrs

Coding Decoding, Blood Relation, Direction sense, Number Series, Analogy

Unit 2: - 03 hrs

Sitting Arrangement, Puzzles.

Unit 3:- 03 hrs

Syllogism, Statement course of action, Statement arguments, Statement Assumptions, Miscellaneous Type of Reasoning

PART III: - Employability Skills

Unit 1: - Presentation Skills (02 hrs)

What is a presentation? Essential characteristics of Good presentation.

Preparation of presentation: Identify the purpose, Analyze the audience, Design and organize the information, Medium of presentation and Visual aids

Delivering Presentation: rehearsal, body Language, Handling questions, Tips to fight stage fear.

Unit 2: - Job Interview Skills (02 hrs)

Types of interviews, Focus of interview, dress code, importance of body language.

Probable interview questions, Telephonic and video interview, Strategies for success at interview.

Unit 3: - Resume Building (02 hrs)

Meaning, Difference among Bio-data, Curriculum vitae and Resume. CV writing tips, The content of Resume, Structure of Resume

Books

1. Prashant Sharma, SOFT SKILLS PERSONALITY DEVELOPMENT FOR LIFE SUCCESS. BPB Publication.
2. P. D. Chaturvedi & Mukesh Chaturvedi, Business Communication: Concepts, Cases, and Applications 2nd Edition. Pearson Education.
3. Barun Mitra, Personality Development and Soft Skills. Oxford University Press.
4. Dr.K.Alex, *Soft Skills Know yourself and Know the World*. S.ChandPublishing, 2014
5. R.S Agrawal, Quantitative Aptitude.
6. Arun Sharma, How to Prepare for Quantitative Aptitude.
7. R. S Agrawal, Verbal and Non Verbal Reasoning.
8. R.V.Praveen, Quantitative Aptitude and Reasoning, 2nd Revised Edition 2013, Prentice-Hall of India Pvt.Ltd.
9. G. K. Ranganath, C. S. Sampangiram and Y. Rajaram, A text Book of business Mathematics, 2008, Himalaya Publishing House

68h
Chairman
BOS (17)
IDCO, Nagpur



PRIVACY AND SECURITY IN ONLINE SOCIAL MEDIA

PROF. PONNURANGAM KUMARAGURU

Department of Computer Science and Engineering
IIIT Hyderabad

PRE-REQUISITES : Basic / Intermediate programming course. Understanding of Python will be necessary for the course. Should be able to quickly learn APIs, and to collect data from social networks.

INTENDED AUDIENCE : Interested students

INDUSTRIES APPLICABLE TO : Any company which is interested in social media / networks data will be interested in recruiting the students finishing the course.

COURSE OUTLINE :

With increase in the usage of the Internet, there has been an exponential increase in the use of online social media and networks on the Internet. Websites like Facebook, YouTube, LinkedIn, Twitter, Flickr, Instagram, Google+, FourSquare, Pinterest, Tinder, and the likes have changed the way the Internet is being used. However, widely used, there is a lack of understanding of privacy and security issues on online social media. Privacy and security of online social media need to be investigated, studied and characterized from various perspectives (computational, cultural, psychological, etc.). Student completing the course will be able to appreciate various privacy and security concerns (spam, phishing, fraud nodes, identity theft) on Online Social Media and Student will be able to clearly articulate one or two concerns comprehensively on one Online Social Media, this will be achieved by homework.

ABOUT INSTRUCTOR :

Prof. Ponnurangam Kumaraguru ("PK") is a Professor of Computer Science at IIIT-Hyderabad. He is a Visiting Faculty at IIT Kanpur and an Adjunct faculty at IIIT Delhi. PK is an ACM India Council Member, and Chair of the Publicity & Membership Committee of ACM India. PK is a TEDx and an ACM Distinguished & ACM India Eminent Speaker. PK received his Ph.D. from the School of Computer Science at Carnegie Mellon University (CMU). His Ph.D. thesis work on anti-phishing research at CMU contributed in creating an award-winning startup - Wombat Security Technologies, wombatsecurity.com. Wombat was acquired in March 2018 for USD 225 Million. PK was listed in the World's 2% Scientists by Stanford University in Nov 2020. He is a senate member of IIIT Una, and is on various Board of Studies / Academic Council of different institutes across the country. PK has been teaching on NPTEL for the last 5 years, with great feedback from students. He has co-authored research papers in the field of Privacy and Security in Online Social Media, Cyber Security, Computational Social Science, Social Computing, Data Science for Social Good, amongst others. PK's research work regularly gets featured on news media, including print, online, and TV within India and across the world; to list a few, BBC, CBC, CBS, CNN, Doordarshan, Economic Times, Indian Express, NBC, New Scientist, New Yorker, Reuters, Times of India, USA Today, Washington Post, and many more. PK Spear heads ACM India's programs on improving the quality of PhD students in Computing in India -- PhD Clinic & Anveshan Setu Fellowship. In his Dean's role at IITD, he managed a team of 15 faculty members and 10+ admin staff, including Associate Dean of Student Affairs, overseeing hostel, sports centre, health centre, student (well-being, clubs, mentorship program), technical & cultural fests. He was the Founding Head of Cybersecurity Education and Research Centre (CERC) at IIIT-Delhi. PK started and successfully manages PreCog (precog.iiitd.edu.in), a research group at IIIT-Delhi and IIIT Hyderabad. In addition to his contributions to academia, PK is on advisory role on various government organizations, government committees, including a 8 member committee on Non-Personal Data by Government of India, chaired by Mr. Kris Gopalakrishnan.

COURSE PLAN :

Week 1: What is Online Social Networks, data collection from social networks, challenges, opportunities, and pitfalls in online social networks, APIs

Week 2: Collecting data from Online Social Media.

Week 3: Trust, credibility, and reputations in social systems

Week 4: Trust, credibility, and reputations in social systems, cont'd

Week 5: Online social Media and Policing

Week 6: Information privacy disclosure, revelation and its effects in OSM and online social networks

Week 7: Phishing in OSM & Identifying fraudulent entities in online social networks

Week 8: Refresher for all topics

Week 9 to 12 : Research paper discussion

30h
Chaitman
Bos (IT)
IIIT, Nagpur



DATA ANALYTICS WITH PYTHON

PROF. A RAMESH

Department of Management Studies
IIT Roorkee

TYPE OF COURSE : Rerun | Elective | UG/PG

COURSE DURATION : 12 weeks (24 Jan' 22 - 15 Apr' 22)

EXAM DATE : 23 Apr 2022

INTENDED AUDIENCE : Management, Industrial Engineering and Computer Science Engineering Students

INDUSTRIES APPLICABLE TO : Any analytics company

COURSE OUTLINE :

This course includes examples of analytics in a wide variety of industries, and we hope that students will learn how one can use analytics in their career and life. One of the most important aspects of this course is that hands-on experience creating analytics models will be shared.

ABOUT INSTRUCTOR :

Prof. Ramesh Anbanandam graduated in Production Engineering from Madras University, Chennai. He did his post-graduation from National Institute of Technology, Trichy. He later earned his Ph.D. in Supply Chain Management from Indian Institute of Technology Delhi. His professional interest includes Humanitarian Supply Chain Management, Operations Management, Operations Research, Healthcare Waste Management, Sustainable Multi-model and Freight Transportation, Transportation Asset Management and Advanced Data Analytics using Python and R-programming. He has published various research articles in reputed journals. He was also awarded Emerald Literati Award for Excellence under "Highly Commended Research Paper in the Year 2011 and 2016" in the field of Supply Chain Management.

COURSE PLAN :

Week 1: Introduction to data analytics and Python fundamentals

Week 2: Introduction to probability

Week 3: Sampling and sampling distributions

Week 4: Hypothesis testing

Week 5: Two sample testing and introduction to ANOVA

Week 6: Two way ANOVA and linear regression

Week 7: Linear regression and multiple regression

Week 8: Concepts of MLE and Logistic regression

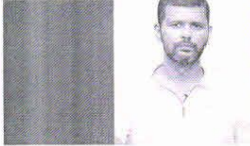
Week 9: ROC and Regression Analysis Model Building

Week 10: χ^2 Test and introduction to cluster analysis

Week 11: Clustering analysis

Week 12: Classification and Regression Trees (CART)


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COEM, Nagpur



FOUNDATIONS OF CRYPTOGRAPHY

PROF. ASHISH CHOUDHURY
Department of Computer Science
IIIT Bangalore

TYPE OF COURSE : Rerun | Elective | UG/PG
COURSE DURATION : 12 weeks (24 Jan' 22 - 15 Apr' 22)
EXAM DATE : 23 Apr 2022

PRE-REQUISITES : There are no pre-requisites for this course. However it is expected that the students who are interested to take this course have had some exposure to a basic course on discrete mathematics, algorithms, or theory of computation.

INTENDED AUDIENCE : Computer Science and Mathematics students

INDUSTRIES APPLICABLE TO : The course will be relevant for any IT related company

COURSE OUTLINE :

The course provides the basic paradigm and principles of modern cryptography. The focus of this course will be on definitions and constructions of various cryptographic objects. We will try to understand what security properties are desirable in such objects, how to formally define these properties, and how to design objects that satisfy the definitions. The aim is that at the end of this course, the students are able to understand a significant portion of current cryptography research papers and standards.

ABOUT INSTRUCTOR :

Prof. Ashish Choudhury is currently an Assistant Professor at IIIT Bangalore. He did his MS and PhD in Computer science from IIT Madras, followed by postdoc at ISI Kolkata and University of Bristol. His research work is focused on the foundation of cryptographic protocols for real-world problems. His current projects aim to design efficient protocols in the asynchronous network model which can be realized in practice.

COURSE PLAN :

Week 1: Course Overview, Symmetric-key Encryption, Historical Ciphers

Week 2: Computational Security, Semantic Security and Pseudorandom Generators (PRGs)

Week 3: Stream Ciphers, Provably-secure Instantiation of PRG, Practical Instantiation of PRG

Week 4: CPA-Secure Ciphers from PRF, Modes of Operations of Block Ciphers

Week 5: DES, AES and Message Authentication Codes (MAC)

Week 6: Information-theoretic Secure MAC, Cryptographic Hash Functions

Week 7: Birthday Attacks on Cryptographic Hash Functions, Applications of Hash Functions

Week 8: Generic Constructions of Authenticated Encryption Schemes

Week 9: Discrete-Logarithm Problem, Computational Diffie-Hellman Problem, Decisional Diffie-Hellman Problem, Elliptic-Curve Based Cryptography and Public-Key Encryption

Week 10: El Gamal Encryption Scheme, RSA Assumption

Week 11: CCA-secure Public-key Hybrid Ciphers Based on Diffie-Hellman Problems and RSA-assumption, Digital Signatures

Week 12: Schnorr Signature, Overview of TLS/SSL, Number Theory, Interactive Protocols and Farewell


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KATOL ROAD, NAGPUR

Affiliated to Dr. BabasahebAmbedkar Technological University, Lonere
Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in

An Autonomous Institute, with NAAC "A" Grade

Department of CSE & AI

"A Place to Learn ; A Chance to Grow"

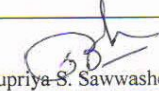


VISION	MISSION
To be a recognized as an Excellent Innovative Engineering Department through Academic Programme which develops leaders in Education and Research in Computer Science."	<ol style="list-style-type: none">1. To create self-learning environment by facilitating leadership qualities, team-spirit and ethical responsibilities.2. To Strengthen department-industry collaboration and Interaction with professional society through technical knowledge and Internship program.3. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering.

Date: 19/07/2023

Details of MOUs

Sr. No.	Name of Industry	Name of the contact person	Address	Mobile No.
1	Atulya Shiksha Foundation	Mr. Shirang Pande, Director	Behind Janki Tawkis, Mouje Square, Sitaburdi, Nagpur.440012	8275299182 pandyleena2014@gmail.com
2	Risewell Cyber Security Solutions Pvt. Ltd	Mrs. Leena Pandey, Manager, Narayana IAS Academy, Nagpur.	Plot No. 14, Flat No. 202, Shantikunj Niwas, Next to Pariwar Cilty Collection, Ring zroad, Trimurti Nagar, Nagpur-440022	9405168986, 7020299872 Risewellcyber@rediffmail.com
3	Tars Technologies Pvt. Ltd, Nagpur	Mr. Amol Rangari, Center Head	181, Gotmare Complex, Giripeth, Near Venus Book Depo, Dharampeth, Nagpur, Maharashtra 440010	8975474788, 9112117415 info@tarstechnologies.com
4	Vasinev Gaming Solutions Pvt. Ltd.	Dr. Shrividhya Srinivasan	766, Shakthi Tower 1 Anna Salai, thousand lights, Chennai, TN 600002	8939375523 ssividhya@vasinevgaming.com


Dr. Supriya S. Sawwashere
HOD CSE, JDCOEM

HOD
Computer Science & Engineering
JDCOEM, Nagpur



**JAIDEV EDUCATION SOCIETY'S
JD COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
SESSION 2020-24**

3rd Semester Artificial Intelligence

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	HSMC	AI3T001	Organization Behaviour	2	0	0	20	20	60	100	2
2	HSMC	AI3T002	Universal Human Values	2	1	0	20	20	60	100	3
3	BSC	AI3T003	Mathematics-III	3	1	0	20	20	60	100	4
4	ESC	AI3T004	Statistical Data Analysis	3	0	0	20	20	60	100	3
5	PCC	AI3T005	Computer Architecture and Organisation	3	0	0	20	20	60	100	3
6	PCC	AI3T006	Internet of Things	2	1	0	20	20	60	100	3
7	PCC	AI3T007	Data Structure & Algorithm	2	1	0	20	20	60	100	3
8	ESC	AI3L008	Introduction to IoT (Lab)	0	0	2	60	0	40	100	1
9	ESC	AI3L009	DSA (Lab)	0	0	2	60	0	40	100	1
10	ESC	AI3L010	Data Analytics (Lab)	0	0	2	60	0	40	100	1
				17	4	6	320	140	540	1000	24

4th Semester Artificial Intelligence

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	PCC	AI4T001	Theory of Computation	2	1	0	20	20	60	100	3
2	PCC	AI4T002	Design & Analysis of Algorithm	2	1	0	20	20	60	100	3
3	PCC	AI4T003	Operating System & Virtualization	3	0	0	20	20	60	100	3
4	PCC	AI4T004	Neural Networks & Fuzzy System	3	0	0	20	20	60	100	3
5	PCC	AI4T005	Discrete Mathematics & Graph Structures	3	0	0	20	20	60	100	3
6	PCC	AI4T006	Database Management Systems	3	0	0	20	20	60	100	3
7	PCC	AI4L007	Introduction to Robotics-(Lab)	0	0	2	60	0	40	100	1
8	PCC	AI4L008	Neural Networks & Fuzzy System (Lab)	0	0	2	60	0	40	100	1
9	PCC	AI4L009	DBMS-(Lab)	0	0	2	60	0	40	100	1
10	MC	AI4T010	Consumer Affairs	2	0	0	10	15	25	50	Audit
11	PROJECT	AI4P011	Field Training (Project)	0	0	0	30	0	20	50	1
				18	2	6	340	135	525	1000	22

S. S. Sawant
Chairman
BOS, Artificial Intelligence
JD COEM, Nagpur

Program: B.Tech. in Artificial Intelligence

Semester	Course Code	Name of the course	L	T	P	Credits
V	A15P008	Field Training/ Industrial Visit	0	0	2	1

Prerequisites for the course

1.	Understand the visiting companies shall be relevant and suitable ones to the specialization and academic requirements.
2	Learning Important tool for attracting investment and technology.

Prior Reading Material/useful links

1.	https://www.quora.com/What-are-some-good-places-for-an-industrial-trip-of-CSE-students
2.	https://www.suas.ac.in/industrial-visit-for-computer-science-and-information-technology-5th-sem-students/

Course Outcomes:

Sr. No	Course Outcome number	CO statement
1	CO1	Students will able to functional opportunity in different sectors.
2	CO2	Students will able to helps to combine theoretical knowledge with industrial knowledge.
3	CO3	Students will able to provide an insight into the real working environment,
4	CO4	Students will able to get to learn a lot of things that will help in their development and also for the future.
5	CO5	Students will able to acquire and apply fundamental principles of science and engineering.

Industrial visits are an integral part of Engineering and acknowledgement of technology upgrades. The purpose of industrial visits for students is to provide technical knowledge with the technological development in the industry and to understand the gap between theoretical and practical knowledge that could be passed in future.

This experience can help students to provide information regarding the functioning of various industries and associated problems and limitations.


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B.Tech. in Artificial Intelligence
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Education to Eternity

**JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR
SESSION 2020-24**

5th Semester Artificial Intelligence

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	PCC	AI5T001	AI & Cognitive Robotics	3	0	0	20	20	60	100	3
2	PCC	AI5T002	Digital Image Techniques and Analysis	2	1	0	20	20	60	100	3
3	PCC	AI5T003	Machine Learning & Deep Learning	2	1	0	20	20	60	100	3
4	PCC	AI5O001	Open Elective -I	3	0	0	20	20	60	100	3
5	PEC	AI5TE01	Elective -I	3	0	0	20	20	60	100	3
6	PCC	AI5L004	Machine Learning & Deep Learning (Lab)	0	0	2	60	0	40	100	1
7	PCC	AI5L005	Digital Image Techniques and Analysis (Lab)	0	0	2	60	0	40	100	1
8	PCC	AI5L006	AI & Cognitive Robotics (Lab)	0	0	2	60	0	40	100	1
9	PROJECT	AI5P007	Mini Project	0	0	2	0	0	50	50	1
10	PROJECT	AI5P008	Industrial Visit	0	0	0	30	0	20	50	1
10	IED	AI5T008	Innovation and Entrepreneurship Development	2	0	0	10	15	25	50	Audit
				15	2	8	290	115	495	900	21

Open Elective 1: Ethics in IT

6th Semester Artificial Intelligence

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	PCC	AI6T001	Advanced Computer Vision	2	1	0	20	20	60	100	3
2	ESC	AI6T002	Data Science	2	1	0	20	20	60	100	3
3	PEC	AI6TE02	Elective -II	3	0	0	20	20	60	100	3
4	PEC	AI6TE03	Elective-III	3	0	0	20	20	60	100	3
5	OEC	AI6O002	Open Elective-II	3	1	0	20	20	60	100	4
6	PCC	AI6L003	Data Science Using R -Lab	0	0	2	60	0	40	100	1
7	PCC	AI6L004	Advanced Computer Vision (Lab)	0	0	2	60	0	40	100	1
8	PCC	AI6L005	Big Data Tools & Techniques(LAB)	0	0	2	60	0	40	100	1
9	PROJECT	AI6P006	Mini Project	0	0	2	25	0	25	50	1
10	PROJECT	AI6P007	CRT(Campus Recruitment Traini	0	0	2	60	0	40	100	1
11	PROJECT	AI6P008	Skill Development	0	0	2	15	0	35	50	1
10	IPR	AI6T007	Intellectual Property Rights	2	0	0	10	15	25	50	Audit
				15	3	12	390	115	545	1050	22

Open Elective 2: Object Oriented Methodology

S. K. Jadhav
Chairman
BOS, Artificial intelligence
JDCEM, Nagpur

Semester	Course Code	Name of the course	L	T	F	Credits
3rd	AI3T008	Innovation and Entrepreneurship Development	2	0	0	2

Prerequisite(s) for the course

6

1	Business Communication
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Prerequisite(s) Material/URL/links

1	https://www.nextiva.com/blog/what-is-business-communication.html
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Course Outcome:

Students will be able to:

Sr.No.	Course Outcome Number	CO Description
1	CO1	To gain an expansive and deep appreciation of entrepreneurship and its pivotal role in the economy.
2	CO2	To approach entrepreneurship with clarity and focus, and an enhanced understanding of the key success factors as well as possible risks and potential mitigation strategies.
3	CO3	To navigate the opportunities and challenges of entrepreneurship more effectively with the additional insights available.
4	CO4	To evaluate the key factors needed to develop a successful business
5	CO5	To recognize the value of problem-solving, effective business management

Syllabus:

Course Content	
Unit I	Entrepreneurial Journey, Entrepreneurial Discovery, Ideation, and Prototyping [4hrs]
Unit II	Testing, Validation, and Commercialization, Disruption as a Success Driver, Technological Innovation and Entrepreneurship – 1, Technological Innovation and Entrepreneurship – 2 [6 hrs]
Unit III	Raising Financial Resources, Education and Entrepreneurship, Beyond Founders and Founder-Families [4 hrs]
Unit IV	India as a Start-up Nation, National Entrepreneurial Culture [4 hrs]
Unit V	Entrepreneurial Thermodynamics, Entrepreneurship and Employment Start-up Case Studies. [6 hrs]
Textbooks	
1	Innovation and Entrepreneurship: Practice and Principles by Peter F. Drucker
2	The Innovator's Solution: Creating and Sustaining Successful Growth by Clayton M. Christensen
Reference Books	
1	Zero to One: Notes on Startups, or How the Build the Future by Peter Thiel
2	The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses by Eric Reis.
URL/links	
1	https://www.lakeforest.edu/academics/majors-and-minors/entrepreneurship-and-innovation/student-learning/
2	https://www.indeed.com/career-advice/career-development/innovative-

About CRT Training Campus Recruitment training (CRT) is designed to aid candidates in their preparation for Recruitment through Campuses or outside campuses (i.e On campus or off campus). Students in their final step of graduation looking for placement in reputed organizations can make use of this training to get trained to deliver their best in the selection processes of organizations.

COURSE OBJECTIVES

1. To enhance the problem solving skills, to improve the basic mathematical skills and to help students who are preparing for any type of campus recruitment drive.
2. To groom the students to the corporate level
3. To ensure that all eligible students are employed by the end of the final year of study.

COURSE OUTCOMES

At the end of the course students will be able to

1. Solve the problems easily by using Short-cut method with time management which will be helpful to them to clear the competitive exams for better job opportunity.
2. Analyze the Problems logically and approach the problems in a different manner.
3. Students will be able to apply mathematical analysis of data to make connections, draw conclusions and solve problems.
4. Students will learn a series of techniques through practical activities to develop presenting skills and enhance confidence to expand the potential of the individual.
5. Students can produce a resume that describes their education, skills, experiences and measurable achievements with proper grammar, format and brevity.
6. Students demonstrate an ability to target the resume to the presenting purpose
7. Demonstrate professional behavior(s) including preparedness, professional attire, and respectful presentation during interviews.

PART I: - QUANTITATIVE ABILITY

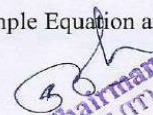
Unit 1: - 03 hrs

Speed Maths Calculation, Number Systems, Ratio & Proportion, Percentage

Unit 2: - 03 hrs

Profit – Loss & Discount, Simple Interest & Compound Interest, Simple Equation and Age's

Unit 3:- 03 hrs


Chairman
BOS (IT)
UDCOEM, Nagpur



FOUNDATIONS OF CRYPTOGRAPHY

PROF. ASHISH CHOUDHURY
Department of Computer Science
IIIT Bangalore

TYPE OF COURSE : Rerun | Elective | UG/PG
COURSE DURATION : 12 weeks (24 Jan' 22 - 15 Apr' 22)
EXAM DATE : 23 Apr 2022

PRE-REQUISITES : There are no pre-requisites for this course. However it is expected that the students who are interested to take this course have had some exposure to a basic course on discrete mathematics, algorithms, or theory of computation.

INTENDED AUDIENCE : Computer Science and Mathematics students

INDUSTRIES APPLICABLE TO : The course will be relevant for any IT related company

COURSE OUTLINE :

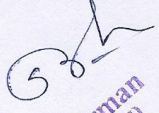
The course provides the basic paradigm and principles of modern cryptography. The focus of this course will be on definitions and constructions of various cryptographic objects. We will try to understand what security properties are desirable in such objects, how to formally define these properties, and how to design objects that satisfy the definitions. The aim is that at the end of this course, the students are able to understand a significant portion of current cryptography research papers and standards.

ABOUT INSTRUCTOR :

Prof. Ashish Choudhury is currently an Assistant Professor at IIIT Bangalore. He did his MS and PhD in Computer science from IIT Madras, followed by postdoc at ISI Kolkata and University of Bristol. His research work is focused on the foundation of cryptographic protocols for real-world problems. His current projects aim to design efficient protocols in the asynchronous network model which can be realized in practice.

COURSE PLAN :

- Week 1:** Course Overview, Symmetric-key Encryption, Historical Ciphers
- Week 2:** Computational Security, Semantic Security and Pseudorandom Generators (PRGs)
- Week 3:** Stream Ciphers, Provably-secure Instantiation of PRG, Practical Instantiation of PRG
- Week 4:** CPA-Secure Ciphers from PRF, Modes of Operations of Block Ciphers
- Week 5:** DES, AES and Message Authentication Codes (MAC)
- Week 6:** Information-theoretic Secure MAC, Cryptographic Hash Functions
- Week 7:** Birthday Attacks on Cryptographic Hash Functions, Applications of Hash Functions
- Week 8:** Generic Constructions of Authenticated Encryption Schemes
- Week 9:** Discrete-Logarithm Problem, Computational Diffie-Hellman Problem, Decisional Diffie-Hellman Problem, Elliptic-Curve Based Cryptography and Public-Key Encryption
- Week 10:** El Gamal Encryption Scheme, RSA Assumption
- Week 11:** CCA-secure Public-key Hybrid Ciphers Based on Diffie-Hellman Problems and RSA-assumption, Digital Signatures
- Week 12:** Schnorr Signature, Overview of TLS/SSL, Number Theory, Interactive Protocols and Farewell


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PRIVACY AND SECURITY IN ONLINE SOCIAL MEDIA

PROF. PONNURANGAM KUMARAGURU

Department of Computer Science and Engineering
IIIT Hyderabad

PRE-REQUISITES : Basic / Intermediate programming course. Understanding of Python will be necessary for the course. Should be able to quickly learn APIs, and to collect data from social networks.

INTENDED AUDIENCE : Interested students

INDUSTRIES APPLICABLE TO : Any company which is interested in social media / networks data will be interested in recruiting the students finishing the course.

COURSE OUTLINE :

With increase in the usage of the Internet, there has been an exponential increase in the use of online social media and networks on the Internet. Websites like Facebook, YouTube, LinkedIn, Twitter, Flickr, Instagram, Google+, FourSquare, Pinterest, Tinder, and the likes have changed the way the Internet is being used. However, widely used, there is a lack of understanding of privacy and security issues on online social media. Privacy and security of online social media need to be investigated, studied and characterized from various perspectives (computational, cultural, psychological, etc.). Student completing the course will be able to appreciate various privacy and security concerns (spam, phishing, fraud nodes, identity theft) on Online Social Media and Student will be able to clearly articulate one or two concerns comprehensively on one Online Social Media, this will be achieved by homework.

ABOUT INSTRUCTOR :

Prof. Ponnurangam Kumaraguru ("PK") is a Professor of Computer Science at IIIT-Hyderabad. He is a Visiting Faculty at IIT Kanpur and an Adjunct faculty at IIIT Delhi. PK is an ACM India Council Member, and Chair of the Publicity & Membership Committee of ACM India. PK is a TEDx and an ACM Distinguished & ACM India Eminent Speaker. PK received his Ph.D. from the School of Computer Science at Carnegie Mellon University (CMU). His Ph.D. thesis work on anti-phishing research at CMU contributed in creating an award-winning startup - Wombat Security Technologies, wombatsecurity.com. Wombat was acquired in March 2018 for USD 225 Million. PK was listed in the World's 2% Scientists by Stanford University in Nov 2020. He is a senate member of IIIT Una, and is on various Board of Studies / Academic Council of different institutes across the country. PK has been teaching on NPTEL for the last 5 years, with great feedback from students. He has co-authored research papers in the field of Privacy and Security in Online Social Media, Cyber Security, Computational Social Science, Social Computing, Data Science for Social Good, amongst others. PK's research work regularly gets featured on news media, including print, online, and TV within India and across the world; to list a few, BBC, CBC, CBS, CNN, Doordarshan, Economic Times, Indian Express, NBC, New Scientist, New Yorker, Reuters, Times of India, USA Today, Washington Post, and many more. PK Spear heads ACM India's programs on improving the quality of PhD students in Computing in India -- PhDclinic & Anveshan Setu Fellowship. In his Dean's role at IITD, he managed a team of 15 faculty members and 10+ admin staff, including Associate Dean of Student Affairs, overseeing hostel, sports centre, health centre, student (well-being, clubs, mentorship program), technical & cultural fests. He was the Founding Head of Cybersecurity Education and Research Centre (CERC) at IIIT-Delhi. PK started and successfully manages PreCog (precog.iiitd.edu.in), a research group at IIIT-Delhi and IIIT Hyderabad. In addition to his contributions to academia, PK is on advisory role on various government organizations, government committees, including a 8 member committee on Non-Personal Data by Government of India, chaired by Mr. Kris Gopalakrishnan.

COURSE PLAN :

- Week 1:** What is Online Social Networks, data collection from social networks, challenges, opportunities, and pitfalls in online social networks, APIs
- Week 2:** Collecting data from Online Social Media.
- Week 3:** Trust, credibility, and reputations in social systems
- Week 4:** Trust, credibility, and reputations in social systems, cont'd
- Week 5:** Online social Media and Policing
- Week 6:** Information privacy disclosure, revelation and its effects in OSM and online social networks
- Week 7:** Phishing in OSM & Identifying fraudulent entities in online social networks
- Week 8:** Refresher for all topics
- Week 9 to 12 :** Research paper discussion

30h
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DATA ANALYTICS WITH PYTHON

PROF. A RAMESH

Department of Management Studies
IIT Roorkee

TYPE OF COURSE : Rerun | Elective | UG/PG

COURSE DURATION : 12 weeks (24 Jan' 22 - 15 Apr' 22)

EXAM DATE : 23 Apr 2022

INTENDED AUDIENCE : Management, Industrial Engineering and Computer Science Engineering Students

INDUSTRIES APPLICABLE TO : Any analytics company

COURSE OUTLINE :

This course includes examples of analytics in a wide variety of industries, and we hope that students will learn how one can use analytics in their career and life. One of the most important aspects of this course is that hands-on experience creating analytics models will be shared.

ABOUT INSTRUCTOR :

Prof. Ramesh Anbanandam graduated in Production Engineering from Madras University, Chennai. He did his post-graduation from National Institute of Technology, Trichy. He later earned his Ph.D. in Supply Chain Management from Indian Institute of Technology Delhi. His professional interest includes Humanitarian Supply Chain Management, Operations Management, Operations Research, Healthcare Waste Management, Sustainable Multi-model and Freight Transportation, Transportation Asset Management and Advanced Data Analytics using Python and R-programming. He has published various research articles in reputed journals. He was also awarded Emerald Literati Award for Excellence under "Highly Commended Research Paper in the Year 2011 and 2016" in the field of Supply Chain Management.

COURSE PLAN :

- Week 1:** Introduction to data analytics and Python fundamentals
- Week 2:** Introduction to probability
- Week 3:** Sampling and sampling distributions
- Week 4:** Hypothesis testing
- Week 5:** Two sample testing and introduction to ANOVA
- Week 6:** Two way ANOVA and linear regression
- Week 7:** Linear regression and multiple regression
- Week 8:** Concepts of MLE and Logistic regression
- Week 9:** ROC and Regression Analysis Model Building
- Week 10:** χ^2 Test and introduction to cluster analysis
- Week 11:** Clustering analysis
- Week 12:** Classification and Regression Trees (CART)

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Department of CSE & AI

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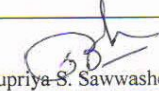


VISION	MISSION
To be a recognized as an Excellent Innovative Engineering Department through Academic Programme which develops leaders in Education and Research in Computer Science."	<ol style="list-style-type: none">1. To create self-learning environment by facilitating leadership qualities, team-spirit and ethical responsibilities.2. To Strengthen department-industry collaboration and Interaction with professional society through technical knowledge and Internship program.3. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering.

Date: 19/07/2023

Details of MOUs

Sr. No.	Name of Industry	Name of the contact person	Address	Mobile No.
1	Atulya Shiksha Foundation	Mr. Shirirang Pande, Director	Behind Janki Tawkis, Mouje Square, Sitaburdi, Nagpur.440012	8275299182 pandeyleena2014@gmail.com
2	Risewell Cyber Security Solutions Pvt. Ltd	Mrs. Leena Pandey, Manager, Narayana IAS Academy, Nagpur.	Plot No. 14, Flat No. 202, Shantikunj Niwas, Next to Pariwar Cilty Collection, Ring zroad, Trimurti Nagar, Nagpur-440022	9405168986, 7020299872 Risewellcyber@rediffmail.com
3	Tars Technologies Pvt. Ltd, Nagpur	Mr. Amol Rangari, Center Head	181, Gotmare Complex, Giripeth, Near Venus Book Depo, Dharampeth, Nagpur, Maharashtra 440010	8975474788, 9112117415 info@tarstechnologies.com
4	Vasinev Gaming Solutions Pvt. Ltd.	Dr. Shrividhya Srinivasan	766, Shakthi Tower 1 Anna Salai, thousand lights, Chennai, TN 600002	8939375523 ssividhya@vasinevgaming.com


Dr. Supriya S. Sawwashere
HOD CSE, JDCOEM

HOD
Computer Science & Engineering
JDCOEM, Nagpur



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MINUTES OF MEETING FOR 7TH BOARD OF STUDIES (EE) MEETING NO. BOS/EE/07/2022-23

23/12/2022

Venue: Classroom VS-003

The 7th meeting of the Board of Studies (Electrical) was held on **22nd December 2022** at **11:00 a.m.** in classroom VS-003. Following members of the Board of Studies were present in the meeting.

Sr.No	Name of the member
1	Dr. V.S. Dhok (Chairperson)
2	Er.Ashok Kale (External Expert)
3	Dr.Nitin Ghawghawe (Internal Expert)
4	Dr.Vinod Chandrakar (External Expert)
5	Dr. S.R.Vaishnav
6	Prof. P.P. Panchbhai
7	Prof. A.V. Joshi(Member Secretary)
8	Prof. P.V. Ambade
9	Prof. M.S.Isasare
10	Prof.Tuba Khan
11	Prof.A.W.Male
12	Prof.P.P.Barekar

Item No. 1 Confirmation of the previous BOS meeting, Inclusion and Confirmation of new members

The Member Secretary welcomed the Chairperson of Board of Studies Dr.V.S.Dhok, External Expert Mr.Ashok Kale, Internal Expert Dr. N.D. Ghawghawe & all members of BOS. The Secretary presented Agenda of the meeting and requested the Chairman to convene the meeting.

The Chairman summarized the MOM of previous BOS meeting held on 23/03/2022 and confirmation on it was taken. Few old BOS members were removed and new BOS members were included.

Item No. 2	Presentation of Action Taken report for last previous meeting held on 23/03/2022
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The Secretary of BOS presented the Action taken report for the previous meeting held on 23/03/2022 and discussed it in front of the members.

Item No. 3	Revision of Scheme & Revision of the syllabus for Open Elective Subject-Electrical AUTOCAD
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Scheme of was revised with minor changes and approved in BOS. Syllabus of open Elective subject 'Electrical AUTOCAD' offered by EE department was revised and approved. Following were the suggestions by experts:

1. Mr.Ashok Kale sir suggested that the syllabus of Power Electronics Lab should include topics like heat dissipation of MOSFET which can give practical exposure of subject to students.
2. Mr.Ashok Kale sir suggested that the subject related to Graph study and analysis should be taught in the curriculum.
3. Dr.N.D.Ghawghawe sir suggested that the subject Electrical AutoCAD should be renamed as Basic AutoCAD.

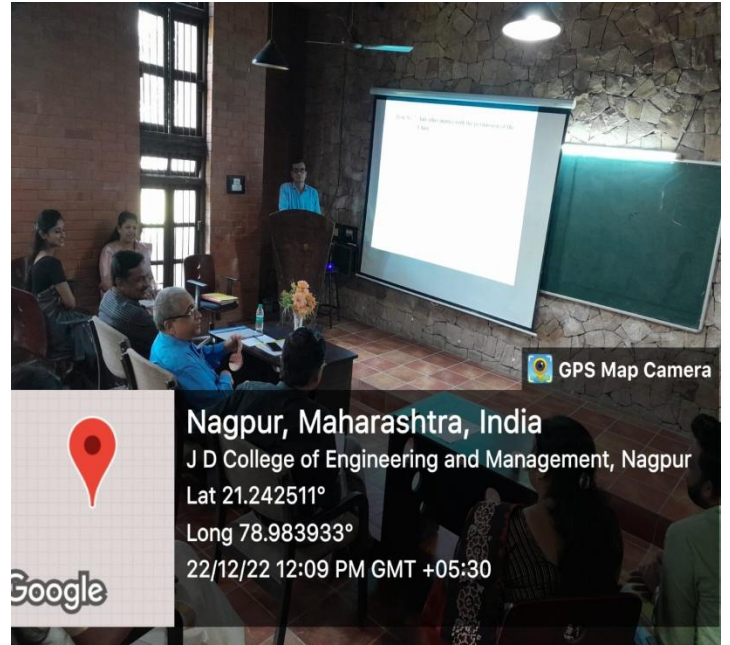
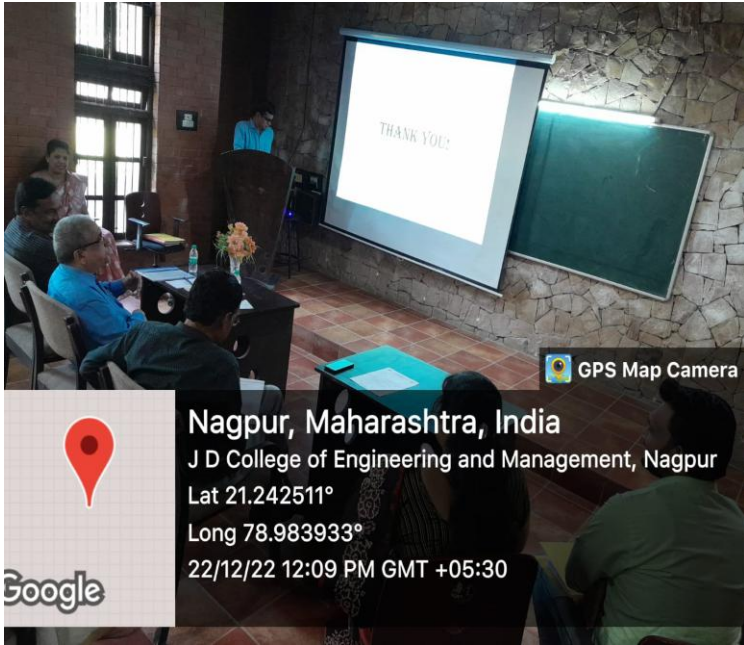
Item No. 4	MOOC Guidelines & Inclusion of MOOC in 4th and 8th Sem & Discussion on 8th Sem Internship
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MOOC Guidelines were discussed, their inclusion in 4th and 8th sem was approved by BoS and valuable suggestions of experts on 8th sem internship were taken. Following were the suggestions by experts:

1. Mr.Ashok Kale sir suggested that student should be classified as
 - Going for PSU with valid gate score.
 - Software and IT Companies
 - Core Companies
 - Going for start ups and should be train according to that.
2. Mr.Ashok Kale sir suggested that the companies selected for internship should not have turn over more than 3-4 crores.

Item No. 5	Any other matter with the permission of the Chair.
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The meeting Concluded with the vote of thanks by Prof.Ankita Male.



Mr. A.V.Joshi,
Member Secretary, Board of Studies,
Dept. of Electrical. Engg.
JDCOEM, Nagpur.

Dr. V.S.Dhok
Chairperson, Board of Studies
Dept. of Electrical. Engg.
JDCOEM, Nagpur



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AY-2022-23



VISION

"To develop competent and committed Electrical Engineers to serve the society"

MISSION

1. To impart quality education in the field of Electrical Engineering.
2. To be excellent learning centre through research and industry interaction.

Branch code: EE

I Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit	
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total		
1	HSMC	HU2T001	Communication Skills	2	0	0	60	0	40	100	2	
2	BSC	MA2T001	Engineering Mathematics- I	3	1	0	20	20	60	100	4	
3	BSC	EE2T002	Engineering Chemistry	3	1	0	20	20	60	100	4	
4	ESC	EE2T003	Engineering Graphics	1	0	0	20	20	60	100	1	
5	HSMC	HU2L001	Communication Skills Lab.	0	0	4	60	0	40	100	2	
6	BSC	EE2L002	Engineering Chemistry Lab	0	0	2	60	0	40	100	1	
7	ESC	EE2L003	Engineering Graphics Lab	0	0	4	60	0	40	100	2	
8			Induction Programme	3 Weeks								
9	ESC	EE2T004	Basic Civil and Mechanical Engineering	2	0	0	10	15	25	50	Audit	
				11	2	10					16	

II Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit	
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total		
1	HSMC	HU1T002	Introduction to Computer programming	2	0	0	20	20	60	100	2	
2	BSC	MA1T001	Engineering Mathematics- II	3	1	0	20	20	60	100	4	
3	BSC	EE1T005	Engineering Physics	3	1	0	20	20	60	100	4	
4	ESC	EE1T006	Energy and Environment Engineering	3	0	0	20	20	60	100	3	
5	HSMC	HU1L002	Introduction to Computer programming Lab	0	0	4	60	0	40	100	2	
6	ESC	WS1L001	Workshop Practices	0	0	4	60	0	40	100	2	
7	BSC	EE1L005	Engineering Physics Lab	0	0	2	60	0	40	100	1	
8			Societal Internship/ Field Training	Report submission						50	1	
9	ESC	EE1T007	Basic Electrical and Electronics Engineering	2	0	0	10	15	25	50	Audit	
				13	2	10					19	
				25								

III Semester

Sr. No.	Subject Category	Subject Code	Course Title	Teaching Scheme			Evaluation Scheme				Credits
				L	T	P	CA	MSE	ESE	TOTAL	
1	HSMC	EE3T001	Engineering Economics	2	0	0	20	20	60	100	2
2	BSC	EE3T002	Engineering Mathematics –III	3	1	0	20	20	60	100	4
3	ESC	EE3T003	Fundamentals of Electrical Engineering	2	1	0	20	20	60	100	3
4	PCC-EE	EE3T004	Network Analysis	3	0	0	20	20	60	100	3
5	PCC-EE	EE3T005	Electrical Machine I	3	1	0	20	20	60	100	4
6	PCC-EE	EE3T006	Measurement and Instrumentation	2	1	0	20	20	60	100	3
7	PCC-EE	EE3L004	Network Analysis Lab	0	0	2	60	0	40	100	1
8	PCC-EE	EE3L005	Electrical Machine I Lab	0	0	2	60	0	40	100	1
9	PCC-EE	EE3L006	Measurement and Instrumentation Lab	0	0	2	60	0	40	100	1
10	PROJ-EE	EE3P001	Field training/ Industrial visit	0	0	0	0	0	50	50	1
11	HSMC	EE3T007	Universal Human Values -II	3	0	0	10	15	25	50	3
				18	4	6	310	135	555	1000	
Total Credits										26	

IV Semester

Sr. No.	Subject Category	Subject Code	Course Title	Teaching Scheme			Evaluation Scheme				Credits
				L	T	P	CA	MSE	ESE	TOTAL	
1	BSC	EE4T001	Numerical method and probability	2	1	0	20	20	60	100	3
2	ESC	EE4T002	Power Station Practice	4	0	0	20	20	60	100	4
3	PCC-EE	EE4T003	Electronic Devices and circuits	3	0	0	20	20	60	100	3
4	PCC-EE	EE4T004	Power System I	2	1	0	20	20	60	100	3
5	PCC-EE	EE4T005	Electrical Machine II	3	0	0	20	20	60	100	3
6	BSC	EE4L001	Numerical method and probability Lab	0	0	2	60	0	40	100	1
7	PCC-EE	EE4L004	Power System I Lab	0	0	2	60	0	40	100	1
8	PCC-EE	EE4L005	Electrical Machine II Lab	0	0	2	60	0	40	100	1
9	PROJ-EE	EE4P002	Field training/ Internship/ industrial visit	0	0	0	0	0	50	50	1
10	MC	EE4T007	Innovation and entrepreneurship Development	2	0	0	10	15	25	50	Audit
				16	2	6	290	115	495	900	
Total Credits										20	

V Semester

Sr. No.	Subject Category	Subject Code	Course Title	Teaching Scheme			Evaluation Scheme				Credits
				L	T	P	CA	MSE	ESE	TOTAL	
1	PCC-EE	EE5T001	Power Electronics	3	0	0	20	20	60	100	3
2	PCC-EE	EE5T002	Control System I	3	1	0	20	20	60	100	4
3	PCC-EE	EE5T003	Power System II	3	0	0	20	20	60	100	3
4	PEC-EE	EE5E001	Elective I	3	0	0	20	20	60	100	3
5	PEC-EE	EE5E002	Elective II	3	0	0	20	20	60	100	3
6	OEC-EE	EE5O001	Open Elective I	4	0	0	20	20	60	100	4
7	PCC-EE	EE5L001	Power Electronics Lab	0	0	2	60	0	40	100	1
8	PCC-EE	EE5L002	Control System I Lab	0	0	2	60	0	40	100	1
9	PCC-EE	EE5L003	Power System II Lab	0	0	2	60	0	40	100	1
10	PROJ-EE	EE5P003	Mini Project/Seminar (Phase I)	0	0	2	30	0	20	50	1
11	MC	EE5T004	Consumer Affairs	2	0	0	10	15	25	50	Audit
				21	1	8	340	135	525	1000	
				Total Credits						24	

VI Semester

Sr. No.	Subject Category	Subject Code	Course Title	Teaching Scheme			Evaluation Scheme				Credits
				L	T	P	CA	MSE	ESE	TOTAL	
1	PCC-EE	EE6T001	Microprocessor and microcontroller	3	0	0	20	20	60	100	3
2	PCC-EE	EE6T002	Advance Control System	3	0	0	20	20	60	100	3
3	PEC-EE	EE6E003	Elective III	3	0	0	20	20	60	100	3
4	PEC-EE	EE6E004	Elective IV	3	0	0	20	20	60	100	3
5	OEC-EE	EE6O002	Open Elective II	4	0	0	20	20	60	100	4
6	PCC-EE	EE6L001	Microprocessor and microcontroller Lab	0	0	2	60	0	40	100	1
7	PCC-EE	EE6L003	Computer Aided Design Lab	0	0	2	60	0	40	100	1
8	PROJ-EE	EE6P004	Mini Project/Seminar(phase II)	0	0	2	30	0	20	50	1
9	PROJ-EE	EE6P005	Campus Recruitment Training(CRT)	0	0	2	50	0	0	50	1
10	PROJ-EE	EE6P006	Skill Development Courses	0	0	2	15	0	35	50	1
11	MC	EE6T003	Research Methodology	2	0	0	10	15	25	50	Audit
				15	0	10	305	95	400	800	
				Total Credits						21	

VII Semester

Sr. No.	Subject Category	Subject Code	Course Title	Teaching Scheme			Evaluation Scheme				Credits
				L	T	P	CA	MSE	ESE	TOTAL	
1	PCC-EE	EE7T001	Switch gear and protection	3	0	0	20	20	60	100	3
2	PCC-EE	EE7T002	High Voltage Engineering	3	0	0	20	20	60	100	3
3	PEC-EE	EE7E005	Elective V	3	0	0	20	20	60	100	3
4	OEC-EE	EE7O003	Open Elective III	4	0	0	20	20	60	100	4
5	PCC-EE	EE7L001	Switch gear and protection Lab	0	0	2	60	0	40	100	1
6	PCC-EE	EE7L002	High Voltage Engineering Lab	0	0	2	60	0	40	100	1
7	PROJ-EE	EE7P006	Project-I	0	0	10	0	0	50	50	5
8	MC	EE7T003	Intellectual Property Rights	2	0	0	10	15	25	50	Audit
				15	0	14	210	95	395	700	
Total Credits										20	

VIII Semester

Sr. No.	Subject Category	Subject Code	Course Title	Teaching Scheme			Evaluation Scheme				Credits
				L	T	P	CA	MSE	ESE	TOTAL	
1	PEC-EE	EE8E006	Elective VI	3	0	0	20	20	60	100	3
	OEC-EE	EE8O004	Open Elective IV	4	0	0	20	20	60	100	4
	PROJ-EE	EE8P007	Project-II	0	0	6	0	0	100	100	3
OR											
2	PROJ-EE	EE8P008	Internship(3 months)	0	0	0	0	0	0	20	10
				7	0	6	40	40	220	320	
Total Credits										10	

EE Credits	121
First Year	35
Total Credits	156



Member Secretary
Board of Studies, EE Dept



Chairperson
Board of Studies, EE Dept

Course Title : Communication Skills

Course Objectives:

The main objective of the subject is to enhance the employability skills of engineering students as well as communication skills at workplace.

The sub-objectives are:

- 1) To develop students' reading skills and pronunciation.
- 2) To develop technical communication skills through drafting, letter writing, and précis writing.
- 3) To develop literary skills through essay writing.
- 4) To develop public speaking skills of the students.
- 5) To expose the students to the ethics of English language by teaching grammar

Unit 1: Communication and Communication Processes (06 hrs)

Introduction to Communication, Types and functions of Communication, Barriers to Communication and overcoming them, Role of Communication Skills in Society

Reading: Introduction to Reading, Barriers to Reading, Types of Reading: Skimming, Scanning, Intensive and Extensive, Strategies for Reading Comprehension.

Listening : Importance of Listening, Types of Listening, Barriers to Listening.

Unit 2: English Grammar (06 hrs)

Grammar: Forms of Tenses, Articles, Prepositions, Use of Auxiliaries and Modal Auxiliaries, Sentence Structures, Use of phrases and clauses in sentences, Importance of proper punctuation, Common Errors. Misplaced modifiers.

Unit 3: Professional Verbal Communication (06 hrs)

Components of an effective talk, Idea of space and time in public speaking, Tone of voice, Body language, Timing and duration of speech, Audio-Visual Aids in speech. Presentation Skills, Group Discussion and Job Interviews

Unit 4: Developing Business Writing Skills, Styles and Practice (06 hrs)

Writing Emails, Report Writing: Format, Structure and Types, Letter Writing: Types, Parts, Layouts, Writing Job Application Letter and Resume.

Nature and Style of sensible Writing and Practice: Describing, Defining, Classifying, Providing examples or evidence, writing introduction and conclusion, Writing Practices: Comprehension, Précis Writing, Essay Writing

Unit 5: Study of Sounds in English and Vocabulary Building (06 hrs)

Introduction to phonetics, Study of Speech Organs, Study of Phonemic Script, Articulation of Different Sounds in English.

Vocabulary Building: The concept of Word Formation, Root words from foreign languages and their use in English, Use of prefixes and suffixes from foreign languages in English to form derivatives, Synonyms, antonyms, and words syllables.

Text book:

Mohd. Ashraf Rizvi, Communication Skills for Engineers, Tata McGraw Hill

Reference Books:

- 1) Sanjay Kumar, Pushp Lata, Communication Skills, Oxford University Press, 2016
- 2) Meenakshi Raman, Sangeeta Sharma, Communication Skills, Oxford University Press, 2017
- 3) Teri Kwal Gamble, Michael Gamble, Communication Works, Tata McGraw Hill Education, 2010
- 4) Anderson, Kenneth. Joan Maclean and Tossny Lynch. Study Speaking: A Course in Spoken English for Academic Purposes. Cambridge: CUP, 2004.
- 5) Aswalthapa, K. Organisational Behaviour, Himalayan Publication, Mumbai (1991).
- 6) Atreya N and Guha, Effective Credit Management, MMC School of Management, Mumbai (1994).
- 7) Balan, K.R. and Rayudu C.S., Effective Communication, Beacon New Delhi (1996).
- 8) Bellare, Nirmala. Reading Strategies. Vols. 1 and 2. New Delhi. Oxford University Press, 1998.
- 9) Bhasker, W. W. S & Prabhu, N. S.: English through Reading, Vols. 1 and 2. Macmillan, 1975.
- 10) Black, Sam. Practical Public Relations, E.L.B.S. London (1972).
- 11) Blass, Laurie, Kathy Block and Hannah Friesan. Creating Meaning. Oxford: OUP, 2007.
- 12) Bovee Courtland, L and Thrill, John V. Business Communication, Today McGraw Hill, New York, Taxman Publication (1989).

Course Title : Communication Skills-Lab

List of Practical Sessions (Any 6 practical sessions can be conducted):

- 1) Pronunciation, Intonation, Stress and Rhythm(02 hrs)
- 2) Introduction to Phonemic symbols (02 hrs)
- 3) Articulation of sounds in English with proper manner (02 hrs)
- 4) Practice and exercises on articulation of sounds (02 hrs)
- 5) Read Pronunciations/transcriptions from the dictionary (02 hrs)
- 6) Practice and exercises on pronunciations of words (02 hrs)
- 7) Introduce yourself (02 hrs)
- 8) Importance of Business Communication with the help of a case study.(02hrs)
- 9) Listening Skills/ Comprehension(02 hrs)
- 10) Common Everyday Situations: Conversations and Dialogues(02 hrs)
- 11) Communication at Workplace(02 hrs)
- 12) Rapid reading sessions (02 hrs)
- 13) Draft Email(02 hrs)
- 14) Resume Writing(02hrs)
- 15) Drafting Business Letter(02 hrs)
- 16) Preparing technical paper using IEEE format(02 hrs)
- 17) Extempore (02 hrs)
- 18) Elocution (02 hrs)
- 19) Group discussion (02 hrs)
- 20) Participating in a debate (02 hrs)
- 21) Presentation techniques (02 hrs)
- 22) Interview techniques – Job Interviews, Telephonic Interviews (02hrs)
- 23) Mock interviews and practice sessions (02 hrs)



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Department of Electrical Engineering

"Igniting minds to illuminate the world"

AY-2022-23



॥ ज्ञानम् सर्वार्थ साधनम् ॥

VISION	MISSION
“To develop competent and committed Electrical Engineers to serve the society”	<ol style="list-style-type: none"> To impart quality education in the field of Electrical Engineering. To be excellent learning center through research and industry interaction.

Program: B. Tech in Electrical Engineering

Semester	Course Code	Name of the course	L	T	P	Credits
IV	EE4T007	Innovation and entrepreneurship Development	2	0	0	3

Prerequisites for the course	
1	Basics idea of Entrepreneurship derived from live examples of startups and innovation from various news channels, newspapers and social media.

Prior Reading Material/useful links	
1	https://onlinecourses.nptel.ac.in/noc21_mg63/preview

Course Outcomes:

Sr. No	Course outcome number	CO statement
1	CO1	Discover the creative / innovative side within her/him
2	CO2	Hone entrepreneurial and leadership skills within his/her personality.
3	CO3	Develop new ways of thinking and Learn the entire innovation cycle from Ideation to GoToMarket.
4	CO4	Study frameworks, strategies, techniques and business models for conceived ideas.
5	CO5	Develop skills for evaluating, articulating, refining, and pitching a new product or service.

Syllabus:

Course Contents
Introduction to Innovation, Personal thinking preferences, ‘Innovation’ mind set, Everyday creativity and eliminating mental blocks, Introduction to Innovation, Creative thinking techniques, Innovation types, Idea management and approaches, Teaming techniques for creativity, Idea Conception, Idea Scoping, Self-Evaluation, Idea Brainstorming sessions, Idea

Verification, Market Evaluation, Concept Evaluation, Idea Verification, Prototype Evaluation, Protection/Patent review, Innovation Case Study, Idea Presentations, Idea Incubation, Product and Market Plan, Product and Market Development, Innovation Case Studies, Idea Incubation and Product Launch, Marketing and selling, Post Launch Review	
Text Books	
1	Jeff Dyer, Hal Gregersen, Clayton M. Christensen, " The Innovator's DNA: Mastering the Five Skills of Disruptive Innovators, Harvard Business Review Press, 2011.
Reference Books	
1	Paddy Miller, Thomas Wedell-Wedellsborg, "Innovation as Usual: How to Help Your People Bring Great Ideas to Life, Harvard Business Review Press, Kindle Edition.
Useful links	
1	https://onlinecourses.nptel.ac.in/noc21_mg63/preview

Contributions for syllabus designing:

Sr. No	Name of the person	Designation	Organization
1	Dr.V.S.Dhok	Asst.Prof.	JDCOEM,Nagpur
2	Mr.A.V.Joshi	Asst.Prof.	JDCOEM,Nagpur
3	Ms.S.V.Jethani	Asst.Prof.	JDCOEM,Nagpur
4	Mr. P. V. Ambade	Asst.Prof.	JDCOEM,Nagpur
5	Mr. J. S. Joshi	Professor (EE)	RKNEC,Nagpur
6	Dr. S. G. Tarnekar	Ex-Prof.	VNIT,Nagpur
7	Ms.Shreya Ramteke	Technical Recruiter	Collabera Pvt.Ltd. (Alumni batch JDCOEM,Nagpur)
8	Ms.Snehal Tembhurne	Business Development Executive	Byjus Pvt.Ltd. (Alumni JDCOEM,Nagpur)



Prof. A. V. Joshi
Member Secretary
Board of Studies, EE Dept



Dr. V. S. Dhok
Chairperson
Board of Studies, EE Dept

Course Objectives

1. To understand the importance of Innovation and Idea Generation
2. To understand the concept of entrepreneurship.

Course Outcomes

At the end of the course students will be able to

1. Identify and validate of ideas.
2. Remember Patent registration of Innovation.
3. Understand roles and responsibilities of Entrepreneurship.

Module 1: Innovation**[06 Hrs]**

Concept of creativity, innovation, invention, discovery. Methods for development of creativity, convergent & divergent thinking etc. Introduction to Intellectual Property Rights (IPR), Patent and laws related to patents.

Module 2: Entrepreneurship**[06 Hrs]**

Concept of entrepreneurship, its relations in economic developments, Eventuation of concept of entrepreneur, characteristics of an Entrepreneur, Types of entrepreneurs, Qualities of entrepreneur, Factors affecting growth of entrepreneurship

Module 3: Role of Entrepreneurial Bodies**[06 Hrs]**

Theory of achievement, motivation, Medelland's. Experiment, Women entrepreneurship, Role of SSI, its advantages & limitations, policies governing small scale industries, Procedure to set up small scale industrial unit, Advantages and limitations of SSI.

Module 4: Role of Entrepreneurial Support**[06 Hrs]**

Factors governing project selection, Market survey, Preparation of project report. Financial, technical & market analysis of project. Entrepreneurial support systems, Role of consultancy organization like, District Industrial Centre, State Industrial Development Corporation, Financial institution, Latest SSI schemes of DIC (to be confirmed from DIC from time to time).

Text Book

- 1) Entrepreneurship Development, S. S. Khanka, S. Chand Publishers.

Reference Book

- 1) Creativity Innovation & Entrepreneurship, Zechariah James Blanchard, Needle Rat Business Publishers.

Objective: This paper seeks to familiarize the students with their rights and responsibilities as a consumer, the social framework of consumer rights and legal framework of protecting consumer rights. It also provides an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards. The student should be able to comprehend the business firms' interface with consumers and the consumer related regulatory and business environment.

Unit 1: Conceptual Frame work

06 Lectures

Consumer and Markets: Concept of Consumer, Nature of markets: Liberalization and Globalization of markets with special reference to Indian Consumer Markets, E-Commerce with reference to Indian Market, GST, and Digital consumer issues.

Experiencing and Voicing Dissatisfaction: Consumer buying process, Consumer Satisfaction/dissatisfaction-Grievances-complaint, Consumer Complaining Behaviour: Alternatives available to Dissatisfied Consumers; Complaint Handling Process: ISO 10000 suite

Unit 2: The Consumer Protection Law in India

06 Lectures

Objectives and Basic Concepts: Consumer rights and UN Guidelines on consumer protection, Consumer goods, defect in goods, spurious goods and services, service, deficiency in service, unfair trade practice, and restrictive trade practice.

Unit 3: Grievance Redressal Mechanism under the Indian Consumer Protection Law 06 Lect.

Who can file a complaint? Grounds of filing a complaint; Limitation period; Procedure for filing and hearing of a complaint; Disposal of cases, Relief/Remedy available; Temporary Injunction, Enforcement of order, Appeal, frivolous and vexatious complaints; Offences and penalties.

Unit 4: Role of Industry Regulators in Consumer Protection

06 Lectures

- i. Banking: RBI and Banking Ombudsman
- ii. Insurance: IRDA and Insurance Ombudsman
- iii. Telecommunication: TRAI
- iv. Food Products: FSSAI
- v. Electricity Supply: Electricity Regulatory Commission
- vi. Real Estate Regulatory Authority

Text Books

1. Khanna, Sri Ram, Savita Hanspal, Sheetal Kapoor, and H.K. Awasthi. (2007) *Consumer Affairs*,

Universities Press.

2. Choudhary, Ram Naresh Prasad (2005). *Consumer Protection Law Provisions and Procedure*, Deep and Deep Publications Pvt Ltd.
3. G. Ganesan and M. Sumathy. (2012). *Globalisation and Consumerism: Issues and Challenges*, Regal Publications
4. Suresh Misra and Sapna Chadah (2012). *Consumer Protection in India: Issues and Concerns*, IIPA, New Delhi
5. Rajyalaxmi Rao (2012), *Consumer is King*, Universal Law Publishing Company
6. Girimaji, Pushpa (2002). *Consumer Right for Everyone* Penguin Books.
7. E-books :- www.consumereducation.in
8. Empowering Consumers e-book, www.consumeraffairs.nic.in
9. ebook, www.bis.org
10. *The Consumer Protection Act, 1986 and its later versions.*

Reference Books

1. Misra Suresh, (Aug 2017) “Is the Indian Consumer Protected? One India One People.
2. Raman Mittal, Sonkar Sumit and Parineet Kaur (2016) *Regulating Unfair Trade Practices: An Analysis of the Past and Present Indian Legislative Models*, Journal of Consumer Policy.
3. Chakravarthy, S. (2014). *MRTP Act metamorphoses into Competition Act*. CUTS Institute for Regulation and Competition position paper. Available online at www.cuts-international.org/doc01.doc.
4. Kapoor Sheetal (2013) “Banking and the Consumer” *Akademios* (ISSN 2231-0584)
5. Bhatt K. N., Misra Suresh and Chadah Sapna (2010). *Consumer, Consumerism and Consumer Protection*, Abhijeet Publications.
6. Kapoor Sheetal (2010) “Advertising- An Essential Part of Consumer’s Life-Its Legal and Ethical Aspects”, *Consumer Protection and Trade Practices Journal*, October 2010.
7. Verma, D.P.S. (2002). *Regulating Misleading Advertisements, Legal Provisions and Institutional Framework*. *Vikalpa*. Vol. 26. No. 2. pp. 51-57.

Website:

www.ncdrc.nic.in
www.consumeraffairs.nic.in
www.iso.org
www.bis.org.in
www.consumereducation.in
www.consumer-voice.in
www.cercindia.org



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Department of Electronics and Telecommunication Engineering

"Rectifying Ideas, Amplifying Knowledge"

2022-23 (Even Sem)



VISION

To be a Department providing high quality & globally competent knowledge of concurrent technologies in the field of Electronics and Telecommunication."

MISSION

1. To provide quality teaching learning process through well-developed educational environment and dedicated faculties.
2. To produce competent technocrats of high standards satisfying the needs of all stakeholders.

6th Sem Skill Development Courses

Course 1: Software Testing

(https://onlinecourses.nptel.ac.in/noc23_cs38/preview)

By Prof. Rajib Mall | IIT Kharagpur

Duration : 4 weeks
Start Date : 23 Jan 2023
End Date : 17 Feb 2023
Exam Date : 26 Mar 2023
IST
Enrollment Ends : 30 Jan 2023

Link to join the course: https://onlinecourses.nptel.ac.in/noc23_cs38/preview

Course layout

Week 1: Introduction to software testing and test process

Week 2: Black box testing

Week 3: White box testing

Week 4: Integration, regression and system testing, test automation

Course 2: Electric Vehicles - Part 1

(https://onlinecourses.nptel.ac.in/noc23_ee01/preview)

By Prof. Amit Jain | IIT Delhi

Duration :	4 weeks
Start Date :	23 Jan 2023
End Date :	17 Feb 2023
Exam Date :	26 March 2023 IST
Enrollment Ends :	30 Jan 2023

Link to join the course: https://onlinecourses.nptel.ac.in/noc23_ee01/preview

Course layout

Week 1 : Introduction to Electric Vehicle

Week 2 : Vehicle Dynamics: Modelling and Simulation

Week 3 : Fundamental of Drives and DC Machine Modeling

Week 4 : DC Machine Drives and Control of EV Using DC Machine

Course 3: A brief introduction of Micro - Sensors

(https://onlinecourses.nptel.ac.in/noc23_ee09/preview)

By Prof. Santanu Talukder | IISER Bhopal

Duration : 4 weeks
Start Date : 23 Jan 2023
End Date : 17 Feb 2023
Exam Date : 26 Mar 2023 IST
Enrollment Ends : 30 Jan 2023


Link to join the course: https://onlinecourses.nptel.ac.in/noc23_ee09/preview


Week 1 : What is small! From millimeter to angstrom; MEMS sensors introduction and application

Week 2 : Fundamentals of stress-strain, electrostatics and energy dissipation

Week 3 : Si and its properties; Microfabrication and lithography

Week 4 : Design and analysis of Micro Sensors; Case study: Accelerometer, Pressure sensor


Prof. Avinash K. Ikhari
Academic Incharge


Prof. Gayatri Bhojar
Incharge HOD

Campus Recruitment Training

About CRT Training Campus Recruitment training (CRT) is designed to aid candidates in their preparation for Recruitment through Campuses or outside campuses (i.e. On campus or off campus). Students in their final step of graduation looking for placement in reputed organizations can make use of this training to get trained to deliver their best in the selection processes of organizations.

COURSE OBJECTIVES

1. To enhance the problem solving skills, to improve the basic mathematical skills and to help students who are preparing for any type of campus recruitment drive.
2. To groom the students to the corporate level
3. To ensure that all eligible students are employed by the end of the final year of study.

COURSE OUTCOMES

At the end of the course students will be able to

1. Solve the problems easily by using Short-cut method with time management which will be helpful to them to clear the competitive exams for better job opportunity.
2. Analyze the Problems logically and approach the problems in a different manner.
3. Students will be able to apply mathematical analysis of data to make connections, draw conclusions and solve problems.
4. Students will learn a series of techniques through practical activities to develop presenting skills and enhance confidence to expand the potential of the individual.
5. Students can produce a resume that describes their education, skills, experiences and measurable achievements with proper grammar, format and brevity.
6. Students demonstrate an ability to target the resume to the presenting purpose
7. Demonstrate professional behaviour(s) including preparedness, professional attire, and respectful presentation during interviews.

PART I: - QUANTITATIVE ABILITY

Unit 1: - 03 hrs

Speed Maths Calculation, Number Systems, Ratio & Proportion, Percentage

Unit 2: - 03 hrs

Profit – Loss & Discount, Simple Interest & Compound Interest, Simple Equation and Age's

Unit 3:- 03 hrs

Averages Mixture & Allegation, Time and work, Time Speed & Distance, Permutation – Combination & Probability

PART II: - REASONING ABILITY

Unit 1: - 03 hrs

Coding Decoding, Blood Relation, Direction sense, Number Series, Analogy

Unit 2: - 03 hrs

Sitting Arrangement, Puzzles.

Unit 3:- 03 hrs

Syllogism, Statement course of action, Statement arguments, Statement Assumptions, Miscellaneous Type of Reasoning

PART III: - Employability Skills

Unit 1: - Presentation Skills (02 hrs)

What is a presentation? Essential characteristics of Good presentation.

Preparation of presentation: Identify the purpose, Analyze the audience, Design and organize the information, Medium of presentation and Visual aids

Delivering Presentation: rehearsal, body Language, Handling questions, Tips to fight stage fear.

Unit 2: - Job Interview Skills (02 hrs)

Types of interviews, Focus of interview, dress code, importance of body language.

Probable interview questions, Telephonic and video interview, Strategies for success at interview.

Unit 3: - Resume Building (02 hrs)

Meaning, Difference among Bio-data, Curriculum vitae and Resume.

CV writing tips, The content of Resume, Structure of Resume

Books

1. Prashant Sharma, SOFT SKILLS PERSONALITY DEVELOPMENT FOR LIFE SUCCESS. BPB Publication.
2. P. D. Chaturvedi & Mukesh Chaturvedi, Business Communication: Concepts, Cases, and Applications 2nd Edition. Pearson Education.
3. Barun Mitra, Personality Development and Soft Skills. Oxford University Press.
4. Dr. K. Alex, *Soft Skills Know yourself and Know the World*. S. Chand Publishing, 2014
5. R.S Agrawal, Quantitative Aptitude.
6. Arun Sharma, How to Prepare for Quantitative Aptitude.
7. R. S Agrawal, Verbal and Non Verbal Reasoning.
8. R.V. Praveen ,Quantitative Aptitude and Reasoning, 2nd Revised Edition 2013, Prentice-Hall of India Pvt. Ltd.
9. G. K. Ranganath, C. S. Sampangiram and Y. Rajaram, A text Book of business Mathematics, 2008, Himalaya Publishing House



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MINUTES OF 7TH BOARD OF STUDIES MEETING NO. BOS/ETC/07/2022-23

23/12/2022

Venue: Department of Electronics & Telecommunication Engineering

The 7th meeting of the Board of Studies was held on 23rd December, 2022 at 11.00 A.M.

Following members were present for this meeting.

Sr. No.	Name of the Faculty	Designation
1.	Mrs. Gayatri Bhojar	Chairman
2.	Dr. M.M.Khanapurkar	Member (Academician), GHRCE, Nagpur
3.	Dr. K. M. Bhurchandi	Member (VC Nominated), VNIT, Nagpur
4.	Mr. Ashish Khachane	Member (Industry)
5.	Mr.Amit Bhattacharya	Member (Alumni)
6.	Mr. Mohammad Hassan	Secretary
7.	Dr. Sanjay Haridas	Member
8.	Mr. Avinash Ikhar	Member
9.	Mr. Firoz Akthar	Member
10.	Ms. Pranali Langde	Member
11.	Mrs. Kiran Khandare	Member
12.	Mrs. Akanksha Sontakke	Member
13.	Ms. Ashwini Mate	Member
14.	Mr. Tushar Joshi	Member
15.	Mr. Pravin Lakhe	Member

The Secretary Mr. Mohammad Hassan are welcomed the members of the Board of Studies and the Chairman Mrs. Gayatri Bhojar introduced the new member(External) experts Dr. M. M. Khanapurkar Mr. Ashish Khachane, Mr. Amit Bhattacharya, M. Bhurchandi to the forum. With the permission of chair the discussion started as per the agenda. Following points were discussed.

Item No. 1 To confirm the minutes of 6thBoS meeting

The 6thBoS meeting was held on 24rd March, 2022. The new members in the Board of Studies were introduced, finalization of the syllabus for open elective course and finalization of the syllabus of B. Tech 7th & 8th Semester scheme were done.

Item No. 2	To bring on table the action taken report of 6th meeting of BoS held on 24th March 2022
-------------------	------------------------------------------------------------------------------------------------

The Secretary presented the Minutes of 6thBoS BOS/ETC/06/2022-23, to all the members and action taken on it. Following points were presented under this item.

Item No.	Item	Action Taken
01	Inclusion and confirmation of new member	Prof. Gayatri Bhojar was introduced and included as the Chairman of the Board.
02	Finalization of the syllabus of B. Tech 7th & 8th Semester	All the suggested changes/modifications were incorporated in the respective subject syllabus of B.Tech 7th & 8th Semester and the syllabus is finalized. The final draft of syllabus of B.Tech 7 th and 8 th semester was sent to all members.
03	Finalization of the syllabus for open elective courses	All the suggested changes/modifications were incorporated in the respective open elective courses and the syllabus is finalized. The final draft of syllabus was sent to all members.

Item No. 3	Inclusion and Confirmation of new members
-------------------	--------------------------------------------------

Inclusion and Confirmation of new (External) members Dr. M. M. Khanapurkar, Mr. Amit Bhattacharya and Mr. Ashish Khachne with Inclusion of (Internal) members Prof. Mohammad Hassan (Secretary) , Assistant Professor, Prof. Kiran Kahndare Assistant Professor, Prof. Akansha Sontakke Assistant Professor, Prof. Ashwini Mate Assistant Professor, Prof. Tushar Joshi Assistant Professor, Prof. Pravin Lakhe Assistant Professor of ETC Department, JDCOEM, Nagpur which was accepted by the forum.

Item No. 4	To finalize the minor corrections in the Scheme of UG
-------------------	--------------------------------------------------------------

Discussion on finalization of minor corrections in the scheme of UG was done and accepted by the forum. Following changes were made in the existing UG scheme

Sr. No.	Semester	Existing Subject	To be Replaced with
1	III	Electronic Devices and Circuits-I	Electronic Devices and Circuits
2	III	Electronic Devices and Circuits-I Lab	Electronic Devices and Circuits Lab
3	IV	Electronic Devices and Circuits-II	Microcontroller and Applications
4	IV	Electrical Machines and Instruments Lab	Microcontroller and Application Lab

5	IV	Electronic Devices and Circuits- II Lab	Basics of Python Programming Lab
6	IV		NPTEL Course

Item No. 5	To finalize the syllabus of B. Tech 3rd & 4th semester
-------------------	-----------------------------------------------------------------------------------------

Discussion on finalization of the syllabus of B. Tech 3rd & 4th semester was done and accepted by the forum. As per the discussion following changes are proposed in the syllabus.

In 4th semester syllabus most of the subject's syllabus were accepted by the forum. Some minor changes were proposed like In 3rd semester syllabus according to the EDC Syllabus six unit consist of CMOS technology topics. The introduction or basic requirement for studying CMOS should be included in previous unit i.e. 3rd unit.

Application part like Power amplifier should be added after CMOS topic and check out the syllabus should not be bulky.

Remove the experiment no. 8, 9 and 14 from Python Programming Lab. Instead of that include program of experiment based on Flash Module. Also instructed to add experiment based on PIP installations of various modules.

Reimbursement for NPTEL conferences and copyright should be provided to students and provide them financially.

Finalize the lower limit of attendance for detention of students, decide lower threshold limit of attendance. Students having zero % attendance should not be allowed for 1 mark according to the rubrics.

Students should allowed to do MOOC courses of 4 weeks, 8 weeks and 12 Weeks for all the mentioned courses and two credits should be award to the students.


Change the rubrics of mega projects and allow them for to do the training in the reputed institute and provide them incentives accordingly.

Achievements of department or departmental faculty from last BoS meeting should be added in last PPT of BoS meeting.

Item No. 8	Any other matter with the permission of the Chair.
-------------------	-----------------------------------------------------------

No other matter is discussed. Finally the meeting was concluded by the vote of thanks proposed by the chairman and secretary of the board.


Mr. Mohammad Hassan
 Secretary BOS
 ETC Board


Mrs. Gayatri Bhojar
 Chairman BOS
 ETC board



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Department of Information Technology
"Progress Beyond Excellence"
Session: 2022-23



Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	PCC	IT4T001	Theory of Computation	2	1	0	20	20	60	100	3
2	PCC	IT4T002	Java Programming	3	0	0	20	20	60	100	3
3	PCC	IT4T003	Operating System	3	0	0	20	20	60	100	3
4	PCC	IT4T004	Computer Networks	2	1	0	20	20	60	100	3
5	PCC	IT4T005	DBMS	3	0	0	20	20	60	100	3
6	PCC	IT4T006	Discrete Mathematics & Graph Theory	3	0	0	20	20	60	100	3
7	PCC	IT4L007	DBMS(Lab)	0	0	2	60	0	40	100	1
8	PCC	IT4L008	Computer Networks(Lab)	0	0	2	60	0	40	100	1
9	PCC	IT4L009	Java Programming(Lab)	0	0	2	60	0	40	100	1
10	MC	IT4L010	Consumer Affairs	2	0	0	15	10	25	50	Audit
11	PROJECT	IT4P011	Field Training/ Industrial Visit	0	0	2	30	0	20	50	1
12	PCC	IT4T012	NPTEL Course								2
				18	2	6	345	130	525	1000	24

IT4L010

Consumer Affairs

Audit

Course Objectives:

1. To familiarise the students with of their rights as a consumer, the social framework of consumer rights and legal framework of protecting consumer rights.
2. To provide an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards.

Course Outcomes:

The student should be able to

1. Remember the basic terminology related to Consumer Affairs
2. Understand the different approaches applied in different aspects of consumption, customer protection and consumer awareness and their evolution.
3. Apply the knowledge in different aspects of consumption, customer protection and consumer awareness.
4. Comprehend the business firms' interface with consumers and the consumer related regulatory and business environment.



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Department of Information Technology
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Session: 2022-23



5. Analyse: the norms applicable to different consumption patterns.
6. Evaluating the functioning of Consumer Protection mechanism in India.

Syllabus

Unit I: An Introduction to Consumer Affairs [7 Hrs]

An Introduction to History and Development of Consumer Movement; An introduction to International Organizations and Agreements; Product Liabilities Including Tortious Liabilities; Role of Non-Government Organizations (NGOs) and Voluntary Consumer Organizations (VCOs); Importance

Unit II: Grievance Redress Mechanism under the Consumer Protection Act [7 Hrs]

Who can file a complaint? Grounds of filing a complaint; Limitation period; Procedure for filing and hearing of a complaint; Disposal of cases, Relief/Remedy to be provided; Temporary Injunction, Enforcement of order, Appeal, frivolous and vexatious complaints; Offences and penalties. Globalization and its Consequences; Unfair Trade Practice;

Unit III: Legislation [7 Hrs]

Features and Aim of Consumer Protection Act; Consumer Protection Act; Comparison between Pre and Post Legislation Period; Land Mark Judgements

Unit IV: Understanding Consumption and Consumer Values [8 Hrs]

Customer Awareness Importance, Companies' Behaviour and Customer Awareness Relevance, Understanding the Market and Companies' Behaviour, Companies' Practices Requiring Consumers' Protection, Customer Awareness Relevance and Strategies

Unit V: Project Work [7 Hrs]

Leading Cases decided under Consumer Protection Act: Medical Negligence; Banking; Insurance; Housing & Real Estate; Electricity, Water, and Telecom Services; Education; Defective Product; Presenting a comprehensive solution to a selected case study.

Text Books:



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Session: 2022-23



1. Khanna, Sri Ram, Savita Hanspal, Sheetal Kapoor, and H.K. Awasthi. "Consumer Affairs" (2007) Delhi University Publication
2. Aggarwal, V. K. (2003). Consumer Protection: Law and Practice. 5th Ed. Bharat Law House, Delhi
3. Girimaji, Pushpa (2002). Consumer Right for Everyone Penguin Books.
4. Nader, Ralph (1973). The Consumer and Corporate Accountability. USA, Harcourt Brace Jovanovich, Inc.
5. Sharma, Deepa (2011). Consumer Protection and Grievance-Redress in India: A Study of Insurance Industry (LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbrücken, Germany)

Reference Books:

1. Empowering Consumers e-book, www.consumeraffairs.nic.in
2. EBook www.bis.org 8. The Consumer Protection Act, 1986 Consumer Protection Judgments (CPJ) (Relevant cases reported in various issues)
3. Recent issues of magazines: Insight, published by CERC, Ahmedabad 'Consumer Voice', Published by VOICE Society, New Delhi.
4. Upphokta Jagran, Ministry of Consumer Affairs, Govt, of India, New Delhi

Websites:

1. www.ncdrc.nic.in
2. www.fcamin.nic.in
3. www.consumeraffairs.nic.in
4. www.iso.org.in
5. www.bis.org
6. www.ascionline.org.in
7. www.trai.gov.in
8. www.irda.gov.in
9. www.derc.gov.in
10. www.rbi.org.in
11. www.fssai.gov.in
12. www.consumer-voice.org
13. www.nationalconsumerhelpline.in
14. www.cci.gov.in



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Curriculum for Semester- V [Third Year]

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	ESC	IT5T001	Embedded System & IoT	3	0	0	20	20	60	100	3
2	PCC	IT5T002	Cyber Security & Cryptography	2	1	0	20	20	60	100	3
3	PCC	IT5T003	Design and Analysis of Algorithm	2	1	0	20	20	60	100	3
4	OEC	IT5O001	Open Elective-1	3	1	0	20	20	60	100	4
5	PEC	IT5TE01	Elective -I	3	0	0	20	20	60	100	3
6	ESC	IT5L004	Embedded System & IoT (Lab)	0	0	2	60	20	40	100	1
7	PCC	IT5L005	Cyber Security & Cryptography (Lab)	0	0	2	60	0	40	100	1
8	PCC	IT5L006	Design and Analysis of Algorithm (Lab)	0	0	2	60	0	40	100	1
9	PROJECT	IT5P007	Mini Project	0	0	2	30	0	20	50	1
10	PROJECT	IT5P008	Field Training/ Industrial Visit	0	0	0	30	0	20	50	1
11	MC	IT5T009	Innovation and Entrepreneurship Development	2	0	0	15	10	25	50	Audit
				15	3	8	355	130	485	950	21

IT5T009

Innovation and Entrepreneurship Development

1 Credit

COURSE OBJECTIVES

1. To understand the importance of Innovation and Idea Generation
2. To understand the concept of entrepreneurship.

COURSE OUTCOMES

At the end of the course students will be able to

1. Identify and validate of ideas.
2. Remember Patent registration of Innovation.
3. Understand roles and responsibilities of Entrepreneurship.



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Session: 2022-23



Unit 1: Innovation

[06

Hours]

Concept of creativity, innovation, invention, discovery. Methods for development of creativity, convergent & divergent thinking etc. Introduction to Intellectual Property Rights (IPR), Patent and laws related to patents.

Unit 2: Entrepreneurship

[06 Hours]

Concept of entrepreneurship, its relations in economic developments, Eventuation of concept of entrepreneur, characteristics of an Entrepreneur, Types of entrepreneurs, Qualities of entrepreneur, Factors affecting growth of entrepreneurship.

Unit 3: Role of Entrepreneurial Bodies

[06 Hours]

Theory of achievement, motivation, Medelland's experiment, Women entrepreneurship, Role of SSI, it's advantages & limitations, policies governing small scale industries, Procedure to set up small scale industrial unit, Advantages and limitations of SSI.

Unit 4: Role of Entrepreneurial Support

[06 Hours]

Factors governing project selection, Market survey, Preparation of project report. Financial, technical & market analysis of project. Entrepreneurial support systems, Role of consultancy organization like, District Industrial Centre, State Industrial Development Corporation, Financial institution, Latest SSI schemes of DIC (to be confirmed from DIC from time to time).

Text Book

1) Entrepreneurship Development, S. S. Khanka, S. Chand Publishers.

Reference Book



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 "Progress Beyond Excellence"
 Session: 2022-23



1) Creativity Innovation & Entrepreneurship, Zechariah James Blanchard, Needle Rat Business

6th Sem

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	ESC	IT6T001	Adhoc Wireless Networks	3	0	0	20	20	60	100	3
2	PCC	IT6T002	Machine Learning	2	1	0	20	20	60	100	3
3	PEC	IT6TE02	Elective -II	3	0	0	20	20	60	100	3
4	PEC	IT6TE03	Elective-III	3	0	0	20	20	60	100	3
5	OEC	IT6O002	Open Elective 2	3	1	0	20	20	60	100	4
6	ESC	IT6L003	Adhoc Wireless Networks (Lab)	0	0	2	60	0	40	100	1
7	PCC	IT6L004	Machine Learning (Lab)	0	0	2	60	0	40	100	1
8	PCC	IT6L005	Multimedia (Lab)	0	0	2	60	0	40	100	1
9	PROJECT	IT6P006	Mini Project	0	0	4	30	0	20	50	1
10	PROJECT	IT6P007	CRT(Campus Recruitment Training)	0	0	2	50	0	0	50	1
11	PROJECT	IT6P008	Skill Development	0	0	2	15	0	35	50	1
12	MC	IT6T009	Intellectual Property Rights	2	0	0	15	10	25	50	Audit
				16	2	14	390	110	500	1000	22

IT6P007	Campus Recruitment Training	1 Credit
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About CRT Training Campus Recruitment training (CRT) at is designed to aid candidates in their preparation for Recruitment through Campuses or outside campuses (i.e On campus or off campus). Students in their final step of graduation looking for placement in reputed organizations can make use of this training to get trained to deliver their best in the selection processes of organizations.

COURSE OBJECTIVES

1. To enhance the problem solving skills, to improve the basic mathematical skills and to help students who are preparing for any type of campus recruitment drive.
2. To groom the students to the corporate level



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Session: 2022-23



3. To ensure that all eligible students are employed by the end of the final year of study.

COURSE OUTCOMES

At the end of the course students will be able to

1. Solve the problems easily by using Short-cut method with time management which will be helpful to them to clear the competitive exams for better job opportunity.
2. Analyze the Problems logically and approach the problems in a different manner.
3. Students will be able to apply mathematical analysis of data to make connections, draw conclusions and solve problems.
4. Students will learn a series of techniques through practical activities to develop presenting skills and enhance confidence to expand the potential of the individual.
5. Students can produce a resume that describes their education, skills, experiences and measurable achievements with proper grammar, format and brevity.
6. Students demonstrate an ability to target the resume to the presenting purpose
7. Demonstrate professional behavior(s) including preparedness, professional attire, and respectful presentation during interviews.

PART I: - QUANTITATIVE ABILITY

Unit 1: - 03 hrs

Speed Maths Calculation, Number Systems, Ratio & Proportion, Percentage

Unit 2: - 03 hrs

Profit – Loss & Discount, Simple Interest & Compound Interest, Simple Equation and Age's

Unit 3:- 03 hrs

Averages Mixture & Allegation, Time and work, Time Speed & Distance, Permutation – Combination & Probability

PART II: - REASONING ABILITY

Unit 1: - 03 hrs



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Department of Information Technology
"Progress Beyond Excellence"
Session: 2022-23



Coding Decoding, Blood Relation, Direction sense, Number Series, Analogy

Unit 2: - 03 hrs

Sitting Arrangement, Puzzles.

Unit 3:- 03 hrs

Syllogism, Statement course of action, Statement arguments, Statement Assumptions, Miscellaneous Type of Reasoning

PART III: - Employability Skills

Unit 1: - Presentation Skills (02 hrs)

What is a presentation? Essential characteristics of Good presentation.

Preparation of presentation: Identify the purpose, Analyze the audience, Design and organize the information, Medium of presentation and Visual aids

Delivering Presentation: rehearsal, body Language, Handling questions, Tips to fight stage fear.

Unit 2: - Job Interview Skills (02 hrs)

Types of interviews, Focus of interview, dress code, importance of body language.

Probable interview questions, Telephonic and video interview, Strategies for success at interview.

Unit 3: - Resume Building (02 hrs)

Meaning, Difference among Bio-data, Curriculum vitae and Resume.

CV writing tips, The content of Resume, Structure of Resume

Books

1. Prashant Sharma, SOFT SKILLS PERSONALITY DEVELOPMENT FOR LIFE SUCCESS. BPB Publication.
2. P. D. Chaturvedi & Mukesh Chaturvedi, Business Communication: Concepts, Cases, and Applications 2nd Edition. Pearson Education.
3. Barun Mitra, Personality Development and Soft Skills. Oxford University Press.



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Session: 2022-23



4. Dr.K.Alex, *Soft Skills Know yourself and Know the World*. S.ChandPublishing, 2014
5. R.S Agrawal, Quantitative Aptitude.
6. Arun Sharma, How to Prepare for Quantitative Aptitude.
7. R. S Agrawal. Verbal and Non Verbal Reasoning.
8. R.V.Praveen,Quantitative Aptitude and Reasoning, 2nd Revised Edition 2013, Prentice-Hall of India Pvt.Ltd.
9. G. K. Ranganath, C. S. Sampangiram and Y. Rajaram, A text Book of business Mathematics, 2008, Himalaya Publishing House

SKILL DEVELOPMENT

SYLLABUS

1. Foundations of Cyber Physical Systems

Dr. S. Kumar (Dr. H. Krishna)

Summary

Course Status : Upcoming

Course Type : Elective

Duration : 12 weeks

Start Date : 23 Jan 2023

End Date : 14 Apr 2023

Exam Date : 29 Apr 2023 IST

Enrollment Ends : 30 Jan 2023

Category : Computer Science and Engineering

Credit Points : 3

Level : Undergraduate Postgraduate

Course layout

Week 1

- 1.1 Introduction to Cyber Physical Systems (CPS) - Industrial and Industry 4.0, Automotive, and Other Applications, Medical CPS
- 1.2 Embedded systems and real-time systems - CPS

Week 2: Hardware sensing and control for CPS

- 2.1 Sensors and Actuators
- 2.2 Control systems for embedded systems

Week 3:

- i. Real time task scheduling for CPS
- ii. Worst Case Execution Time, Res. ponse time analysis of CPS software

Week 4:

- i. Dynamical System modeling for CPS
- ii. Different notions of stability

Week 5:

- i. Controller Design (using pole placement)
- ii. Delay aware Controller Design

Week 6:

Stability and Control Performance in presence of Platform uncertainties

Week 7:

- i. Lyapunov Stability
- ii. Barrier Functions

Week 8:

Quadratic Program based Controller Design ensuring Safety and Stability

Week 9:

Neural Network (NN) Based Controllers in CPS

Week 10:

Safety of NN enabled CPS: switching between NN and conventional controllers

Week 11:

State Estimation using Kalman Filter and other techniques

Week 12:

- i. False Data Injection (FDI) Attack detection in CPS
- ii. Attack Mitigation in C

Books and references

1. "Principles of Cyber-Physical Systems" - Rajeev Alur
2. "Introduction to Embedded Systems — A Cyber- Physical Systems Approach" - U. A. Lee, SanjitSinha

2. Introduction To Soft Computing

By Prof. Debasis Samanta III Kharagpur

Summary

Course Status : Upcoming

Course Type : Elective

Duration : 8 weeks

Start Date : 23 Jan 2023

End Date : 17 Mar 2023

Exam Date : 26 Mar 2023 IST

Enrollment Ends : 30 Jan 2023

Category : e - Computer Science and Engineering

Credit Points : 2

Level : Undergraduate/Postgraduate

Course layout

Week 1: Introduction to Soft Computing, Introduction to Fuzzy logic, Fuzzy membership functions, Operations on Fuzzy sets

Week 2: Fuzzy relations, Fuzzy propositions, Fuzzy implications, Fuzzy inferences

Week 3: Defuzzification Techniques-I, Defuzzification Techniques-II, Fuzzy logic controller-I, Fuzzy logic controller-II

Week 4: Solving optimization problems, Concept of GA, GA Operators - Encoding, GA Operators - Selection-I

Week 5: GA Operators - Selection-II, GA Operators - Crossover, GA Operators - Crossover-II, GA Operators - Mutation

Week 6: Introduction to FCF, Introduction to EC-II, MOEA Approaches - NS-PSO, MOEA Approaches - Pareto-I

Week 7: MOEA Approaches - Pareto-II, Introduction to ANNs - ANN Architectures

Week 8: ANN Training-I, ANN Training-II, ANN Training-III, Applications of ANN

Books and references

1. An Introduction to Genetic Algorithms Melanie Mitchell (MIT Press)
2. Evolutionary Algorithms for Solving Multi-objective Optimization Problems (2nd Edition, Coello, Lamont, Velthuiszer) Springer
3. Fuzzy Logic with Engineering Applications Timothy J. Ross (Wiley)
4. Neural Networks and Learning Machines Simon Haykin (PHI)

3 Object Oriented System Development Using UML, Java And Patterns

By Prof. Rashmi Mishra, IIT Kharagpur

Summary

Course Status :	Open Enrol
Course Type :	Elective
Duration :	12 week
Start Date :	23 Jan 2023
End Date :	14 Apr 2023
Exam Date :	29 Apr 2023 IS1
Enrollment Ends :	30 Jan 2023
Department :	Computer Science and Engineering
Category :	Programming
Credit Points :	3
Level :	Postgraduate

Course layout

Week 1: Introduction

Week 2: Life Cycle Models for O/O Development

Week 3: Use Case Diagram

Week 4: Class Diagram I

Week 5: Class Diagram II

Week 6: Sequence Diagram

Week 7: State chart diagram

Week 8: Design process
Week 9: Introduction to design patterns
Week 10: GRASP patterns
Week 11: GoF pattern I
Week 12: GoF Pattern II

Books and references

Robert Martin, UML for Java Programmers, Pearson, Ali Bahrami, Object-oriented System Development, IJIT, 1999

for. Shodh
Prof. M. M. Baig
HOD (IT) ▽



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SESSION 2020-21**



Branch: Mechanical Engineering	Branch Code: ME
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1ST Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	HSMC	HU1T001	Communication Skills	2	0	0	60	0	40	100	2
2	BSC	MA1T001	Engineering Mathematics- I	3	1	0	20	20	60	100	4
3	BSC	ME1T002	Engineering Chemistry	3	1	0	20	20	60	100	4
4	ESC	ME1T003	Engineering Graphics	1	0	0	20	20	60	100	1
5	HSMC	HU1L001	Communication Skills Lab.	0	0	4	60	0	40	100	2
6	BSC	ME1L002	Engineering Chemistry Lab	0	0	2	60	0	40	100	1
7	ESC	ME1L003	Engineering Graphics Lab	0	0	4	60	0	40	100	2
8			Induction Programme	3 Weeks							
9	ESC	ME1T004	Basic Civil and Mechanical Engineering	2	0	0	10	15	25	50	Audit
				11	2	10					16

2nd Semester

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE/Ext. Pra.	Total	
1	HSMC	HU2T002	Introduction to Computer programming	2	0	0	20	20	60	100	2
2	BSC	MA2T001	Engineering Mathematics- II	3	1	0	20	20	60	100	4
3	BSC	ME2T005	Engineering Physics	3	1	0	20	20	60	100	4
4	ESC	ME2T006	Energy and Environment Engineering	3	0	0	20	20	60	100	3
5	ESC	WS2L001	Workshop Practices	0	0	4	60	0	40	100	2
6	HSMC	HU2L002	Introduction to Computer programming Lab	0	0	4	60	0	40	100	2
7	BSC	ME2L005	Engineering Physics Lab	0	0	2	60	0	40	100	1
8			Societal Internship/ Field Training	Report submission					50	1	
9	ESC	ME2T007	Basic Electrical and Electronics Engineering	2	0	0	10	15	25	50	Audit
				13	2	10					19
				25							



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 SESSION 2021-22

3rd Semester Mechanical Engineering

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	BSC	ME3T001	Applied Maths-III	3	1	0	20	20	60	100	4
2	ESC	ME3T002	Rigid Body Mechanics	3	0	0	20	20	60	100	3
3	PCC	ME3T003	Material Science	3	0	0	20	20	60	100	3
4	PCC	ME3T004	Engineering Thermodynamics	3	0	0	20	20	60	100	3
5	PCC	ME3T005	Theory Of Machines-I	3	0	0	20	20	60	100	3
6	PCC	ME3T006	Manufacturing Engineering-I	3	0	0	20	20	60	100	3
7	PCC	ME3L003	Material Science Lab	0	0	2	60	0	40	100	1
8	PCC	ME3L006	Manufacturing Engineering-I Lab	0	0	2	60	0	40	100	1
9	ESC	ME3L007	Machine Drawing and Computer Graphics	1	0	2	60	0	40	100	2
10	HSMC	ME3T008	Universal Human Value	3	0	0	20	20	60	100	3
				22	2	6	320	140	540	1000	26

4th Semester Mechanical Engineering

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	BSC	ME4T001	Numerical Method	3	1	0	20	20	60	100	4
2	ESC	ME4T002	Basic Electronic Engineering	3	1	0	20	20	60	100	4
3	ESC	ME4T003	Product Design and Development	2	0	0	20	20	60	100	2
4	PCC	ME4T004	Manufacturing Engineering-II	3	0	0	20	20	60	100	3
5	PCC	ME4T005	Strength Of Materials	3	0	0	20	20	60	100	3
6	PCC	ME4T006	Fluid Mechanics & Fluid Machines	3	0	0	20	20	60	100	3
7	PCC	ME4L004	Manufacturing Engineering Lab	0	0	2	60	0	40	100	1
8	PCC	ME4L005	Strength Of Materials Lab	0	0	2	60	0	40	100	1
9	PCC	ME4L006	Fluid Mechanics & Fluid Machines Lab	0	0	2	60	0	40	100	1
10	PROJECT	ME4F007	Industrial visit	0	0	0	0	0	50	50	1
11	MC	ME4T008	Innovation and Entrepreneurship Development	2	0	0	10	15	25	50	Audit
				19	2	6	310	135	555	1000	23

5th Semester Mechanical Engineering

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme				Evaluation Scheme				Credit
				L	T	P	A	CA	MSE	ESE	Total	
1	PCC	ME5T001	Heat Transfer	2	1	0	1	20	20	60	100	3
2	PCC	ME5T002	Theory Of Machines-II	2	1	0	1	20	20	60	100	3
3	PCC	ME5T003	Measurement and Quality Control	2	1	0	1	20	20	60	100	3
4	PEC	ME5TE01	Elective-I	3	0	0	1	20	20	60	100	3
5	OEC	ME5O001	Open elective I	3	1	0	1	20	20	60	100	4
6	PCC	ME5L001	Heat Transfer Lab	0	0	2	0	60	0	40	100	1
7	PCC	ME5L002	Theory Of Machines-II Lab	0	0	2	0	60	0	40	100	1
8	PCC	ME5L003	Measurement and Quality Control Lab	0	0	2	0	60	0	40	100	1
9	PROJECT	ME5P004	Mini Project	0	0	0	0	0	0	50	50	1
10	MC	ME5T005	Consumer Affair	2	0	0	0	10	15	25	50	Audit
				14	4	6	5	290	115	495	900	20

6th Semester Mechanical Engineering

Sr. No.	Category of Subject	Course Code	Course Name	Teaching Scheme				Evaluation Scheme				Credit
				L	T	P	A	CA	MSE	ESE	Total	
1	HSMC	ME6T001	Operation Research	3	0	0	1	20	20	60	100	3
2	PCC	ME6T002	Applied Thermodynamics	2	1	0	1	20	20	60	100	3
3	PCC	ME6T003	Design of Machine Element	2	1	0	1	20	20	60	100	3
4	PEC	ME6TE01	Elective-II	3	0	0	1	20	20	60	100	3
5	OEC	ME6O002	Open elective II	3	1	0	1	20	20	60	100	4
6	PCC	ME6L002	Applied Thermodynamics Lab	0	0	2	0	60	0	40	100	1
7	PCC	ME6L003	Design of Machine Element Lab	0	0	2	0	60	0	40	100	1
8	ESC	ME6L004	Computer Graphics Lab	1	0	2	0	60	0	40	100	2
9	PROJECT	ME6P005	Campus Recruitment Training	0	0	2	0	50	0	0	50	1
10	PROJECT	ME6P006	Skill Development	0	0	2	0	15	0	35	50	1
11	PROJECT	ME6P007	Mini Project	0	0	0	0	25	0	25	50	1
12	MC	ME6T008	Research Methodology	2	0	0	0	10	15	25	50	Audit
				16	3	10	5	380	115	505	1000	23

Course Title : Communication Skills

Course Objectives:

The main objective of the subject is to enhance the employability skills of engineering students as well as communication skills at workplace.

The sub-objectives are:

- 1) To develop students' reading skills and pronunciation.
- 2) To develop technical communication skills through drafting, letter writing, and précis writing.
- 3) To develop literary skills through essay writing.
- 4) To develop public speaking skills of the students.
- 5) To expose the students to the ethics of English language by teaching grammar

Unit 1: Communication and Communication Processes (06 hrs)

Introduction to Communication, Types and functions of Communication, Barriers to Communication and overcoming them, Role of Communication Skills in Society

Reading: Introduction to Reading, Barriers to Reading, Types of Reading: Skimming, Scanning, Intensive and Extensive, Strategies for Reading Comprehension.

Listening : Importance of Listening, Types of Listening, Barriers to Listening.

Unit 2: English Grammar (06 hrs)

Grammar: Forms of Tenses, Articles, Prepositions, Use of Auxiliaries and Modal Auxiliaries, Sentence Structures, Use of phrases and clauses in sentences, Importance of proper punctuation, Common Errors. Misplaced modifiers.

Unit 3: Professional Verbal Communication (06 hrs)

Components of an effective talk, Idea of space and time in public speaking, Tone of voice, Body language, Timing and duration of speech, Audio-Visual Aids in speech. Presentation Skills, Group Discussion and Job Interviews

Unit 4: Developing Business Writing Skills, Styles and Practice (06 hrs)

Writing Emails, Report Writing: Format, Structure and Types, Letter Writing: Types, Parts, Layouts, Writing Job Application Letter and Resume.

Nature and Style of sensible Writing and Practice: Describing, Defining, Classifying, Providing examples or evidence, writing introduction and conclusion, Writing Practices: Comprehension, Précis Writing, Essay Writing

Unit 5: Study of Sounds in English and Vocabulary Building (06 hrs)

Introduction to phonetics, Study of Speech Organs, Study of Phonemic Script, Articulation of Different Sounds in English.

Vocabulary Building: The concept of Word Formation, Root words from foreign languages and their use in English, Use of prefixes and suffixes from foreign languages in English to form derivatives, Synonyms, antonyms, and words syllables.

Text book:

Mohd. Ashraf Rizvi, Communication Skills for Engineers, Tata McGraw Hill

Reference Books:

- 1) Sanjay Kumar, Pushp Lata, Communication Skills, Oxford University Press, 2016
- 2) Meenakshi Raman, Sangeeta Sharma, Communication Skills, Oxford University Press, 2017
- 3) Teri Kwal Gamble, Michael Gamble, Communication Works, Tata McGraw Hill Education, 2010
- 4) Anderson, Kenneth. Joan Maclean and Tossny Lynch. Study Speaking: A Course in Spoken English for Academic Purposes. Cambridge: CUP, 2004.
- 5) Aswalthapa, K. Organisational Behaviour, Himalayan Publication, Mumbai (1991).
- 6) Atreya N and Guha, Effective Credit Management, MMC School of Management, Mumbai (1994).
- 7) Balan, K.R. and Rayudu C.S., Effective Communication, Beacon New Delhi (1996).
- 8) Bellare, Nirmala. Reading Strategies. Vols. 1 and 2. New Delhi. Oxford University Press, 1998.
- 9) Bhasker, W. W. S & Prabhu, N. S.: English through Reading, Vols. 1 and 2. Macmillan, 1975.
- 10) Black, Sam. Practical Public Relations, E.L.B.S. London (1972).
- 11) Blass, Laurie, Kathy Block and Hannah Friesan. Creating Meaning. Oxford: OUP, 2007.
- 12) Bovee Courtland, L and Thrill, John V. Business Communication, Today McGraw Hill, New York, Taxman Publication (1989).

Course Title : Communication Skills-Lab

List of Practical Sessions (Any 6 practical sessions can be conducted):

- 1) Pronunciation, Intonation, Stress and Rhythm(02 hrs)
- 2) Introduction to Phonemic symbols (02 hrs)
- 3) Articulation of sounds in English with proper manner (02 hrs)
- 4) Practice and exercises on articulation of sounds (02 hrs)
- 5) Read Pronunciations/transcriptions from the dictionary (02 hrs)
- 6) Practice and exercises on pronunciations of words (02 hrs)
- 7) Introduce yourself (02 hrs)
- 8) Importance of Business Communication with the help of a case study.(02hrs)
- 9) Listening Skills/ Comprehension(02 hrs)
- 10) Common Everyday Situations: Conversations and Dialogues(02 hrs)
- 11) Communication at Workplace(02 hrs)
- 12) Rapid reading sessions (02 hrs)
- 13) Draft Email(02 hrs)
- 14) Resume Writing(02hrs)
- 15) Drafting Business Letter(02 hrs)
- 16) Preparing technical paper using IEEE format(02 hrs)
- 17) Extempore (02 hrs)
- 18) Elocution (02 hrs)
- 19) Group discussion (02 hrs)
- 20) Participating in a debate (02 hrs)
- 21) Presentation techniques (02 hrs)
- 22) Interview techniques – Job Interviews, Telephonic Interviews (02hrs)
- 23) Mock interviews and practice sessions (02 hrs)

COURSE OBJECTIVES

1. To understand the importance of Innovation and Idea Generation
2. To understand the concept of entrepreneurship.

COURSE OUTCOMES

At the end of the course students will be able to

1. Identify and validate of ideas.
2. Remember Patent registration of Innovation.
3. Understand roles and responsibilities of Entrepreneurship.

Unit 1: Innovation**[06 Hours]**

Concept of creativity, innovation, invention, discovery. Methods for development of creativity, convergent & divergent thinking etc. Introduction to Intellectual Property Rights (IPR), Patent and laws related to patents.

Unit 2: Entrepreneurship**[06 Hours]**

Concept of entrepreneurship, its relations in economic developments, Eventuation of concept of entrepreneur, characteristics of an Entrepreneur, Types of entrepreneurs, Qualities of entrepreneur, Factors affecting growth of entrepreneurship

Unit 3: Role of Entrepreneurial Bodies**[06 Hours]**

Theory of achievement, motivation, Medelland's. experiment, Women entrepreneurship, Role of SSI, it's advantages & limitations, policies governing small scale industries, Procedure to set up small scale industrial unit, Advantages and limitations of SSI.

Unit 4: Role of Entrepreneurial Support**[06 Hours]**

Factors governing project selection, Market survey, Preparation of project report. Financial, technical & market analysis of project. Entrepreneurial support systems, Role of consultancy organization like, District Industrial Centre, State Industrial Development Corporation, Financial institution, Latest SSI schemes of DIC (to be confirmed from DIC from time to time).

Text Book

- 1) Entrepreneurship Development, S. S. Khanka, S. Chand Publishers.

Reference Book

- 1) Creativity Innovation & Entrepreneurship, Zechariah James Blanchard, Needle Rat Business Publishers.

Campus Recruitment Training

About CRT Training Campus Recruitment training (CRT) is designed to aid candidates in their preparation for Recruitment through Campuses or outside campuses (i.e On campus or off campus). Students in their final step of graduation looking for placement in reputed organizations can make use of this training to get trained to deliver their best in the selection processes of organizations.

COURSE OBJECTIVES

1. To enhance the problem solving skills, to improve the basic mathematical skills and to help students who are preparing for any type of campus recruitment drive.
2. To groom the students to the corporate level
3. To ensure that all eligible students are employed by the end of the final year of study.

COURSE OUTCOMES

At the end of the course students will be able to

1. Solve the problems easily by using Short-cut method with time management which will be helpful to them to clear the competitive exams for better job opportunity.
2. Analyze the Problems logically and approach the problems in a different manner.
3. Students will be able to apply mathematical analysis of data to make connections, draw conclusions and solve problems.
4. Students will learn a series of techniques through practical activities to develop presenting skills and enhance confidence to expand the potential of the individual.
5. Students can produce a resume that describes their education, skills, experiences and measurable achievements with proper grammar, format and brevity.
6. Students demonstrate an ability to target the resume to the presenting purpose
7. Demonstrate professional behavior(s) including preparedness, professional attire, and respectful presentation during interviews.

PART I: - QUANTITATIVE ABILITY

Unit 1: - 03 hrs

Speed Maths Calculation, Number Systems, Ratio & Proportion, Percentage

Unit 2: - 03 hrs

Profit – Loss & Discount, Simple Interest & Compound Interest, Simple Equation and Age's

Unit 3:- 03 hrs

Averages Mixture & Allegation, Time and work, Time Speed & Distance, Permutation – Combination & Probability


H.K. Bhatnagar

PART II: - REASONING ABILITY

Unit 1: - 03 hrs

Coding Decoding, Blood Relation, Direction sense, Number Series, Analogy

Unit 2: - 03 hrs

Sitting Arrangement, Puzzles.

Unit 3:- 03 hrs

Syllogism, Statement course of action, Statement arguments, Statement Assumptions, Miscellaneous Type of Reasoning

PART III: - Employability Skills

Unit 1: - Presentation Skills (02 hrs)

What is a presentation? Essential characteristics of Good presentation.

Preparation of presentation: Identify the purpose, Analyze the audience, Design and organize the information, Medium of presentation and Visual aids

Delivering Presentation: rehearsal, body Language, Handling questions, Tips to fight stage fear.

Unit 2: - Job Interview Skills (02 hrs)

Types of interviews, Focus of interview, dress code, importance of body language.

Probable interview questions, Telephonic and video interview, Strategies for success at interview.

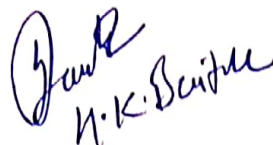
Unit 3: - Resume Building (02 hrs)

Meaning, Difference among Bio-data, Curriculum vitae and Resume.

CV writing tips, The content of Resume, Structure of Resume

Books

1. Prashant Sharma, SOFT SKILLS PERSONALITY DEVELOPMENT FOR LIFE SUCCESS. BPB Publication.
2. P. D. Chaturvedi & Mukesh Chaturvedi, Business Communication: Concepts, Cases, and Applications 2nd Edition. Pearson Education.
3. Barun Mitra, Personality Development and Soft Skills. Oxford University Press.
4. Dr.K.Alex, *Soft Skills Know yourself and Know the World*. S.ChandPublishing, 2014
5. R.S Agrawal, Quantitative Aptitude.
6. Arun Sharma, How to Prepare for Quantitative Aptitude.
7. R. S Agrawal, Verbal and Non Verbal Reasoning.
8. R.V.Praveen, Quantitative Aptitude and Reasoning, 2nd Revised Edition 2013, Prentice-Hall of India Pvt.Ltd.
9. G. K. Ranganath, C. S. Sampangiram and Y. Rajaram, A text Book of business Mathematics, 2008, Himalaya Publishing House


N.K. Saini

ME5T005

Consumer Affairs

Audit

Objective: This paper seeks to familiarize the students with their rights and responsibilities as a consumer, the social framework of consumer rights and legal framework of protecting consumer rights. It also provides an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards. The student should be able to comprehend the business firms' interface with consumers and the consumer related regulatory and business environment.

Unit 1: Conceptual Framework

[06 Hours]

Consumer and Markets: Concept of Consumer, Nature of markets: Liberalization and Globalization of markets with special reference to Indian Consumer Markets, E-Commerce with reference to Indian Market, GST, Digital consumer issues.

Experiencing and Voicing Dissatisfaction: Consumer buying process, Consumer Satisfaction/dissatisfaction-Grievances-complaint, Consumer Complaining Behaviour: Alternatives available to Dissatisfied Consumers; Complaint Handling Process: ISO 10000 suite

Unit 2: The Consumer Protection Law in India

[06 Hours]

Objectives and Basic Concepts: Consumer rights and UN Guidelines on consumer protection, Consumer goods, defect in goods, spurious goods and services, service, deficiency in service, unfair trade practice, restrictive trade practice.

Unit 3: Grievance Redressal Mechanism under the Indian Consumer Protection Law

[06 Hours]

Who can file a complaint? Grounds of filing a complaint; Limitation period; Procedure for filing and hearing of a complaint; Disposal of cases, Relief/Remedy available; Temporary Injunction, Enforcement of order, Appeal, frivolous and vexatious complaints; Offences and penalties.

Unit 4: Role of Industry Regulators in Consumer Protection

[06 Hours]

- i. Banking: RBI and Banking Ombudsman
- ii. Insurance: IRDA and Insurance Ombudsman
- iii. Telecommunication: TRAI
- iv. Food Products: FSSAI
- v. Electricity Supply: Electricity Regulatory Commission
- vi. Real Estate Regulatory Authority

Text Books

1. Khanna, Sri Ram, Savita Hanspal, Sheetal Kapoor, and H.K. Awasthi. (2007) Consumer Affairs, Universities Press.
2. Choudhary, Ram Naresh Prasad (2005). Consumer Protection Law Provisions and Procedure, Deep and Deep Publications Pvt Ltd.
3. G. Ganesan and M. Sumathy. (2012). Globalisation and Consumerism: Issues and Challenges, Regal Publications
4. Suresh Misra and Sapna Chadah (2012). Consumer Protection in India: Issues and Concerns, IIPA, New Delhi
5. Rajyalaxmi Rao (2012), Consumer is King, Universal Law Publishing Company
6. Girimaji, Pushpa (2002). Consumer Right for Everyone Penguin Books.
7. E-books :- www.consumereducation.in
8. Empowering Consumers e-book, www.consumeraffairs.nic.in
9. ebook, www.bis.org
10. The Consumer Protection Act, 1986 and its later versions.

Reference Books

1. 1. Misra Suresh, (Aug 2017) "Is the Indian Consumer Protected? One India One People.
2. Raman Mittal, Sonkar Sumit and Parineet Kaur (2016) Regulating Unfair Trade Practices: An Analysis of the Past and Present Indian Legislative Models, Journal of Consumer Policy.
3. Chakravarthy, S. (2014). MRTP Act metamorphoses into Competition Act. CUTS Institute for Regulation and Competition position paper. Available online at www.cuts-international.org/doc01.doc.
4. Kapoor Sheetal (2013) "Banking and the Consumer" Akademos (ISSN 2231-0584)
5. Bhatt K. N., Misra Suresh and Chadah Sapna (2010). Consumer, Consumerism and Consumer Protection, Abhijeet Publications.
6. Kapoor Sheetal (2010) "Advertising-An Essential Part of Consumer's Life-Its Legal and Ethical Aspects", Consumer Protection and Trade Practices Journal, October 2010.
7. Verma, D.P.S. (2002). Regulating Misleading Advertisements, Legal Provisions and Institutional Framework. Vikalpa. Vol. 26. No. 2. pp. 51-57.

Modeling and design for Mechanical Engineers with Fusion 360

THE BASICS OF MODELING

In Week 1, we'll cover the control and creation of sketches, construction geometry, and conversion into solid bodies. Understanding how to define and reuse sketch elements is a critical step in defining geometry that can be easily updated later to accommodate design changes.

THE BASICS OF ASSEMBLIES

In Week 2, we'll talk about the creation, organization, and management of assemblies and components in Fusion 360. Replicate contacts and motion through the application of joints, motion links, and contacts and understand how best to begin a design for reuse while exploring the integration of off-the-shelf components and assembly management.

EXPLORING DESIGNTOOLS FOR PRODUCTION

In Week 3, we'll focus on the tools used to produce production-ready molded parts. Rest assured that design requirements will be met for production with features like adding draft, creating ribs, or detailing threads.

CREATING COMPLEX DESIGNS WITH FORM TOOLS

In Week 4, we'll cover form tools as an option when creating complex designs. Form tools allow for a different design approach than the traditional sketch and feature creation by allowing you to explore shapes while pushing and pulling vertices, faces, and edges. Explore the basics of form creation and manipulation as well as advanced control and creation of designs with forms.



JDCOLLEGE OF ENGINEERING & MANAGEMENT

An Autonomous College, Affiliated to DBATU, Lonere
At: Khandala, Post-Valni, Kalmeshwar Road, Near Petri, Nagpur



MINUTE OF MEETING FOR 07th BOARD OF STUDIES MEETING NO. BOS/ME/07/2022-23

15/12/2022

Venue: TS-205, DOME, JDCOEM

The 7th Meeting of the Board of Studies was held on Thursday, 15th December, 2022 at 2:30 P.M. Three Experts and Departmental BoS Members and Faculties are present physically.

The following members were present:

1.	Mr. Suhas A. Rewatkar, Mechanical Department	Chairman
2.	Mr. Pravin M. Gupta, Assistant Professor, DOME	Member
3.	Mr. Amir R. Sayed, Assistant Professor, DOME	Member
4.	Mr. Dharmesh Agrawal, Assistant Professor, DOME	Secretary
5.	Mr. Sidharth Ghosh, Assistant Professor, DOME	Member
6.	Mr. Rohit Sharma, Assistant Professor, DOME	Member
7.	Mr. Dinesh Yelure, Assistant Professor, DOME	Member
8.	Mr. Rakesh Bandana, Assistant Professor, DOME	Member
9.	Mr. Rajendra Dhandre, Assistant Professor, DOME	Member

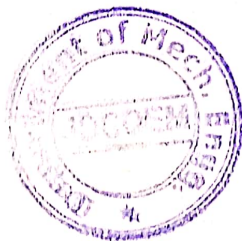
The following Experts were invited to attend the meeting:

1.	Dr. S. A. Ambade, Academic Expert, YCC, Nagpur	Invitee
2.	Mr. Imranul Haque, Industry Expert, IGTR, GOI, Nagpur	Invitee
3.	Ms. Sakshi Ingole, Alumni 2021-22, JDCOEM, Nagpur.	Invitee

The following members were Absent in the meeting-

1. Mr. Vinod Saboo – CEO Saboo plastics Pvt. Ltd, Nagpur - Invitee Expert
2. Prof. Praful Ulhe – Faculty Member-DOME
3. Prof. Gaurav Gohane - Faculty Member-DOME

Mr. Vinod Saboo was unavailable due to busy schedule in his Industry while Prof. Praful Ulhe & Prof. Gaurav Gohane was on leave with prior permission from head office



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ItemNo. 1 & 2. Review of the Previous Meeting.

The Secretary welcomed the Chairman of Board of Studies, Subject Expert Dr. S. A. Ambade, Professor, YCC, Nagpur, Industry Expert Mr. Imranul Haque, Ms. Sakshi Ingole, Alumni Mechanical Department and all members of BoS and faculties of department. Prof. S.S. Ghosh presented agenda of the meeting through power point presentation. Further, the Action taken report from the previous meeting were presented and discussed one by one point in the presence of the members. Following are the points:

Sr. No.	6 th BoS Meetings	Action Taken Report
1.	Alumni to be included in BoS Meeting here onwards – Mr. Saboo Sir.	Ms. Sakshi Ingole from session 2021-22 has become part of BOS now.
2.	Gauges Design should be added in precise manner in course content. <i>Suggested by Dr. A. B. Deoghare.</i>	The content has been added in the subject MQC and will be further discussed in BOS meeting.
3.	Some part of Thermodynamics syllabus from unit 3 can be skipped. <i>Suggested by Saboo Sir.</i>	Contents has been modified accordingly, is under review and will be discussed in BOS meeting.
4.	Smart Manufacturing should be part of Manufacturing syllabus. <i>Suggested by Imran Sir.</i>	Content has been added in AMT subject 5 th Semester and is under review and will be discussed in BOS.

ItemNo. 3 Updation in scheme of 2nd, 3rd and Final Year.

Chairman Sir begin the main agenda of the meeting i.e. Updation in Scheme of all semester Mechanical Engineering. Later he asked experts for any suggestions in the Scheme. Following were the suggestions given by the experts.

1. In 4th semester scheme, Category of subject and course code were asked to add for MOOCS I by Imran Sir
2. Imran Sir again suggested that in 5th semester scheme name of newly added lab name should be changed from 'Python' to 'Basics of python and SQL'.
3. Same corrections for MOOCS-II should be reflected in 8th semester scheme suggested by Imran Sir.

Item No. 4 | Updation in the syllabus of 2nd, 3rd and Final Year.

Chairman requested the concerned subject teachers those have updated their respective subject syllabus to present in front of experts. Total updation in six subjects were discussed.

Following are the key highlights of the agenda:

1. Prof. Rohit Sharma presented the syllabus of Engineering Thermodynamics of 3rd semester, as per the previous BOS suggestions some part of the syllabus were skipped. Experts were satisfied with the updated syllabus.
2. Prof. Suhas Rewatkar presented the syllabus of Strength of material of 4th semester, as per the previous BOS suggestions some part of the syllabus were skipped. Experts were satisfied with the updated syllabus.
3. Prof. Rajendra Dhandre presented the syllabus of Material Science of 3rd semester. Our experts, Dr. Sachin Ambade, suggested some changes in the syllabus as follows:
 - > Critical temperature in iron carbon diagram should be added.
 - > Plasma hardening should be removed.
 - > Some part of the syllabus can be skipped in place of which Powder metallurgy should be added in unit IV.
4. Prof. Siddharth Ghosh presented the syllabus of Metrology & Quality Control of 5th semester, as per the previous BOS suggestions some part of the syllabus were skipped. Experts were satisfied with the updated syllabus.
5. Prof. Dinesh Yelure presented the syllabus of Open elective subject Automobile Engineering of 5th semester, as per the previous BOS suggestions some part of the syllabus were skipped. Experts were satisfied with the updated syllabus.
6. Prof. Siddharth Ghosh presented the syllabus of Professional elective subject Siddharth Ghosh Siddharth Ghosh Advance Manufacturing Technology of 5th semester, as per the previous BOS suggestions- advance manufacturing part is been added in the last unit. Experts were satisfied with the updated syllabus.

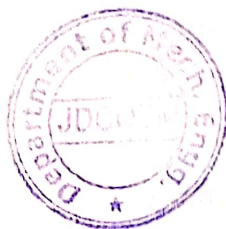
Item No. 5 | Rubrics of CA Evaluation.

Chairman of BOS presented rubrics of CA evaluation and discussed all nine activities involved in Continuous Assessment for students. Later Prof. Dinesh Yelure presented rubrics for mini and major projects.

Experts were satisfied with the all rubrics finalized by higher authorities of JDCOEM.

Item No. 6 | Internship Guidelines for 8 Semester Students

Prof. Pravin Gupta presented the **Internship Guidelines for 8 Semester Students**. Experts were satisfied with the Internship Guidelines.



Handwritten signatures and initials, including 'P', 'DAS', 'Pravin', and 'DAS'.

Item No. 7 & 8	Revised Guidelines regarding MOOCS & Award of Major Degree to the Student
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Prof. Rohit Sharma discussed the revised Guidelines regarding MOOCS & Major Degree criteria. He also declared that one student from mechanical department name Vaibhav Dhuvare is now eligible for the award of major degree.

Experts appreciated the effort taken by the management authorities and faculty members.

Item No. 9	Any other matter with the permission of the Chair.
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Chairman asked all the experts for their kind suggestions. Ms Sakshi Ingole suggested that Mock interviews of the students should be regular practice in the department.

No other issue was raised by any member the meeting was concluded with vote of thanks.

Sr.No.	Name of the BoS Members	Designation	Sign
1.	Mr. Dharmesh Agrawal, Assistant Professor, DOME	Secretary	
2.	Mr. Dinesh Yelure, Assistant Professor, DOME	Faculty	
3.	Mr. Rohit Sharma, Assistant Professor, DOME	Faculty	
4.	Mr. Hemant Baitule, Assistant Professor, DOME	Faculty	
5.	Mr. Sidharth Ghosh, Assistant Professor, DOME	Member	
6.	Mr. Aamir R. Sayed, Assistant Professor, DOME	Member	
7.	Mr. Pravin M. Gupta, Assistant Professor, DOME	Member	
8.	Ms. Sakshi Ingole, DOME	Alumni DOME	
9.	Mr. Imranul Khan, IGTR, Nagpur	Industry Expert	
10.	Dr. Sachin Bagde, Assistant Professor, YCCE, Nagpur	Subject Expert	
11.	Mr. Suhas A. Rewatkar, HoD, Mechanical Department	Chairman	

Following members could not attend the meeting as leave of absence was granted to them.

Sr.No.	Name of the BoS Members	Designation
1.	Mr. Vinod Saboo – CEO Saboo plastics Pvt. Ltd, Nagpur	Industry Expert

CC:

Hon' Directors, JES

Respected Principal, JDCOEM

Respected Vice-Principal & Dean Admin

Dean (Academics/Student/Capacity Building/Development, A&P)

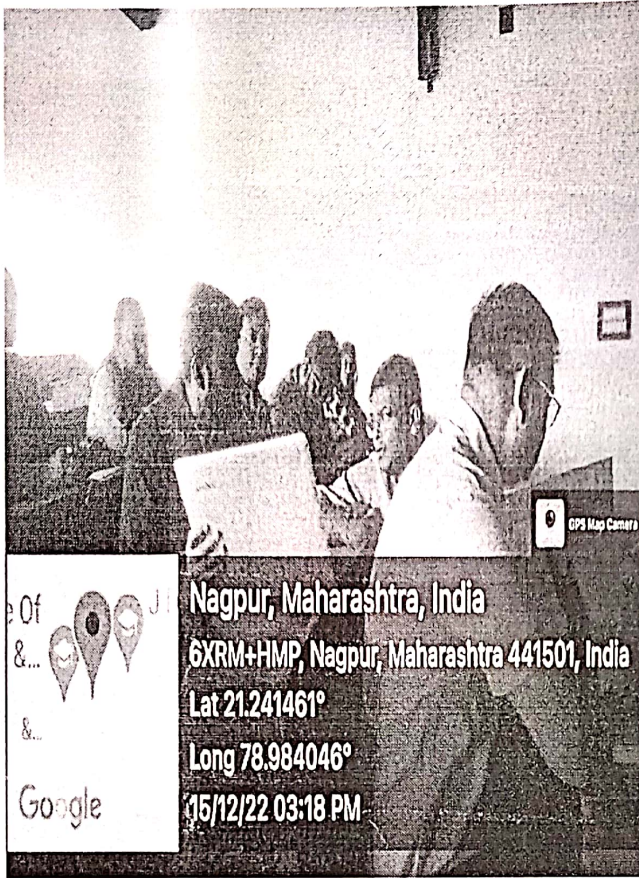
All concerned faculty members.



Pictures from Meeting:

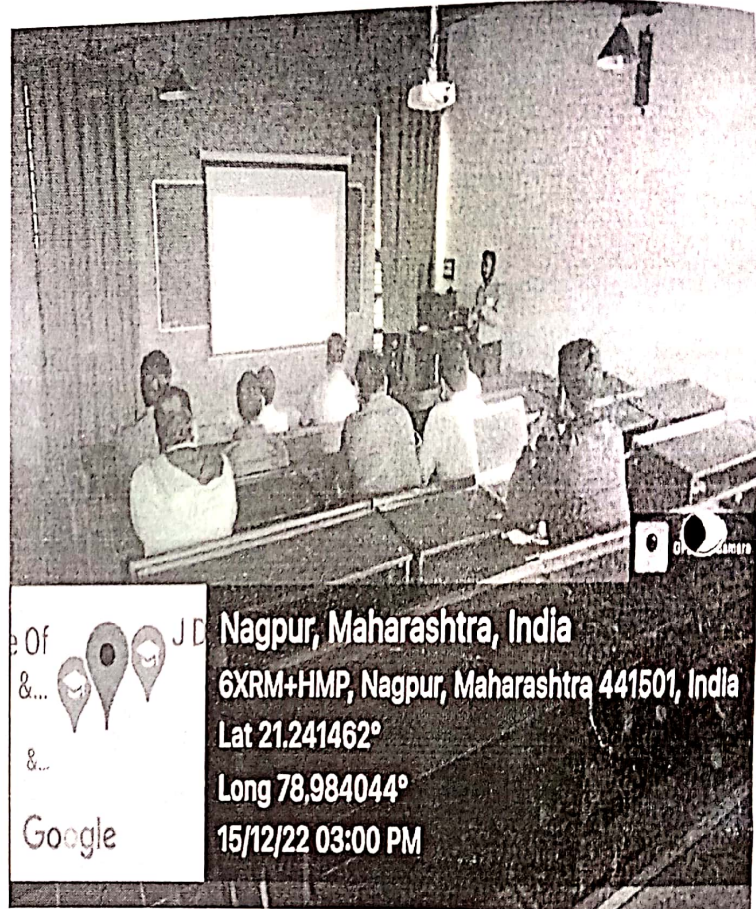


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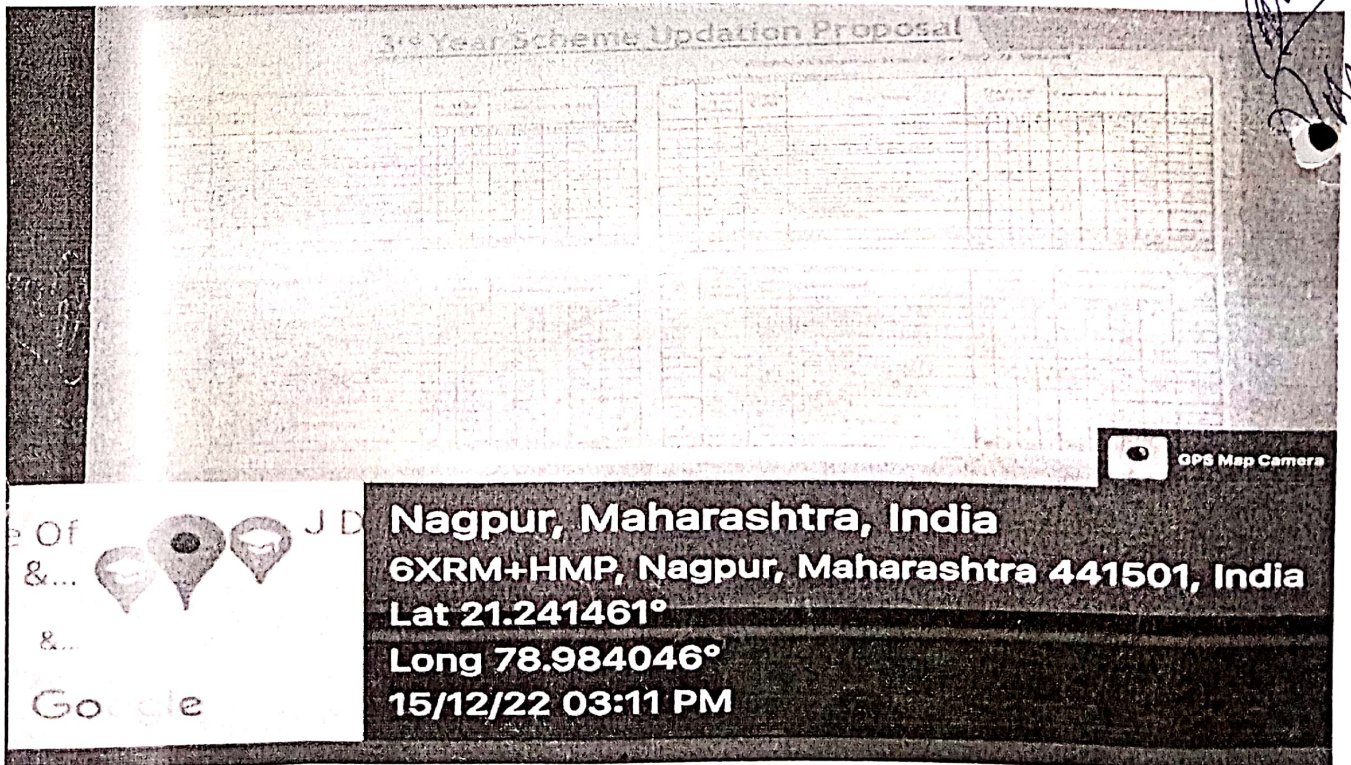
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**MOU for Training on enhancing software skills of UG & PG students Between
JD College of Engineering, Management and Diploma & F6 Design & Training Solution**

This MOU is made at Nagpur on the day of 09/03/2023 amongst Principal, Nagpur JD College of Engineering, Management and Diploma, Kalmeshwar Road, Valni, Near Hanuman Temple, Borgoan-Phata, Nagpur, 441501 which expression shall mean and include his successions, subordinate etc. herein after referred to as JDCOEM.

AND

Managing Director (MD), F6 Design & Training Solution (F6DTS), located at 303, Achraj Tower-2, Chhaoni, Sadar, Nagpur - 440013, Maharashtra herein after referred to as F6DTS.

By this MOU, the following terms and conditions agreed between the above referred parties i.e. JDCOEM & F6DTS.

General clauses:-

1. JDCOEM will permit F6DTS to run skill enhancement trainings on software like AutoCAD, AutoCAD Electrical, AutoCAD Mechanical, Revit MEP, Creo, Catia, Ansys, Staad Pro etc. for students of UG / PG courses on chargeable basis.
 2. Both the parties as per mutual understanding will decide & provide the requisite infrastructure to conduct the course including classrooms, Computers, internet, projector and other utilities.
 3. JDCOEM will register students in course by providing adequate information to the students in batch size of 15 for a specific topic.
 4. JDCOEM will ensure that all the participating students attend classes regularly as per the schedule.
- Both the parties will not hire employees of each other directly or indirectly during & up to three years till the execution of this agreement.

JDCOEM will provide minimum 2 hour slots for conducting the training per session.

JDCOEM will make payment to the F6DTS within 1 week of commencement of training program.

F6DTS shall conduct skill enhancement training programs as per the schedule and topics provided by

JDCOEM.

9. F6DTS will provide faculty with requisite knowledge and experience for undertaking training program. It will also provide substitute faculty as and when required for uninterrupted training.
10. F6DTS will provide Course Completion Certificate for students who successfully complete the skill enhancement training programs.
11. F6DTS will provide placement assistance to the interested students who have undertaken skill enhancement training programs.

Duration of this MOU

The duration of this agreement shall be for a period of 3 year from the date of signing and if not renewed or renewed in writing, the same will be continued as expired and/or terminated.

Termination

1. This MOU shall take effect immediately on the execution of these presents. This MOU can be terminated by any party by a written letter giving 2 months' notice period.
2. Upon expiry of the notice period, this MOU will be terminated & both the parties will settle their accounts within one month of termination of this MOU.
3. Any notice request or other communication required or permitted to be given or made under this agreement to JDCOEM & F6DTS shall be in writing.

Address of JDCOEM

The Principal, Kalmeshwar Road, Valni, Near Hanuman Temple, Bor goan Phata, Nagpur, 441501

Address of F6DTS

Managing Director (MD), F6 Design & Training Solution (F6DTS), 303, Achraj Tower-2, Chhaoni, Sadar, Nagpur - 440013, Maharashtra

4. Except as otherwise specifically provided here in this MOU, shall bind and insure to the benefit of each party's successors & permitted assigns.
5. The parties hereto acting themselves or through representatives duly authorized, have caused this MOU to be signed in their respective name as of the day & year written above.

In witness whereof the parties have set their respective hand and seats on the date mentioned herein above.

Principal,
JD College of Engineering, Management and Diploma, Nagpur

(Signature & stamp) *10/07/13*



Head of the Department,
Mechanical Engineering,
JD College of Engineering, Management and Diploma, Nagpur

(Signature & stamp)

Managing Director, Pravin Jadhao
F6 Design & Training Solution,
Nagpur

(Signature & stamp)





MSME TECHNOLOGY CENTER INDO GERMAN TOOL ROOM, AURANGABAD

(A Govt. of India society, Ministry of MSME)
AN ISO 9001:2008, ISO 29990:2010, ISO 14001:2004, BS OHSAS 18001:2007, ISO 50001:2011,
ISO/IEC 17025:2005 CERTIFIED TOOL ROOM & TRAINING CENTRE



Minutes of Meeting held between Indo German Tool Room, Aurangabad & J D College of Engineering & Management, Nagpur on 08/12/2022

J D College of Engineering & Management, Nagpur in association with Indo German Tool Room, Aurangabad would like to conduct skill development training program for imparting technical training to the students of their Institute. The primary objective of the training programme is to upgrade the skills & Knowledge of the engineering students during their studies in the area of CAD, CAM, CAE, Tool Design, Automation and Information Technology areas. This programme will be executed impartially imparting quality education & conducting necessary examinations. Successful trainees will be awarded certificates.

The proposed training program is as follows:

- Department: Mechanical Engineering

SUBJECT	TOPICS	COURSE DURATION (Hrs.)	TRAINING FEE PER STUDENT (INR)	INSTITUTE SHARE AGAINST RESOURCE UTILIZATION PER STUDENT (10%) (INR)	FEES TO BE PAID TO IGTR AURANGABAD PER STUDENT			
					REG. FEE PER STUDENT (INR)	TUITION FEE PER STUDENT (INR)	GST 18% EXTRA ON TUITION FEE + REG. FEE PER STUDENT (INR)	TOTAL FEE PER STUDENT (INR)
AUTOCAD	<ul style="list-style-type: none"> • INTRODUCTION TO AUTOCAD • DRAW TOOLBAR • MODIFY TOOLBAR • DIMENSIONS TOOLBAR • INSERT TOOLBAR • FORMAT TOOLBAR • VIEW TOOLBAR • EDIT TOOLBAR • PARAMETRIC TOOLBAR • EXPRESS TOOLBAR • SOLID MODELING • EXERCISES 	48 HRS	1700/-	170/-	300/-	1530/-	329/-	2159/-
CNC PROG. (LATHE / MILLING ANY ONE)	<ul style="list-style-type: none"> • INTRODUCTION TO CNC TECHNOLOGY • GEOMETRICAL BASICS FOR CNC MACHINES • TECHNOLOGICAL BASICS FOR CNC MACHINES • INTRODUCTION TO G CODES AND M CODES • INTRODUCTION TO NC PROGRAMMING • CNC PROGRAMMING (MANUAL & CYCLE) • EXERCISES 	48 HRS	1905/-	190/-	300/-	1715/-	363/-	2378/-

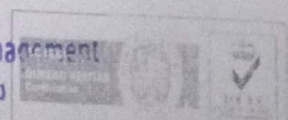
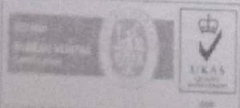


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Principal





MSME TECHNOLOGY CENTER INDO GERMAN TOOL ROOM, AURANGABAD

(A Govt. of India society, Ministry of MSME)

AN ISO 9001:2008, ISO 29990:2010, ISO 14001:2004, BS OHSAS 18001:2007, ISO 50001:2011,
ISO/IEC 17025:2005 CERTIFIED TOOL ROOM & TRAINING CENTRE



- Resource utilization charges shall be applicable for the modules which will be conducted at Institute end only.
- The proposed training program is practical oriented.
- The proposed minimum intake for the above courses should be 30 (minimum) each.
- The course fee for the above courses will be reimbursed by J D College of Engineering & Management, Nagpur.
- **Required Hardware and software will be provided by J D College of Engineering & Management, Nagpur.**
- The disbursement of the course fee to IGTR, Aurangabad will be made as 50% at the start of course & 50% after completion of course.
- IGTR, Aurangabad will undertake the training for the mentioned module as per proposal.
- Course completion certificate shall be given to only those trainees who qualify the evaluation test to be conducted at the end of the training program.
- The course contents are attached with the proposal.
- The schedule will be executed from the date of signing of this MOM.
- Any disputes arising out shall be discussed & mutually solved between IGTR, Aurangabad & J D College of Engineering & Management, Nagpur.
- IGTR, Aurangabad & J D College of Engineering & Management, Nagpur shall nominate representatives from either side for coordinating & executing the training Program.
- If J D College of Engineering & Management, Nagpur provides more than 50 participants in a batch than the institute share against resource utilization per student will be 20% of course fees.

For Indo German Tool Room,
Aurangabad

Sr. Manager (Training)

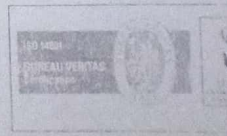
Engineer (C&M)
I/c IGTR Abad Extension Centre Nagpur

For J D College of Engineering &
Management, Nagpur

Principal
Principal
J.D. College of Engineering & Management
Khandala, Katol Road
Nagpur-441501

Head of Dept. (Mech.)
Head of Department
Mechanical Engineering
J D College of Engineering & Management
Nagpur

Page 01 of 02



MEMORANDUM OF UNDERSTANDING (MoU)

BETWEEN

NU Intelligence Pvt. Ltd., Nagpur

AND

**Department of Mechanical Engineering, - J.D. College of Engineering & Management and
Diploma, (JD/COEM) Nagpur**

This Memorandum of Understanding (hereinafter called as the 'MoU') is entered into on this 10th March 2023, between **NU Intelligence Pvt. Ltd., Nagpur** and **Department of Mechanical Engineering, - J.D. College of Engineering & Management and Diploma, (JD/COEM) Nagpur**

NU Intelligence Pvt. Ltd., Nagpur the First Party represented herein by its Director, Mr. Amish Ukani And **J.D. College of Engineering & Management and Diploma, (JD/COEM) Nagpur** the Second party, represented herein by Head of the Department (Mechanical Engineering and diploma).

WHEREAS:

A) Second Party is a Higher Educational Institution named: **J.D. College of Engineering & Management and Diploma, (JD/COEM) Nagpur.**

B) First Party & Second Party believe that collaboration and co-operation between themselves will promote more effective use of each of their resources and provide each of them with enhanced opportunities.

C) The Parties intent to cooperate and focus their efforts on cooperation within area of Skill Based Training, Education, Placement, Industrial Visit, Technical Expert Lecture & Internship.

D) **NU Intelligence Pvt. Ltd., Nagpur**, - the First Party is engaged in Industrial Robotics, industrial Automation, Python for Data Science, Electrical Vehicle, Embedded Systems and IoT, Drone Design, Mobile Robotics, Hand Robot Design, Web Designing, Electric Vehicle, Raspberry Pi using Python, Data Science, Linux Networking and Soft skills.

NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL PROMISES SET FORTH IN THIS MoU, THE PARTIES HERE TO AGREE AS FOLLOWS:

CLAUSE 1 CO-OPERATION

- 1.1 Both Parties are united by common interests and objectives, and they shall establish co-operation.
- 1.2 First Party and Second Party co-operation will facilitate effective utilization of the intellectual capabilities.
- 1.3 The parties shall co-operate with each other and shall as promptly as is responsibly practical, relevant agreement.

CLAUSE 2 SCOPE OF THE MoU

2.1 **Industrial Training & Visits:** Industry and Institution interaction will provide an insight into the latest developments / requirements of the industries; the first Party to permit the Faculty and Students to

the Second Party to visit its group companies and also involve in Industrial Training Programs for the Second Party. This will provide confidence & smooth transition for students work. Also, the Second party may register on the AICTE Internship Portal for the benefit of students.

2.2 **Guest Lectures:** First Party to extend the necessary support to deliver guest lecturers to the students of the Second Party on the technology trends and in house requirements.

2.3 **Placement of trained students:** First party will actively engage to help the delivery of the training and placement of the students of the Second party on the technology trends and in house requirements.

2.4 There is no financial commitment on the part of the **J.D. College of Engineering & Management, (JDCOEM) Nagpur** the Second party to take up any program mention in MoU. If there is any financial consideration, it will be dealt separately.

2.5 Both Parties to obtain all internal approvals, consents, permissions, and licenses of whatsoever nature required.

2.6 Any financial consideration for training, internship, Faculty development program, short term training programs, workshops and technical trainings, it will be done as per the quotation provided by the first party.

CLAUSE 3 VALIDITY

3.1 The term of this MOU shall be valid for a period of three years, effective from the date of signing.

3.2 Or this agreement will be valid until it is expressly terminated by either Party on mutually agreed terms, during which period, the Second Part.

CLAUSE 4 RELATIONSHIP BETWEEN THE PARTIES

4.1 It is expressly agreed that First Party and Second Party are acting under this MOU as independent contractors, and the relationship established under this MOU shall not be construed as a partnership.

On behalf of First Party

Amish Ukani

Mr. Amish Ukani
Director,
NU Intelligence Pvt. Ltd.

Witness 1

Neema Amish Ukani
1. Prof. Neema Amish Ukani
Director, NU Intelligence Pvt. Ltd.

Witness 2

Nitisha Uike
2. Nitisha Uike
Business Development Manager
NU Intelligence Pvt. Ltd.



On behalf of Second Party

Shrikant V. Sonekar
10/03/23

1. Dr. Shrikant V. Sonekar,
Principal,
JDCOEM, Nagpur

Witness 1

Suhas A. Rewatkar
2. Prof. Suhas A. Rewatkar
HOD (Mech), JDCOEM, Nagpur

Witness 2

Prashant Mahakalkar
Prof. Prashant Mahakalkar
Dean, Diploma,
JDCOEM



RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

DIRECTION NO. 9 OF 2021

**ADMISSIONS AND EXAMINATIONS LEADING TO THE AWARD OF DEGREE
OF MASTER OF BUSINESS ADMINISTRATION (OUTCOME BASED -
CBCS), DIRECTION-2021**

(Issued by the Vice-Chancellor under section 12(8) of the Maharashtra Public Universities Act, 2016)(Mah. Act No. VI of 2017)

WHEREAS, the Maharashtra Public Universities Act, 2016 (No. VI of 2017) (hereinafter the "Act") has come into force with effect from 1st March, 2017;

AND

WHEREAS, the Hon'ble Vice Chancellor has issued a Direction No. 37 of 2019 entitled "ADMISSIONS AND EXAMINATIONS LEADING TO THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION (OUTCOME BASED - CBCS), in the Faculty of Commerce and Management, by exercising the powers vested in him under Section 12(8) of the Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017);

AND

WHEREAS, provision of section 12(8) provide that the Direction issued by the Hon'ble Vice-Chancellor shall automatically lapse after 180 days;

AND

WHEREAS, Direction No. 37 of 2019 was issued by the Hon'ble Vice-Chancellor on 8.8.2019, which could not have been converted into the statute / Ordinance / Regulations within Six months;

AND

WHEREAS, Direction No. 37 of 2019 issued by the Hon'ble Vice-Chancellor on 8.8.2019 is required to be renewed for regulating the matter involved in the said direction;

AND

WHEREAS, the Board of Studies in Business Administration and Business Management recommended certain changes in the Direction No. 37 of 2019 with regard to the requirement of MOOCs and its mechanism for processing of results vide item no. 6 in its meeting held on 11/06/2020;

AND

WHEREAS, the recommendations of the Board of Studies in Business Administration and Business Management were approved and recommended to the Academic Council by the Faculty of Commerce and Management vide item no. 9 in its meeting held on 22/07/2020;

AND

WHEREAS, the recommendations of the Faculty of Commerce and Management were approved by the Academic Council vide item no. 27 in its meeting held on 28/8/2020;

AND

WHEREAS, Section 12 (8) of the Act empowered the Hon'ble Vice-Chancellor to issue Direction for regulating the matter for which statute/Ordinance/Regulations is not made or to amend the existing statute/ordinance/regulations;

Now, therefore, I, Dr. Subhash R. Chaudhari, Vice-Chancellor, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur in exercise of the powers vested in me under Section 12(8) of the Maharashtra Public Universities Act, 2016 (VI of 2017) do hereby issue the following direction:

1. This direction shall be called "ADMISSIONS AND EXAMINATIONS LEADING TO THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION (OUTCOME BASED - CBCS) DIRECTION-2021"
2. This Direction shall come into force from the date of its issuance and shall also be applicable to all the students who were admitted to MBA (Outcome Based - CBCS) program under the Direction No. 37 of 2019 (since lapsed).
3. In this Direction unless the context requires otherwise:-
 - a. "ATKT" means "Allowed to Keep Term" in the higher semester, as per the rules herein.
 - b. "Board of Studies" means the Board of Studies in Business Administration and Business Management in the Faculty of Commerce and Management.

- c. **"Course"** means a theory, practical (or the combination of theory and practical) subject, and research project, prescribed for any semester and carrying maximum and minimum passing marks, which a student, admitted to the Masters' Degree of Business Administration (Outcome Based - CBCS) programme, governed by this Direction, has to study in order to become eligible for the award of the Degree under this Direction.
- d. **"Credit"** means the unit by which the course work is measured. It is measured in terms of weekly class hours assigned to a Course.
- e. **"Credit Point"** (CP) is the value obtained by multiplying the Grade Point by the Credit i.e. No. of Credits assigned for the course x Grade Points secured for that course.
- f. **"CET"** means the Common Entrance Test conducted by the Directorate of Technical Education, Government of Maharashtra for the purpose of admission to MBA program.
- g. **"CMAT"** means the Common Management Aptitude Test conducted by the All India Council for Technical Education for the purpose of admission to MBA program.
- h. **"Cumulative Grade Point Average (CGPA)"** CGPA refers to the Cumulative Grade Point Average weighted across all the semesters. It is obtained by dividing total number of credit points in all the semesters by the total number of credits in all the semesters.
- i. **"Degree"** means the Master of Business Administration (Outcome Based - Choice Based Credit System).
- j. **"Grade Letter"** is an index to indicate the performance of a student in a particular course/ Paper. It is the transformation of actual marks secured by a student in a course/paper. It is indicated by a Grade letter O,A,B,C,D,E and F. There is a range of marks for each Grade.
- k. **"Grade Point"** is the weight allotted to each grade letter depending on the marks awarded in a course/paper.



- l. "MOOCs" means the Massive Online Open Courses offered on SWAYAM, NPTEL or any other such portals approved by the UGC/AICTE for the purpose of credit transfer.
- m. "Programme" means the Master of Business Administration (Outcome Based - Choice Based Credit System) programmes under this Direction (for short the 160 credit programmes).
- n. "Student" means a student admitted to the programme under this Direction.
- o. "Semester Grade Point Average (SGPA)" indicates the performance of a student in a given semester. It is based on the total credit points earned by the student in all the courses and the total number of credits assigned to the courses/papers in a Semester.
- p. "University" means Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
4. The M.B.A. programme shall be of Two years duration consisting Semester-I & II in first year and Semester-III & IV in second year.
5. Subject to compliance with the provisions of this direction and of other ordinances in force from time to time, an applicant for admission to this course shall have passed degree examination of Rashtrasant Tukadoji Maharaj Nagpur University or any other recognized University equivalent thereto with 50% aggregate marks for open category and 45% marks aggregate for Backward Class candidates or as notified by the State Government (Competent Authority) from time to time. Provided that Students admitted through Common Management Aptitude Test (CMAT) conducted by All India Council for Technical Education or through Common Entrance Test (CET) conducted by Directorate of Technical Education or any other entrance examination conducted by competent authority approved by the Directorate of Technical Education and fulfilling the eligibility conditions as prescribed by the Rashtrasant Tukadoji Maharaj Nagpur University shall only be admitted to this programme.
6. The Examinations for Semesters I, II, III and IV shall be held twice a year at such places and on such dates as may be fixed by the University.
7. The fees for examination shall be as prescribed by the Rashtrasant Tukadoji Maharaj Nagpur University from time to time.
8. Applicant for the examination prosecuting a regular course of study leading to the Master Degree in Business Administration shall not be permitted to join any other course in this University or any other University simultaneously.

9. A collegiate candidate shall have pursued a regular course of study for not less than 90 days of the academic session before being examined for any semester examination of **MBA** in any recognized institution and or college affiliated to RashtrasantTukdojiMaharaj Nagpur University where the programme is conducted.
10. Without prejudice to the other provisions of Ordinance No. 6 relating to the Examinations in General, the provisions of Paragraphs 5, 7, 8, 10, 26 and 31 of the said Ordinance shall apply to every collegiate candidate.
11. **Choice Based Credit System (CBCS):** The MBA program shall consist of 27 courses, a project equivalent to 1 course in any of the specialization area opted by the student and an Exit Seminar equivalent to 1 course. The courses in this program are of two kinds: **Core and Elective**. **The elective courses also include MOOCs and its alternate courses.**
- Core Course:** - This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study (Comprising of basic subjects of Business Management).
 - Elective Course:** - It is a course which can be chosen from the pool of courses. The course may be specific/specialized/supportive or advanced to the discipline of study. They may be nurturing candidate's skill as well as proficiency. **Generic Elective courses add generic proficiency** to the students and they are for the said discipline of study. These courses are oriented towards competency building of student in various functional areas of business management. These *Electives* will give the students a chance to study a subject according to his/her area of interest and will also help in developing his/her personality. Two elective courses are to be selected by a student from the groups of electives before commencement of 3rd Semester of the program.

A student is required to Select *Any Two* Electives as following:

- Either both the Electives from Core Group
- OR**
- One Elective each from Core Group and Complementary Group

Core Group	Financial Management
	Marketing Management
	Human Resource Management
Complementary Group	Operations Management
	Business Analytics

	Entrepreneurship
	Development
	International Business

Note: The affiliated Management Institutes / Colleges/ Department shall declare the Elective/Specialization it is offering before the commencement of admission process of Semester -I in their Information Brochure and website and communicate the same to the University well in advance. The Institute will offer the Specialization only if minimum **TEN PER SIXTY** students opt for the same. However, it is the discretionary decision of the Institute to offer the specialization with lesser number of students.

12. **MOOCs** : - Every student admitted to this program has to successfully complete TWO Massive Online Open Courses available on SWAYAM/NPTEL portal to become eligible for the award of MBA degree. The credit points of MOOCs earned by a student shall be transferred in the Mark list of Semester IV. The student has liberty to complete these two courses any time during the MBA program after his/her admission and it is not restricted to any specific semester/s. However, the student is advised to successfully complete these MOOCs before 4th Semester. This shall help the student in getting better placement opportunities.

In compliance with the Choice Based Credit System, the student is free to opt for any course available on the portal during a particular semester provided the course has **minimum 2 credits** and the students are required to complete two such MOOCs to become eligible for the award of MBA degree. Following guidelines are to be followed by the concerned stakeholders such as students, University and Institute/College/ Department to enable student to opt for MOOC and the credit transfer of such MOOC completed by the student.

1. The Institute/College/Department shall provide the list of courses (with **minimum 2 Credits each**) available in the beginning of each semester to students on its website, college notice boards and through other medium of communication. Similarly, such a list shall also be published on the University's website.
2. A student may select the course (with **minimum 2 Credits**) of her/his choice from the available courses and register for the same.
3. A student is also required to appear and successfully complete the online examination for the MOOC opted by him/her.
4. The successful completion of TWO such MOOCs comprising of total 4 Credit Points is mandatory for every student to become eligible for the award of degree.
5. If a student has completed a MOOC carrying more than 2 credits, then only 2 credits shall be considered and be shown in the mark list of 4th Semester against such course

6. In case, the MOOC certificate does not have a mention of Credits, the Principal/Director/Head shall certify the number of credits for which a course of minimum duration of 8 weeks shall be considered equivalent to 2credits..
7. **A student is expected to fill the examination form for Semester IV along with the MOOCs he/she had completed or pursuing. Use MOOC-I, MOOC-II terminology only.**
8. The University shall provide an option as "MOOC-1" and "MOOC- 2" in the drop-down list while filling up the online examination form for IVth Semester.
9. The marks/gradeobtained by the student in such MOOCs shall be submitted by the Institute/College/Department (with copy of Certificate) to the University along with Internal Assessment Marks for Semester IV.
10. In case, a student is not able complete TWO MOOCs by the end of Semester IV, he/she shall be marked absent in MOOC - 1 and MOOC - 2 subjects in the Semester IV Mark list and the University shall not declare result of such a student (keep it withheld). Such a student, on successful completion of MOOCs and submission of certificates through the college to that effect shall be declared successful and become eligible for award of degree.
11. The online examination of such courses is conducted by Host Institutions and not the University and the dates of examination are declared at the beginning of the session. Hence, the University shall keep these days free from its MBA Examination Time Table and not schedule any Semester End Examination on such dates.
12. The examination fee of MOOCs is to be paid and borne by the student separately.

13. Credit Based Teaching and Evaluation Scheme:

Induction Cum Foundation Course:

This course is aimed at making the student ready to pursue higher education in business management. As graduate of any stream/faculty is eligible to take admission to this program, the Institute/College/Department may have students from various streams such as Commerce, Humanities, Science or any other Interdisciplinary studies. Hence, every institute shall organize an Induction Course for First Year Students before commencement of academic sessions for First Semester. The desired contents of such Induction Course are provided in Appendix No. 3.

Guidelines for Induction Cum Foundation Course:

- The Induction Course shall have minimum 40 contact hours.
- The Induction Course does not carry any Credit and hence the evaluation of students is not mandatory at the end of Induction Course.

- The Institute/College/Department shall organize the Induction Course before commencement of classes for First Semester and ensure the attendance of all enrolled students for the same.
- The Institute/College/Department shall keep proper record of the Induction Course to be verified by the competent authority, if needed.
- The contents of Induction Course provided in Appendix No.3 are minimum and the Institute/College/Department is free to add any relevant content as they deem fit.

Courses offered, contact hours, credits attached and allocation of marks shall be as follows:

Semester-I									
Course Code	Course Name	Internal/ University Examination	Instruction Hours	Tutorial Hours	Total Hours	Marks			Credits
						Semester End Exam.	Internal Assessment	Total	
1T1	Managerial Economics	Uni.	20	10	30	80	20	100	3
1T2	Management Information Systems	Uni.	20	10	30	80	20	100	3
1T3	Business Research	Uni.	10	20	30	80	20	100	3
1T4	Organizational Behaviour	Uni.	25	05	30	80	20	100	3
1T5	Financial Reporting, Statements and Analysis	Uni.	20	10	30	80	20	100	3
1T6	Business Statistics and Analytics for Decision Making	Uni.	20	10	30	80	20	100	3
1T7	Legal and Business Environment	Uni.	25	05	30	80	20	100	3
1T8	Managerial Skills for Effectiveness	Internal	10	20	30	00	100	100	3
Total			150	90	240	560	240	800	24

Semester-II									
Course Code	Course Name	Internal/ University Examination	Instruction Hours	Tutorial Hours	Total Hours	Semester End Exam.	Internal Assessment	Total	Credits

						Semester End Exam. Internal Assessment	Total		
2T1	Financial Management	Uni.	20	10	30	80	20	100	3
2T2	Marketing Management	Uni.	25	05	30	80	20	100	3
2T3	Human Resource Management	Uni.	25	05	30	80	20	100	3
2T4	Operations Management	Uni.	20	10	30	80	20	100	3
2T5	Strategic Management	Uni.	25	05	30	80	20	100	3
2T6	International Business	Uni.	25	05	30	80	20	100	3
2T7	CSR and Sustainability	Uni.	25	05	30	80	20	100	3
2T8	Cost Accounting	Uni.	20	10	40	80	20	100	3
Total			185	55	25	640	160	800	24

Semester-III

Course Code	Course Name	Internal/ University Examination	Instruction Hours	Tutorial Hours	Total Hours	Marks			Credits
						Semester End Exam.	Internal Assessment	Total	
3P1	Summer Internship Project	Internal	15	45	60	00	100	100	6
3T1	Elective I - Paper 1	Uni.	30	1	40	80	20	100	4
3T2	Elective I - Paper 2	Uni.	30	1	40	80	20	100	4
3T3	Elective I - Paper 3	Uni.	30	1	40	80	20	100	4
3T4	Elective II - Paper	Uni.	30	1	40	80	20	100	4
3T5	Elective II - Paper	Uni.	30	1	40	80	20	100	4
3T6	Elective II - Paper	Uni.	30	1	40	80	20	100	4
3T7	Management Case Analysis	Internal Assess	20	20	40	00	100	100	4
Total			215	12	340	480	320	800	34

Semester-IV

Course Code	Course Name	Internal	Tutorial	Total	Marks	Credits
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						Semester End Internal Assessment		Total	
4T1	Elective I - Paper 4	Uni.	30	10	40	80	20	100	4
4T2	Elective II - Paper 4	Uni.	30	10	40	80	20	100	4
4M1	MOOC 1	MOOC Asses	20	20	40	00	100	100	2
4M2	MOOC 2	MOOC Asses	20	20	40	00	100	100	2
4P1	Project Work and Viva Voce	Uni.	10	30	40	50	50	100	4
4P2	Exit Seminar and Open Defense	Uni.	10	30	40	100	00	100	4
Total			120	120	240	310	290	600	20

Summary of the Total Marks and Credits

Sr. No.		Instruction Hours	Tutorial Hours	Total Hours	Marks			Credits
					Semester End Internal Assessment	Total		
1	Semester - I	150	90	240	560	240	800	24
2	Semester - II	185	55	240	640	160	800	24
3	Semester - III	215	125	340	480	320	800	34
4	Semester - IV	120	120	240	310	290	600	20
Total		670	390	1060	199	910	2900	102

- The Semester End written examination of all the courses shall be conducted by the University.
- The performance of the learners will be evaluated in two Components, One component will be the continuous assessment by the Institute/College/Department (Internal Assessment) component carrying 20% marks and the second component will be the Semester End Examination component carrying 80% marks.

The allocation of Internal Assessment Marks

1a	Attendance of the student during a particular semester	05 marks
1b	An assignment based on curriculum to be assessed by the teacher concerned	05 marks
1c	Subject wise class test conducted by the teacher concerned	05 marks
1d	Subject presentation/viva-voce seminar conducted during the semester	05 marks
1	Internal assessment Total marks	20
2	Semester wise End Examination marks	80
Total Marks Per Course		100

- Marks for internal assessment shall be awarded on the basis of tests, assignment etc. as prescribed above by the teacher in the respective subject and moderated by the Director shall be notified on the college notice board for information of students and it shall be communicated to the University at least 5 days before the commencement of the End Semester examinations.
 - The college shall preserve the answer sheets and assignments submitted by the students and attendance record and evaluation sheets for at least five academic years, while the summary of the internal marks to be preserved as a permanent record.
 - A student has to pass each course/subject jointly in University Assessment and Internal Assessment. There is no provision for reassessment of Internal Assessment marks.
- c. **Summer Training:** At the end of second semester, all students will have to undergo summer training of 6-10 weeks with an industrial, business or service organization by taking a project study. The condition of successfully completing the program shall not be deemed to have been satisfied unless a student undergoes summer training under the supervision of the department in organizations as approved by the Director/ Principal/ Head / Faculty from time to time. Alternatively Director/ Principal/ Head / Faculty of the Department/ College/ Institute may allocate the sector/ industry/ company specific project to the individual student. Each student will be required to submit a project report to the Department/ College/ Institute for the work undertaken during this period within three weeks of commencement of the third semester for the purpose of evaluation in the third semester. The detailed parameters for evaluation of SIP projects are provided in Appendix No. 3.



d. Conversion of Marks to Grades and Calculations of GPA (Grade Point Average) and CGPA (Cumulative Grade Point Average): In the Credit and Grade Point System, the assessment of individual Courses in the concerned examinations will be on the basis of marks only, but the marks shall later be converted into Grades by mechanism described hereinafter where the overall performance of the Students can be reflected after considering the Credit Points for any given course. However, the overall evaluation shall be designated in terms of Grade. There are some abbreviations used here that need understanding of each and every parameter involved in grade computation and the evaluation mechanism. The abbreviations and formulae used are as follows:-

Abbreviations and Formulae Used

G: Grade

GP: Grade Points

C: Credits

CP: Credit Points

CG: Credits X Grades (Product of credits & Grades)

SGPA = $\frac{\sum CG}{\sum C}$: Sum of Product of Credits & Grades points / $\sum C$: Sum of Credits points

SGPA: Semester Grade Point Average shall be calculated for individual semesters. (It is also designated as GPA)

CGPA: Cumulative Grade Point Average shall be calculated for the entire Program by considering all the semesters taken together.

While calculating the CG the value of Grade Point 1 shall be consider Zero (0) in case of students who failed in the concerned course/s i.e. obtained the marks below 50.

After calculating the SGPA for an individual semester and the CGPA for entire program, the value can be matched with the grade in the Grade Point table as per the TEN (10) Points Grading System and expressed as a single designated GRADE such as O, A, B, etc....

Marks	Grade	Grade Points
85 and Above	O	10
84-75	A	9
74-65	B	8
64-60	C	7
59-55	D	6
54-50	E	5
49 and Below	F (Fail)	0

NOTE: In case of MOOCs, if the passing percentage is 40%, then, a student scoring marks between 40 – 54 shall be awarded 'E' grade with 5 points.

Conversion of CGPA into Grades and Division shall be as follows:

CGPA	Grade	Division
9.0-10	O	Distinction
8.0-8.9	A	Distinction
7.0-7.9	B	Distinction
6.0-6.9	C	First
5.5-5.9	D	Second
5.0-5.4	E	Second
00-4.4	F (Fail)	Fail

Note: Final Mark List will only show the Grade, Grade points and Division and not the marks

- e. Provision of Direction No.44 of 2001 governing the award of grace marks for passing an examination and securing higher Grades shall apply to the examination.

11. Conversion of CGPA into Equivalent Percent Marks:

The CGPA obtained by an examinee shall be converted into the aggregate percent marks by using the following formula. This formula shall be printed on the Semester IV Mark list of the examinee.

$$\text{Equivalent Aggregate Percentage Marks} = 10(\text{CGPA})$$

12. Project Work and Exit Seminar: Project Work and Exit Seminar will be compulsory for each student appearing at the semester- IV (M.B.A) Examination.

- (i) Project Work shall carry 100 marks as follows-

Head of Passing	Marks
Project Report Evaluation and Viva-Voce by External Examiner	50
Project Report Evaluation and Viva-Voce by Internal Examiner	50
TOTAL	100

- (ii) Exit Seminar shall carry 100 marks as follows -

Head of Passing	Marks
Exit Seminar and Open Defense to be conducted by External Examiner	100
TOTAL	100

- (iii) For Project work a batch of Maximum TWENTY students per guide /supervisor has to be allotted by the Institute. The Guide/Supervisor shall act as an internal examiner for project Examination.

(iv) The guide or the supervisor shall be appointed by the institute and should be teaching to MBA Programme with minimum qualifications as prescribed by AICTE for Assistant Professor.

(v) The External examiner for Project Evaluation and Exit Seminar shall be appointed from the list of full time approved teaching faculty of the MBA programme by the University.

(vi) Each such External examiner shall examine a maximum of TWENTY students in the academic year.

(vii) ONE copy of Project work (Printed) shall be submitted to the College/Department at least one month before commencement of MBA Sem IV Examination for evaluation purpose. The college/Department shall retain the copy of Project Work for evaluation and the list of 'Project Work Titles' of all students shall be submitted to the University.

A Candidate shall submit with his/her project work, a certificate from the Supervisor to the effect-

- That the candidate has satisfactorily completed the Project work for not less than one session and
- That the Project work is the result of the candidates own work and is of sufficiently high standard to warrant its presentation for examination.
- Candidate shall submit his declaration that the Project is the result of his own research work and the same has not been previously submitted to any examination of this University or any other University. The Project shall be liable to be rejected and /or cancelled if found otherwise.
- The Project work shall be evaluated through Seminar and Viva-voce at the College/ Department by internal examiner appointed by Director/ Principal and external examiners appointed by University within 10 Days of the completion of Semester IV examination.
- The Exit Seminar, Presentation an Open Defence shall be evaluated through Seminar, Presentation and Open Defence at the college/ department by external examiners appointed by University within 15 days.
- A student appearing for MBA Semester IV Examination will have to pay additional fees as prescribed by the University from time to time.

(viii) Exit Seminar

Exit Seminar is a culmination and presentation of all the learning that has happened in last 4 semesters of MBA program. The idea is to check the key learnings of a student manager and to map them with the program outcomes so as to assess the attainment of program outcomes. The Viva-Voce should be targeted at assessment of these POs.

MBA Program Outcomes:

1. Apply knowledge of management theories and practices to solve business problems
2. Foster Analytical and Critical thinking abilities for data-based decision making
3. Ability to develop Value Based Leadership ability

4. Ability to understand, analyze and communicate global, economic, legal, and ethical areas of business
5. Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

This will also present the student portfolio evaluation i.e. a systematic and organized collection of a student's work that exhibits the direct evidence of a student's efforts, achievements and progress over a period of time including Theory Papers, SIP, Live Projects, MOOCs, etc.

Evaluation of Exit Seminar:

- The individual presentation should ideally last for 15-20 minutes followed by Open Defense Question-Answer session.
- The External Examiner (appointed by the University) should evaluate Maximum 20 (Maximum 10 at One Institute) Exit Seminars.

13. The scope of the subject, percentage of passing in theory and project will be governed as per following rules:

1. There will be a combined passing of 50% marks to be secured by an examinee in internal and University written examination taken together for each course/subject/paper. However, the pass percentage for MOOCs shall be taken as prescribed by the course structure of concerned MOOC.
2. The results of successful candidates at the end of semester-IV shall be declared on the basis of CGPA obtained in all the four semesters. However, the formula for conversion of CGPA into equivalent marks should be printed on Semester IV Marklist
3. The candidates who successfully clear all the semester examinations in the first attempt are eligible for ranks provided they secure Grade C and above.
4. The results of the candidates who have successfully cleared the Semester-IV examination but not cleared the lower semester examinations shall be declared as NCL (not completed lower semester examinations). Such candidates shall be eligible for the award of Degree only after successfully clearing all the lower semester examinations.
5. Student successfully clearing Semester I, II, III and IV examinations shall, on payment of the prescribed fee, be awarded a Degree in the prescribed form signed by the Vice-Chancellor.
6. An examinee failing to clear any semester end examination shall be eligible for re-examination on payment of a fresh Examination Fee as prescribed by the University.

14. Promotion to Higher Semester (ATKT)

An examinee failing to clear any semester examination shall be ALLOWED TO KEEP TERM (ATKT) in accordance with the provisions of Clause No. 11 of Direction No. 10 of 2019 in following manner:

Admission	to	Eligibility for admission and taking University Examination
------------------	-----------	--------------------------------------------------------------------



Semester	
Ist Semester	Candidate should have passed the qualifying examination as per the relevant Direction governing the course.
IInd Semester	Candidate should have completed the term of the Ist semester and filled examination form.
IIIrd Semester	Candidate should have completed the term of the IInd semester, filled the examination form of the same and has obtained exemption in 2/3 rd passing heads of the Ist and IInd semesters taken together.
Ivth Semester	Candidate should have completed the term of the IIIrd semester and filled the examination form of the same.

15. Rejection of results:

- i. A candidate who fails in one or more course(s) of a semester may be permitted to reject the result of the whole examination of that semester. Rejection of result course-wise shall not be permitted. A candidate who rejects the results shall appear in the examination of that semester in the subsequent examination.
- ii. Rejection can be exercised only once in each semester and the rejection once exercised cannot be revoked.
- iii. Application for rejection of result along with payment of the prescribed fee shall be submitted to the University through the college along with the original statement of marks within 30 days from the date of publication of the result.
- iv. A candidate who rejects the result is eligible for only class and not for ranking.

16. Improvement of results:

- i. A candidate who has passed in all the papers of a semester may be permitted to improve the result by reappearing for the whole examination of that semester.
- ii. The reappearance shall be permitted only once in each semester.
- iii. The reappearance for the examination of any semester is permitted during the subsequent examination of that semester.

- iv. Application for reappearance along with payment of prescribed fee shall be submitted to the University through the college along with the original statement of marks within 30 days from the date of publication of the result.
- v. The candidate passes in all the subjects in the reappearance, higher of the two aggregate marks secured by the candidate shall be awarded to the candidate for that semester. In case the candidate fails in the reappearance, candidate shall retain the first appearance result.
- vi. A candidate who has appeared for improvement is eligible for class only and not for ranking.
- vii. Internal assessment marks shall be shown separately in the marks card. A candidate who has rejected the result or who, having failed, takes the examination again or who has appeared for improvement shall retain the internal assessment marks already obtained.

17. Guidelines for Setting Question Papers of Semester I, II, III & IV End Examinations.

- a. The question paper should be set in such a manner so as to cover the complete syllabus as prescribed by the University.
- b. The duration of the Semester End Examination shall be 3.00 Hours per course/subject.
- c. The evaluation of the Summer Internship Project should be conducted at the Institute/College/Department by the Examiner appointed by the Principal/Director/Head of the Institute/Department.
- d. The evaluation of Semester IV Project and Exit Seminar should be conducted at Institute /College/ Department by the Project Supervisor of the student and an External Examiner appointed for the same by the University.
- e. The result for these examinations should be declared within time limit as per University norms and communicated to the University within stipulated time.
- f. The record of conduct of such examination, evaluation and results should be maintained for a period of at least FIVE years by the respective Institute / Department for the verification by the competent authority.
- g. The format for question papers for Semester End Examinations to be conducted by the University shall be as follows:
 - 1. There shall be **FIVE compulsory questions of 16 marks each.**
 - 2. All the questions shall have internal choice within the questions, i.e. there shall be 2 questions from each module/unit of the curriculum with an internal option.
 - 3. The concerned Board of Studies shall develop a question bank of 10-15 questions for each module/unit of each course/subject.
 - 4. The question bank shall be prepared on the following guidelines:
 - a. The questions shall be framed to assess the attainment of Course Outcomes defined in Appendix - 3 for each module/unit of each course/subject. Bloom's Taxonomy shall be referred while framing the questions.



- b. The competent authority shall prepare a panel of examiners for preparing a question bank.
- c. The remuneration to be paid for preparing a question bank shall be decided by the competent authority according to the prevailing norms.
- d. A question bank of 10 questions per module/unit (carrying 16 marks each) shall be submitted to the University before commencement of the academic session.
- e. The examiner shall also mandatorily submit a detailed scheme of evaluation (Memorandum of Instructions) along with the question bank to enhance the objectivity and maintain consistency in evaluation.
- f. The Subject Examination Committee shall moderate the questions submitted by examiners and pick up the appropriate questions to set the question paper in the pattern detailed below:

ILLUSTRATIVE PATTERN OF QUESTION PAPER

Q.1 (A)	based on module/unit 1
	OR
Q.1(B).....	based on module/unit 1
Q.2(A).....	based on module/unit 2
	OR
Q.2(B).....	based on module/unit 2
Q.3(A).....	based on module/unit 3
	OR
Q.3(B).....	based on module/unit 3
Q.4(A).....	based on module/unit 4
	OR
Q.4(B).....	based on module/unit 4
Q.5(A).....	based on module/unit 5
	OR
Q.5(B).....	based on module/unit 5

18. Not Fit for the Course:

If a student fails to pass the M.B.A. programme within FIVE successive years from the date of his/her admission he/she shall be declared Not Fit for the Course (NFC), and shall not be allowed to appear for any previous examination of the programme.

19. Absorption Scheme:

The failure students of the MBA Course as per Direction No. 22 of 2017 (Introduced in 2016) immediately preceding the new course under this direction shall be given chance to appear for three more consecutive examinations according to old syllabus (Introduced in 2016).

- b. The University shall conduct the examination of old course for three more consecutive examinations after the new scheme of examination is introduced as per following table:

Semester Examination	Attempt-1	Attempt-2	Attempt-3
Semester-I	Winter 2019	Summer 2020	Winter 2020
Semester-II	Summer 2020	Winter 2020	Summer 2021
Semester-III	Winter 2020	Summer 2021	Winter 2021
Semester-IV	Summer 2021	Winter 2021	Summer 2022

The students are required to clear all their papers/subjects/courses within the stipulated time. The students clearing all the papers of old scheme of Examination in given attempts shall be awarded Degree according to old scheme of Examination (Introduced in 2016).

A student who has failed in one more subjects of any semester/s MBA Direction No. 22 of 2017 (issued in 2016) shall be given three more attempts. A student is required to clear all their papers/subjects/courses within the stipulated time. The students clearing all the papers of old scheme of Examination in given attempts and shall be awarded Degree according to old scheme of Examination (Introduced in 2016).

In case, a student is not able to clear her/his papers in given attempts as per old scheme of examination, she/he shall be absorbed in the scheme of examination as per this direction in the following manner:

1. A student who has passed Semester I and II in the given three attempts will be eligible for admission to Second Year of MBA.
 - a. Such a student will be required to take a casual admission to First year by paying Rs. Five Hundred only.
 - b. Such a student will be required to fill the examination form for Sem I and Sem II and appear and pass the subjects for which there was no equivalent paper in old Direction No. 22 of 2017.
 - c. The new mark list as per this Direction shall be generated for Sem I and Sem II wherein the marks of equivalent subjects (as mentioned in the table given hereunder) shall be mentioned.
 - d. The marks for subject 'Business Communication and Information Systems' as per old course shall be mentioned against two subjects

- i.e. 'Management Information Systems' and 'Managerial Skills for Effectiveness' as per this Direction.
- e. The marks for subject 'Research Methodology and Quantitative Techniques' as per old course shall be mentioned against two subjects i.e. 'Business Statistics and Analytics for Decision Making' and 'Business Research' as per this Direction.
 - f. The marks for 'Strategic Management' as per this Direction shall be mentioned if the student has passed 'Strategic Management' of MBA Sem III of old course (Direction No. 22 of 2017). If not, the student will have to appear for the same paper as per this Direction.
 - g. Every such student will have to appear for the subject 'CSR and Sustainability' as per this Direction as there is no equivalent subject in the old direction.
 - h. Such a student will have to appear for Sem III examination as per this Direction. However, the student will be entitled to exemption for the subjects she/he had passed as per the old Direction.
2. A student who has failed in one or more subjects of Semester I and II will be eligible for admission to Second Year if she/he satisfies the conditions mentioned in Clause No. 11 of Direction No. 10 of 2019.
- a. Such a student will be required to take a casual admission to First year by paying Rs. Five Hundred only.
 - b. Such a student will be required to fill the examination form for Sem I and Sem II and appear for the subjects required to be passed as per this Direction. This includes the equivalent subjects of old direction which he could not pass and the subject 'CSR and Sustainability' as per this Direction as there is no equivalent subject in the old direction.
 - c. The new mark list as per this Direction shall be generated for Sem I and Sem II wherein the marks of equivalent subjects (as mentioned in the table given hereunder) shall be mentioned.
 - d. The marks for subject 'Business Communication and Information Systems' as per old course shall be mentioned against two subjects i.e. 'Management Information Systems' and 'Managerial Skills for Effectiveness' as per this Direction.
 - e. The marks for subject 'Research Methodology and Quantitative Techniques' as per old course shall be mentioned against two subjects i.e. 'Business Statistics and Analytics for Decision Making' and 'Business Research' as per this Direction.
 - f. The marks for 'Strategic Management' as per this Direction shall be mentioned if the student has passed 'Strategic Management' of MBA Sem III of old course (Direction No. 22 of 2017). If not, the student will have to appear for the same paper as per this Direction.
 - g. Such a student will have to appear for Sem III examination as per this Direction. However, the student will be entitled to exemption for the subjects she/he had passed as per the old Direction.

3. A student who has passed Semesters I, II and III examinations as per old course in the given attempts and eligible for MBA Sem IV as per this Direction.
- Such a student will be required to take a casual admission to First year and Second year by paying Rs. Five Hundred only per semester.
 - Such a student will be required to fill the examination form for Sem I, Sem II and Sem III and appear for the subjects required to be passed as per this Direction. This includes the subjects 'CSR and Sustainability' and 'Management Case Analysis' as per this Direction as there is no equivalent subject in the old direction.
 - The new mark list as per this Direction shall be generated for Sem I, SemII andSem III wherein the marks of equivalent subjects (as mentioned in the table given hereunder) shall be mentioned.
 - The marks for subject 'Business Communication and Information Systems' as per old course shall be mentioned against two subjects i.e. 'Management Information Systems' and 'Managerial Skills for Effectiveness' as per this Direction.
 - The marks for subject 'Research Methodology and Quantitative Techniques' as per old course shall be mentioned against two subjects i.e. 'Business Statistics and Analytics for Decision Making' and 'Business Research' as per this Direction.
 - If the student had opted for 'Service Sector Management' specialization as per old course, she/he will be having a choice of selecting any other specialization offered in this Direction as the 'Service Sector Management' specialization is not offered in this Direction. However, if the student has passed Paper 1 or 2 or both of 'Service Sector Management' marks of the same shall be mentioned against same papers in new mark list.
4. Note on Specialization: This direction does not offer 'Service Sector Management' specialization which was offered in old direction. Hence, a student will have a choice to select new specialization area. However, the student shall be exempted from the papers of specialization that she/he had passed as per old direction in the following manner:

Specialization selected as per this Direction	Service Sector Management (Direction No. 22 of 017)	Status of Equivalence
Paper 1	Paper 1	Yes
Paper 2	Paper 2	Yes

Paper 3	Paper 3	Yes
Paper 4 (To be Compulsorily passed by such a student)	--	No

5. MOOCs: Every student who was admitted to MBA as per Direction No. 22 of 2017 but could not pass all subjects in given attempts and is now absorbed in the scheme of examination as per this Direction is required to successfully complete TWO MOOCs from SWAYAM/NPTEL portal to become eligible for the award of degree. The guidelines provided under Clause 12 of this Direction is applicable for all such students also.

Table 1: List of Equivalent Subjects/Papers (Core)

Semester Examination under this Direction	Name of the Course under this Direction	Semester Examination under Old Course (2016)	Name of the Course under Old Direction (2016)	Status of Equivalence
I	Managerial Economics	I	Managerial Economics	Yes
	Management Information Systems	I	Business Communication and Information Systems	Yes
	Managerial Skills for Effectiveness	I	Business Communication and Information Systems	Yes
	Organizational Behaviour	I	Principles of Management	Yes
	Financial Reporting, Statements and Analysis	I	Accounting For Managers	Yes
	Business Statistics and Analytics for Decision	I	Research Methodology and Quantitative	Yes

	Making		Techniques	
	Legal and Business Environment	I	Business Laws	Yes
	Business Research	I	Research Methodology and Quantitative Techniques	Yes
II	Financial Management	II	Financial Management	Yes
	Marketing Management	II	Marketing Management	Yes
	Human Resource Management	II	Human Resource Management and Organizational Behaviour	Yes
	Operations Management	II	Operations Management	Yes
			Cost Accounting	Yes
	Strategic Management	III	Strategic Management	Yes
	International Business	II	Economic Environment of Business	Yes
	CSR and Sustainability			NO
	Cost Accounting	II	Cost Accounting	Yes
III	SIP	III	Strategic Management	Yes
	Elective I - Paper 1			Refer to Table 2
	Elective I - Paper 2			
	Elective I - Paper 3			
	Elective II - Paper 1			
	Elective II - Paper 2			
	Elective II - Paper 3			

	Management Case Analysis			NO
IV	Elective I - Paper 4			Refer to Table 2
	Elective II - Paper 4			
	MOOC 1			NO
	MOOC 2			NO

Table 2: List of Equivalent Elective/Specialization Papers

Elective / Specialization Group	Semester Exam under this Direction	Paper	Name of the Course under this Direction	Semester Exam under old Direction	Name of the Course under old Direction	Status of Equivalence
Financial Management	III	Paper 1	Investment Analysis and Portfolio Management	III	Security, Portfolio and Risk Management	Yes
	III	Paper 2	Project Appraisal and Finance	III	Corporate Financial Management	Yes
	III	Paper 3	Financial Derivatives	IV	Investment Environment & Wealth	Yes

					Managem nt	
	IV	Pap er 4	Managing Banks and Financial Institutions		Investment Environme nt & Wealth Managem nt	Yes
Marketing Management	III	Pap er 1	Sales and Distribution Management	III	Sales and Distribution Managem nt	Yes
	III	Pap er 2	Digital and Social Media Marketing	III	Consumer Buying Behaviour	Yes
	III	Pape r 3	Integrated Marketing Communication and Brand Management	IV	Integrated Marketing Communicati on & Brand Management	Yes
	IV	Pape r 4	Retail and Services Marketing			NO

Human Resource Management	III	Paper 1	Manpower Planning, Recruitment and Selection	III	Training & Development Practices	Yes
	III	Paper 2	Performance Management System	III	Performance and Compensation Management	Yes
	III	Paper 3	Compensation and Benefits Management	III	Performance & Compensation Management	Yes
	IV	Paper 4	Team Dynamics	IV	Industrial relations & Labour Laws	Yes
Operations Management	III	Paper 1	Supply Chain & Logistics Management	III	Logistics & Supply Chain Management	Yes

					nt	
	III	Pap er 2	Quality Toolkit for Managers	IV	Total Quality Manageme nt	Yes
	III	Pap er 3	Operations Research	III	Operations Research	Yes
	IV	Pap er 4	Sales and Operations Planning			
Business Analytics	III	Pap er 1	Data Visualization for Managers			
	III	Pap er 2	Data Mining			
	III	Pap er 3	Data Science using R			
	IV	Pap er 4	Big Data and Digital Analytics			

Entrepreneurs hip Development	III	Pap er 1	Entrepreneuri al Theory and Practices			
	III	Pap er 2	Business Plan Formulation			
	III	Pap er 3	Social Entrepreneurs hip			
	IV	Pap er 4	Entrepreneuri al Marketing			
International Business	III	Pap er 1	International Marketing Management			
	III	Pap er 2	Export Documentatio n and Procedures			
	III	Pap er 3	International Finance			
	IV	Pap er 4	International HRM			

- g. The above absorption scheme of M.B.A. shall be effective till the introduction of new Syllabus with new absorption scheme.

20. Guidelines for Project Work :

Objective

Every student will be assigned a project in 4th Semester of MBA and it will be pursued by him/her under the supervision of an internal supervisor. The objective of the Project Work is to help the student develop his/her ability to apply multi-disciplinary concepts, tools and techniques to solve organizational problems and/or to evolve new/innovative theoretical frame work.

Type of Project

The Project may take any one of the following forms:

- i) Comprehensive case study (covering single organization/multifunctional area problem, formulation, analysis and recommendations)
- ii) Inter-organisational study aimed at inter-organisational comparison/validation of theory/survey of management services.
- iii) Evolution of any new conceptual / theoretical framework.
- iv) Business Plan/Viability Studies
- v) Field study (Empirical study).
- vi) Software analysis, Design and solutions for organisational achievement (Applicable to IT)

Selection of Project Topic:

- Project topic has to be selected with respect to the programme of study and area elected by the student.
- Title of the project should clearly specify the objective and scope of the study. It should be specific and neither too vague nor centralistic. The topics should be designed meticulously. It can be designed like "Employee Welfare Measures" - A case study of XYZ Ltd.
- Project selection has to be made in consultation with the supervisor who will act as a Project guide for the student.

Scope of Work

The student is expected to carry out following activities in the project:

1. Prepare a synopsis and get it approved by the supervisor as assigned by the respective Institutes.
2. Undertake a detailed literature survey on the subject matter.
3. Make relevant data collection/observation.
4. Consult experts of the field.
5. Visit related organizations/institutions/industries.
6. Compile data in proper format.

7. Make proper conclusion/recommendations.
8. Prepare a Project Report.
9. The volume of the project-report should be ranging from 60-80 pages.
10. Obtain approval of Project Report by project supervisor.
11. Submit two hard bound copies of the Project Report at the Institute.
12. Submission of the Project Report shall be one month prior to the date of the commencement of the 4th Semester Examinations for MBA.

General Format of the Report

The project report should preferably be written in the following format:

- a) Executive Summary
- b) Introduction to topic
- c) Research Methodology
- d) Analysis and Findings of the study
- e) Conclusions and Recommendations of the study
- f) Bibliography
- g) Appendices - to include questionnaire, if any

Examination and Evaluation

The Project is to be treated as a Course of study of the MBA-4th Semester comprising of 100 marks. The external assessment shall be done on the basis of the project report and Viva Voce. The Project shall be evaluated by an External faculty for 50 marks and 50 marks for Viva Voce. The Project work shall be evaluated by internal and external examiners approved in the list of the University for 100 marks (as mentioned above) at the respective institute / college as per the schedule fixed by the university. One such External Examiner shall not examine more than 20 students in one academic year.

21. Miscellaneous

- a) Industrial Tour: To make students understand the various aspects of business; college/ Institute/ Department may organize industrial visits to the industrial/ business houses.

22. In the event of any doubt or dispute arising out interpretation of any provision of this Direction the matter shall be referred to the decision of Vice-Chancellor whose decision shall be final and binding on all.

Nagpur

Date: 08-03-2021

(Dr. Subhash R Chaudhari)
Vice - Chancellor

Appendix 1

Course Summary for MBA Program

Semester	Course Code	Course Type	Name of Course/Subject
I	1T1	Core	Managerial Economics
	1T2	Core	Management Information Systems
	1T3	Core	Business Research
	1T4	Core	Organizational Behaviour
	1T5	Core	Financial Reporting, Statements and Analysis
	1T6	Core	Business Statistics and Analytics for Decision Making
	1T7	Core	Legal and Business Environment
	1T8	Core	Managerial Skills for Effectiveness
II	2T1	Core	Financial Management
	2T2	Core	Marketing Management
	2T3	Core	Human Resource Management
	2T4	Core	Operations Management
	2T5	Core	Strategic Management
	2T6	Core	International Business
	2T7	Core	CSR and Sustainability
	2T8	Core	Cost Accounting
III	3P1	Elective	Summer Internship Project
	3T1	Elective	Elective I - Paper 1
	3T2	Elective	Elective I - Paper 2
	3T3	Elective	Elective I - Paper 3
	3T4	Elective	Elective II - Paper 1
	3T5	Elective	Elective II - Paper 2
	3T6	Elective	Elective II - Paper 3
	3T7	Core	Management Case Analysis
IV	4T1	Elective	Elective I - Paper 4
	4T2	Elective	Elective II - Paper 4
	4M1	Elective	MOOC 1
	4M2	Elective	MOOC 2
	4P1	Elective	Project Work & Viva Voce
	4P2	Elective	Exit Seminar -& Open Defense

Appendix 2

List of Elective/Specialization Courses

Group	Group Area	Paper	Name of Course
Core	A Marketing Management	1	Sales and Distribution Management
		2	Digital and Social Media Marketing
		3	Integrated Marketing Communication and Brand Management
		4	Retail Sales Management and Services Marketing
	B Financial Management	1	Investment Analysis and Portfolio Management
		2	Project Appraisal and Finance
		3	Financial Derivatives
		4	Managing Banks and Financial Institutions
	C Human Resource Management	1	Manpower Planning, Recruitment and Selection
		2	Performance Measurement System
		3	Compensation and Benefits Management
		4	Team Dynamics
Complementary	A Operations Management	1	Logistics & Supply Chain Management
		2	Quality Toolkit for Managers
		3	Operations Research
		4	Sales and Operations Planning
	B Business Analytics	1	Data Visualization for Managers
		2	Data Mining
		3	Data Science using R
		4	Web and Social Media Analytics
	C Entrepreneurship Development	1	Entrepreneurial Theory and Practices
		2	Business Plan Formulation
		3	Social Entrepreneurship
		4	Entrepreneurial Marketing
	D International Business	1	International Marketing Management
		2	Export Documentation and Procedures
		3	International Finance
		4	International Human Resource Management

Appendix - 3
Detailed Course Syllabus for MBA Program
SEMESTER - I

Semester	I	Course Code	00	Type of Course	Core
Course Name	INDUCTION cum FOUNDATION COURSE				
Credits	None	Number of 1 hour lectures: Min. 40		4-8 hours per day	
Detailed Course Objectives					
CO1	Given a presentation/ debatable topic, discussion, training, the students will be able to understand voice modulation, nuances of diction and articulation which will in turn help them in developing effective communication skills.				
CO2	Given a workplace setting, the students will not only be aware about their inner qualities, inner potential and importance of human qualities but also will be able to critically assess the relationship between theory and practice in the formulation of values.				
CO3	The Students will be able to perform calculations based on elementary statistics and accountancy				
CO4	Given a stressful or demanding situation the students will develop skills like team work, leadership, time management and will also be able to develop self confidence, handle conflicts, be patient and work under pressure.				
CO5	Given a problematic situation/ a dilemma/ a choice the students will be able to distinguish between the ethical and unethical ways and chose the right way of doing things in professional and personal life.				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	
Module 1	Acting Techniques (Duration -2 hours) Incorporates different renowned techniques which helps in understanding, analysing and applying the craft of Acting. History of Acting: traditional and classical modes of Acting, modern Acting i.e. method Acting / realistic form of Acting and the post-modern, i.e. contemporary methodologies, to comprehend the art of performance more efficiently.			Drama Games and Acting Exercises: 177 games and activities, Rod Martin, 1 st Edition, Meriwether Publishing Ltd	

	<p>Creative Body Movements (Duration -1 hours) The body is the basic tool of an actor. Creative body movements are prime exercises, which are conducted in the beginning of almost every acting class. These movement classes enables one to become graceful and energetic, and makes one aware of factors like rhythm, gait, pace, tempo, gestures, postures, body language, compositions, etc. which later help one in understanding scenes more effectively.</p> <p>Voice Culture (Duration- 2 hours) The voice is another tool of an actor. In voice classes, students get to understand the power of their voice and gain an insight of how to modify it by controlling various resonators and muscles.</p> <p>Diction and Speech (Duration- 2 hours) The students are taught the importance of clarity of speech – articulation as well as expressions.</p>	
Module 2	<p>Self Exploration-what is it? Material requirement (tangible things) for the body and non-material requirement (intangible things) like love, respect, care, etc. Why are they important? Needs of Self (such) and Body (suvidha)- trust love, care, respect (self), physical needs, facilities (suvidha); Peer Pressure and its effect on you and your family; Seven Relations - Parents-children (maataa & pitaa { putra-putri), Teacher { student (guru-shishya), Brother { sister (bhaini-behan), Friend (mitra), Saathi-sahayogi (leader-assistant at work place), Husband-wife (pati-patni), System related (Vyavasthaagata sambandh); Nine Values (Mulya) -Trust (Vishwas), Respect (Samman), Affection (Sneha), Care (Mamataa) Guidance (Vaatsalya) Gratitude (Kritagyataa) Reverence (Shraddha) Glory (Gaurav) Love (Prema)</p>	<p>R.R Gaur, R Sangal, G P Bagaria, A foundation course in Human Values and professional Ethics, Excel books, New Delhi, 2010, ISBN 978-8-174-46781-2</p>
Module 3	<p>Basics of Business Statistics: Measures of Central Tendency – Mean, Mode, Median Basics of Accounting: Golden Principles of Accounting, Journal Entry, Ledger Posting, Trial Balance. Basics of Banking Transactions – Writing Bank Cheques, DD, Challan, Use of NEFT, RTGS, e-Wallets, UPI, Netbanking</p>	<p>Statistical Methods, S. P. Gupta, Sultan Chand & Sons, ISBN-13: 978-8180549311 Chapter No. 7</p> <p>Financial Accounting, S. N. Maheshwari, Suneel K Maheshwari, Sharad K Maheshwari, Vikas Publishing House; Sixth edition (2018), ISBN-13: 978-9352718535</p>

<p>Module 4</p>	<p>Games and sports - This would involve a daily routine of physical activity with games and sports. There can be games in the evening or at other suitable times according to the local climate. Each student should pick one game and learn it for the duration of the induction program and hopefully, continue with it later.</p> <p>The physical, psychological and social benefits of exercise and the importance of assuming personal responsibility in lifestyle choices. Guidelines for healthy eating, the importance of good nutrition and physical activity in weight management and the problems associated with fad diets and quick weight-loss methods</p> <p>YOGA- few basic asanas and some breathing techniques</p> <p>ZUMBA- Zumba is a great confidence and a great way to relieve stress for all while having fun and getting in a great work out.</p> <ul style="list-style-type: none"> • Talk on Healthy eating habits and Tips for leading a FIT lifestyle can be organized in association with the Sports Department • Daily 15 minutes meditation sessions can be organized for the benefit of the students. 	<p>https://www.yogajournal.com</p>
<p>Module 5</p>	<p>Indian ethos and values- relevance of Indian ethos, Indian work ethos and Principles of Indian ethos for Management, Cultural influences on business practices- benefits from the culture knowledge- culture insights into social responsibility, Principles Practiced by Indian Companies, Role of Indian Ethos in Managerial Practices, Transactional Analysis- An Indian Perspective</p>	<p>1. Indian Ethos and values in Management by R. Nandagopal by Ajith Sanakr R.NN, Tata Mc Graw Hill Education Pvt. Ltd, New Delhi (Chapter One Page 2-22)</p>
<p>Other Reference books and sources</p>	<ol style="list-style-type: none"> 1. https://www.aicte-india.org/sites/default/files/induction-guide-jun17-aicte%20(1).pdf 2. The Theatre of the Absurd (English), Martin Esslin, Bloomsbury Publishing India Private Limited; ISBN-13: 978-1472577023 3. The Theatre of the Absurd (Marathi), Dr. Satish Pawade, Generic, ASIN: B07RDY6LSZ 4. Jagatik Rangabhoomi Purvarang by Manisk Kaned- Publication Rohan Prakashan 5. Natyadarshan by Dr. Parag Ghonge by Sahitya Samiksha 6. The Body Can Speak: Essays on Creative Movement Education with Emphasis on Dance and Drama, 1st Edition, by Annelise Mertz (Author), Joseph Roach (Foreword) 7. Vacghik Abhinay by Dr. Shriram Lagoo 8. Lessons from Mahabharata by G.N. Das, Abhinav Publishers, New Delhi, 1998 9. Indian Ethos and Values for Leadership Excellence by K. Nagrajan, New Age International Publishers, 1st edition, 2011, (Chapter 9- Pg 103-113) 	

10. Business Ethics and values By Dr. D. Senthil Kumar and A. Senthil Kumar , Himalaya Publishing House, 33rs edition, 2008(Chapter 7 pg no.283-295)

Semester	I	Course Code	1T1	Type of Course		Core	
Course Name	MANAGERIAL ECONOMICS						
Credits	3	Number of 1 hour lectures:	30				
Detailed Course Objectives							
CO1	Given the details regarding price and quantity, the future manager will be able to calculate and interpret price elasticity, income elasticity and cross-price elasticity of demand and will also be able examine the uses and abuses of demand forecasting techniques						
CO2	Given the information about scale of production, the future manager will be able to analyze various aspects of empirical production functions and also will be able to comprehend the difference sources of economies and diseconomies of scale.						
CO3	Given the information pertaining to market structure, the future manager will be able to determine the optimal price and output for firms under different market structures.						
CO4	Given the circular flow model of an economy, the future manager will be able to interpret the role and importance of each component with regard to factor market and product market and will also be able to comment on the implications and control of inflation.						
CO5	Given the information regarding expenses and income in an economy, the future manager will be able to calculate and explicate the gross domestic product using expenditure and income approaches and given the details about a phase of the business cycle, the future manager will be able to depict the symptoms, causes and effects on economic activities of a nation.						
Detailed Contents:				Reference Book, Publisher, Edition, Page No.			

Module 1	DEMAND ANALYSIS: Introduction; Demand Analysis: The Consumer, Demand Concepts, Own-Price Elasticity of Demand, Income Elasticity of Demand, Cross-Price Elasticity of Demand. Substitution and Income Effects. Normal and Inferior Goods. Indifference Curve Analysis. Demand Forecasting: Need, Techniques and Procedures	Managerial Economics: Analysis, Problems and Cases, P.L. Mehta, 13 th Edition, S. Chand & Co. Ltd. Chap 4, 5, 6 & 7
Module 2	SUPPLY AND PRODUCTION DECISIONS: The Law of Supply, Theory of Production: Factors affecting production, production function, short run analysis, law of variable proportions, Isoquant Curves, Long run production function, Cobb-Douglas production function, Cost-Output Function, Economies and Diseconomies of Scale	Managerial Economics: Analysis, Problems and Cases, P.L. Mehta, 13 th Edition, S. Chand & Co. Ltd. Chap 10 & 11
Module 3	MARKET STRUCTURES AND PRICING PRACTICES: Introduction; Analysis of Market Structures: Factors That Determine Market Structure. Perfect Competition: Demand-supply Analysis in Perfectly Competitive Markets, Optimal Price and Output in Perfectly Competitive Markets. Monopolistic Competition: Demand-Supply Analysis in Monopolistically Competitive Markets, Optimal Price and Output in Monopolistically Competitive Markets, Factors Affecting Long-Run Equilibrium in Monopolistically Competitive Markets. Oligopoly: Demand-Supply Analysis and Pricing Strategies in Oligopoly Markets, Optimal Price and Output in Oligopoly Markets, Factors Affecting Long-Run Equilibrium in Oligopoly Markets. Monopoly: Demand-Supply Analysis in Monopoly Markets; Optimal Price and Output in Monopoly Markets, Price Discrimination.	Managerial Economics: Principles and Worldwide Applications, Dominick Salvatore and Ravikesh Shrivastava, 7 th Edition, Oxford Publications, Chap 8 Managerial Economics, D. N Dwivedi, 7 th Edition, Vikas Publications, Chap 13
Module 4	MACRO ECONOMIC FUNDAMENTALS: Macro Economics – Meaning, Nature and Scope, Circular Flow Model of Economy. Inflation: Demand-Pull and Cost-Push Inflation, CPI vs. WPI, Causes, Effects and Remedies of Inflation, Theories of Inflation and Policy measures to control inflation	Managerial Economics, D. N Dwivedi, 8 th Edition, Vikas Publications, Chap 23,24, 25 & 26
Module 5	NATIONAL INCOME AND BUSINESS CYCLE: National Income – Concept and Measurement, Theory of National Income Determination – Multiplier and Accelerator Theories. Overview of the Business Cycle: Phases of the Business Cycle; Factors causing swings in business activity and measures to control business cycles.	Managerial Economics: Analysis, Problems and Cases, P.L. Mehta, 13 th Edition,S. Chand & Co. Ltd.Chapter 20, 21 & 26
Other	1. Ritika Sinha : “Managerial Economics”, SBPD Publishing House	

Reference books and sources	2. Damodaran Suma: "Managerial Economics", Oxford University Press , 200 3. Paul A Samuelson and William D Nordhaus : "Economics", McGraw Hill 4. Geethika, Ghosh & Choudary : "Managerial Economics", McGraw Hill.
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Semester	I	Course Code	1T2	Type of Course	Core
Course Name	MANAGEMENT INFORMATION SYSTEM				
Credits	3	Number of 1 hour lectures:	30		
Detailed Course Objectives					
CO1	The student will be able to describe different types of management information system from management activity point of view and will also be able to identify and work out KRAs, BOPs and BPPs for various organisations/systems.				
CO2	The student will be able to identify the master data, draw report format and interface matrix while making a model of DSS.				
CO3	The student will be able to suggest the conceptual model of PMS and will also be able to draw a system model of integrated system (PMS+SCM+Accounting and Billing)				
CO4	The student will be able to describe the key features of ERP, SCM and CRM and will also be able to draw functional flow and process flow diagrams for various transactions.				
CO5	The student will be able to enumerate the factors affecting system performance and will also be able to comment on the operational feasibility of IT system under consideration				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	
Module 1	Concepts & Types of Information Systems. Components of MIS. Information Activities. Strategic Management of Business. Balance Score Card, Scorecard and Dashboard, measures			Management Information Systems (1 st Edition) Giridhar Joshi, Oxford University	

	of business operations and business performance. Steps for strategic design of MIS.	Press Chap 1 Management Information Systems (4 th Edition) Waman S Jawadekar, McGraw Hill Publication, Chap 10
Module 2	Applications of MIS in Manufacturing Sector: Model of Information Processing System. Application of Model to personnel management, financial management, production management, marketing management.	Management Information Systems (4 th Edition) Waman S Jawadekar, McGraw Hill Publication, Chap 12
Module 3	Introduction to Service Sector, creating distinctive service, service concept, service process cycle, service management system, MIS application in Service industry - banking & insurance	Management Information Systems (4 th Edition) Waman S Jawadekar, McGraw Hill Publication, Chap 13
Module 4	Enterprise Management System. ERP Systems, Models of business functions integration. ERP Model and Modules. Business organization model. ERP product characteristics. Benefits of ERP. ERP Product evaluation. ERP implementation. SCM & CRM. EMS Model.	Management Information Systems (4 th Edition) Waman S Jawadekar, McGraw Hill Publication, Chap 15
Module 5	Technology of Information Systems. Introduction, data processing, Transaction processing, Application processing, information system process, OLAP, TQM of Information system. Real time systems. Case tools and I-CASE.	Management Information Systems (4 th Edition) Waman S Jawadekar, McGraw Hill Publication, Chap 16
Other Reference books and sources	<ol style="list-style-type: none"> 1. Ashok Arora and Akshya Bhatia, "Management Information systems", Excel Books. 2. A.K. Gupta, " Management Information System ", S. Chand & Co 3. M. Jaiswal, "Management Information systems", - Oxford publishing house 4. Oz, "Management Information Systems", Thomson Learning Books, 3rd Edition 	

Semester	I	Course Code	1T3	Type of Course	Core
Course Name	BUSINESS RESEARCH				

Credits	3	Number of 1 hour lectures:	30
Detailed Course Objectives			
CO1	In context of research, the student will be able to define business research problems and will also able to formulate an abbreviated version of research proposal.		
CO2	The student will be able to describe and choose appropriate sampling design and will also be able to estimate appropriate sample size.		
CO3	The student will be able to develop measurement tools and construct appropriate scales therein.		
CO4	The student will be able to select suitable method of data collection and will be able to make questionnaire/e-questionnaire		
CO5	The student will be able to derive inferences by applying various techniques of interpretation and be and write various types of research reports.		
Detailed Contents:		Reference Book, Publisher, Edition, Page No.	
Module 1	Theory Building and Research Proposal - Meaning and nature of Theory, Nature of proposition, Scientific Method, Verifying Theory, Inductive and Deductive Reasoning, Nature of business problem, importance of problem definition, the process of problem definition, research questions and research objectives, research proposal, anticipating outcomes, Literature Review		Business Research Methods – William G. Zikmund, 7 th Edition, Cengage Learning, ISBN – 978-81-315-0029-3, Chapter 3 & 6
Module 2	Sampling Design - Census and Sample Survey, Implication of Sample Design, Steps in Sample Design, Sampling Procedure, Different Types of Sampling Designs, How to select a random sample, Random sample from infinite universe, Sample size calculation.		Research Methodologies, Methods and Techniques –2nd Edition C R Kothari, New Age International (P) Ltd Publisher, ISBN – 978-81-224-2488-1 Chapter 4
Module 3	Measurement and Scaling Techniques - Measurement in research, Measurement Scales, Source of errors in measurement, Test for sound measurement, Techniques for developing measurement tools, Scaling - Meaning, Scale classification bases, Important Scaling Techniques, Scale construction techniques		Research Methodologies, Methods and Techniques –2nd Edition C R Kothari, New Age International (P) Ltd Publisher, ISBN – 978-81-224-2488-1 Chapter 5
Module 4	Methods of Data Collection - Collection of Primary Data (Observation, Interview, Questionnaire, Schedules), Other methods of data collection, Collection of Secondary Data (Reliability,		Research Methodologies, Methods and Techniques –2nd Edition C R Kothari,

	Suitability and Adequacy), Selection of appropriate method for data collection, Constructing Questionnaire/e-questionnaire/Schedule	New Age International (P) Ltd Publisher, ISBN - 978-81-224-2488-1 Chapter 6
Module 5	Interpretation and Report Writing - Meaning and TEchniques of Interpretation, Significance and Steps of Report Writing, Layout of research reports, types of reports, Mechanics and Precautions for writing a research report.	Research Methodologies, Methods and Techniques -2nd Edition C R Kothari, New Age International (P) Ltd Publisher, ISBN - 978-81-224-2488-1 Chapter 14
	<ol style="list-style-type: none"> 1. Panneerselvam, "Research Methodology", Prentice Hall India 2. Donald Cooper and Pamela Schindler, "Business Research Methods ", Tata McGraw Hill 3. Krishnaswami & Rangantham, "Methodology of Research ", Himalaya Publishing House 4. Alan Bryman and Emma Bell, "Business Research Methods ", Oxford Publication 	

Semester	I	Course Code	1T4	Type of Course	Core
Course Name	ORGANIZATIONAL BEHAVIOUR				
Credits	3	Number of 1 hour lectures:	30		
Detailed Course Objectives					
CO1	Students will be able to explain the concept of Organisation Design and determine the factors that affect Organisation Design.				
CO2	Students will be able to identify the components of Individual Behaviour and apply the concept of Learning, Perception, Attitudes and values.				
CO3	The student will be able to distinguish between the various theories of motivation and their application in organizations and also be able to apply these theories to practical problems in organizations. They will also be able to distinguish between a number of different leadership theories & styles and contribute to the effective performance of a team as the team leader or a group member.				
CO4	The future managers/ students will be able to analyse the behaviour of individuals and groups in organisations in terms of the key factors that influence organisational behaviour and demonstrate skills required for working in groups (team building).				

CO5	The students will be able to justify how organizational change and conflict affect working relationships within organizations and demonstrate how to apply relevant theories to solve problems of change and conflict within organizations	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Organisation Design: Understanding organizations-Basics of an organizational design-Organization and stakeholders-Organizations and environmental influences-Organizational strategy-Organizational design - Alternative structures- Management process - Authority and Responsibility Relationship; organizational control mechanisms; Organizational decision making	Organisational Behavior - Stephen Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall Publication, 13 th Edition, , ISBN 978-81-317-2121-6, Chapter 16 Principles of Management, T. Ramaswamy, 1 st Edition, Himalaya Publishing House pvt Ltd. Chapter No. 7,8,11
Module 2	Organisational Behaviour: Introduction, Foundations of individual behavior-Ability, Attitudes ,Job Satisfaction, Personality, Values , Perception	Organisational Behavior - Stephen Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall Publication, 13 th Edition, ISBN 978-81-317-2121-6, Chapter 2,3,4&5
Module 3	Motivation- Concept, types of motivation and Theories-Maslow, Herzberg,Mc Gregor. Leadership- Concept, Leadership styles and Theories- Trait Theory, Path Goal Theory, Blake Mouton-Managerial Grid	Organisational Behavior - Stephen Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall Publication, 13 th Edition, ISBN 978-81-317-2121-6, Chapter 6,7,12&13
Module 4	Group and Team Behavior-Foundations of Group behavior -Group development; Group properties: Roles, norms, status, size and cohesiveness, Group decision making, Techniques, Teams-Type and Team Dynamics	Organisational Behavior - Stephen Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall Publication, 13 th Edition, ISBN 978-81-317-2121-6, Chapter 9&10
Module 5	Conflict and Change- Understanding organizations- Managing organizational culture, Managing	Organisational Behavior - Stephen

	organizational conflict, power & politics ;Organizational life cycle and Organisational change	Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall Publication, 13 th Edition, ISBN 978-81-317-2121-6, Chapter 15&19
Other Reference books and sources	<ol style="list-style-type: none"> 1. Organisational Behavior Text Cases and Games, K. Aswathappa, Himalaya Publishing House Pvt Ltd, 10th Edition, ISBN- 978-93-5051-588-4 2. Dr. Niraj Kumar, "Organizational Behavior -A new Look Concept, Theory and Cases", Himalaya Publication, First Edition 2009. 3. Margie Parikh , Rajen Gupta, "Organisational Behaviour", McGraw Hill Education (India) Private Limited,1st Edition. 4. PG Aquinas, "Organizational Behaviour: concepts, realities, application and challenges", First edition, Excel Books. 	

Semester	I	Course Code	1T5	Type of Course	Core
Course Name	FINANCIAL REPORTING, STATEMENTS AND ANALYSIS				
Credits	3	Number of 1 hour lectures:		30	
Detailed Course Objectives					
CO1	Given an accounting situation Students will be able to evaluate selected accounting standards and perform their application in actual practice				
CO2	Given the Trial Balance and accompanying financial adjustments the future manager shall be able to prepare the financial statements and calculate the profit or loss of a firm as at the end of the financial year.				
CO3	Given the financial statements a student will be able to Prepare Cash Flow statement to evaluate whether a firm is doing well financially and has sufficient cash to meet its obligations and support its growth or not.				
CO4	Given the financial statements a student will be able to perform Ratio analysis and comment on the performance of the firm. Whether a firm is doing well or not. (As compared to its peers or year on year basis.)				
CO5	Given the financial statements a student will be able to formulate common size statement, trend analysis as well as inter-firm and intra firm comparison (As compared to its peers or year on year basis.)				
Detailed Contents:				Reference Book, Publisher, Edition, Page	

		No.
Module 1	Accounting Standards: Introduction to Indian Accounting Standards.AS 2 (Valuation of Inventories), AS 3 (Cash Flow Statement), AS 6 (Depreciation Accounting), AS 10 (Accounting for Fixed Assets). Practical Questions on these accounting standards.	“Financial Accounting for Management” – N. Ramchandran, Ram Kumar Kakani – Tata Mac-Graw- Hill Publishing Co. Ltd. Second Edition. (491 – 564)
Module 2	Financial Statement Reporting - I: Preparation of Financial Statement - Profit & Loss, Balance sheet (as per Companies Act 2013)	https://resource.cdn.icai.org/53245bos42067final-p1-ann.pdf
Module 3	Financial Statement Reporting - II: Cash Flow Analysis – introduction, Meaning, features, objectives, importance, concept of cash and cash equivalents, cash flow from operating activities, investment activities & financing activities. Preparation of Cash Flow Statement (as per Companies Act 2013)	“Financial Accounting & Analysis” – Narender Ahuja & Varun Dawar, Taxmann Publication (2015), 1 st Edition, (216 – 235)
Module 4	Analysis of financial Statement - I: Introduction, Assessment of Business Performance through Ratio Analysis: Concept of Ratio, significance of ratio analysis, Interpretation of financial performance using ratio. Profitability Ratio, Liquidity Ratio, Solvency Ratio, Activity Ratio & efficiency Ratio,	“Financial Accounting & Analysis” – Narender Ahuja & Varun Dawar, Taxmann Publication (2015), 1 st Edition, (216 – 235)
Module 5	Analysis of financial Statement - II: Techniques of Financial statement Analysis (Common size statement, Trend Analysis, Inter Firm Comparison, Intra Firm Comparison) Du-Pont Analysis	“Financial Accounting & Analysis” – Narender Ahuja & Varun Dawar, Taxmann Publication (2015), 1 st Edition, (216 – 235)
Other Reference books and sources	<ol style="list-style-type: none"> 1. Dr.S.N. Maheshwari and Dr.S.K. Maheshwari, “Financial Accounting”, Vikas, 10th Edition. 2. Ambrish Gupta: “Financial Accounting Management an Analytical Perspective”, Pearson Education-2009. 3. Sehgal, “Accounts for Management”, , Taxmann Publication Pvt. Ltd. 4. Rustagi, “Management Accounting”, , Taxmann Publication Pvt. Ltd 	

Semester	I	Course Code	1T6	Type of Course	Core
Course Name	BUSINESS STATISTICS & ANALYTICS FOR DECISION MAKING				
Credits	3	Number of 1 hour lectures:		30	

Detailed Course Objectives		
CO1	For a given dataset, the student should be able estimate the dispersion / variance & symmetry of the data using various measures and draw inferences to facilitate decision making.	
CO2	For a given dataset, the student should be able assess the level of association between given variables in the data using various types of correlation analysis techniques. The students should also be able to predict the values of a variable using regression analysis techniques.	
CO3	For given situations a student should be able determine the various probabilities arising out of the situation and make use of probability theory and appropriate probability distributions for the purpose of decision making.	
CO4	For a given research problem, student should be able to construct appropriate hypotheses and draw conclusions by using a suitable hypothesis testing procedure so as to address the research problem in question.	
CO5	The student will be able to differentiate between various forms of analytics and will also be able to choose suitable analytics for decision making.	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Measures of Dispersion (Variation) & Symmetry: Significance of measuring Dispersion, Requisites and classification of measures of Dispersion, Distance measures - Range, Inter-quartile range. Average Deviation measures - Mean Absolute Deviation, Variance and Standard deviation, Chebyshev's Theorem, Coefficient of variation & its significance. Concept of Skewness & Kurtosis	Business Statistics, J. K. Sharma, Pearson, Second Edition, Pages 133-170, 171-179, 186-189
Module 2	Measures of Association: Correlation, Types & Methods of Correlation analysis - Karl Pearson's coefficient of correlation, Spearman's Rank correlation, Probable error, Coefficient of Determination, Standard error of coefficient of correlation. Introduction to regression analysis and its advantages, Types of regression models, methods to determine regression coefficients (normal equations).	Business Statistics, J. K. Sharma, Pearson, Second Edition, Pages 447-470, 481-488
Module 3	Probability: Basic terminology, types of probability, probability rules, conditional probabilities, Baye's Theorem. Random Variables, Probability distributions; Binomial distribution, Poisson distribution, Normal distribution. Choosing correct probability distribution.	Statistics For Management, Levin & Rubin, PHI, Seventh Edition, Pages 159-273
Module 4	Hypothesis Testing: Introduction, Hypothesis testing procedure, errors in hypothesis testing. Power of a statistical test. t-test, ANOVA and Chi-Square test, (Students should be able to perform testing on spreadsheets)	Business Statistics, J. K. Sharma, Pearson, Second Edition, Pages 327-360

Module 5	Business Analytics - Introduction to analytics, Differentiating descriptive, predictive, and prescriptive analytics, data mining vs data analytics, Industrial problem solving process, Decision needs and analytics, stakeholders and analytics, SWOT analysis, Business analytics in decision making, Categorization of Analytical Methods and Models. Introduction & applications of SPSS, R, Python, etc.	Essentials of Business Analytics, Jeffery Camm, Cengage, Pages 4-12, 21-34, 75-106
Other Reference books and sources	<ol style="list-style-type: none"> 1. "Quantitative Methods for Business", Anderson (Thomson Learning Books) 2. "Statistical Methods", S.P. Gupta (S. Chand) 3. Levin Richard & Rubin David - "Statistics for Management" (Prentice Hall Of India). 4. SPSS Statistics for Data Analysis and Visualization 1st Edition, Keith McCormick, Jesus Salcedo, Jason Verlen, Jon Peck, Andrew Wheeler, Wiley Publishing, ISBN 978-1119003557 	

Semester	I	Course Code	1T7	Type of Course	Core
Course Name	LEGAL & BUSINESS ENVIRONMENT				
Credits	3	Number of 1 hour lectures:	30		
Detailed Course Objectives					
CO1	Given the circumstances, the learner will be able to infer legal aspects of doing business & plan business activities. In a given situation, the learner will be able make use of provisions of the Contract Act to evaluate a contract used in commercial practice.				
CO2	In a given situation, learner will be able to distinguish between various types of Companies and explain their comparative advantages and disadvantages. The learner will be able to explain the legal process involved in formation of a company and understand the relationships amongst the various stakeholders of the company.				
CO3	In context of Intellectual Property Rights (IPR) the learner will understand various components of IPR and differentiate between them. The learner can also identify the uses of IPR in business				
CO4	Under the given scenario, the learner will be able to describe various provisions of IT Act and will be able to use various provisions of Consumer Protection Act.				
CO5	A learner will be able to analyze the elements of Social, political, economic environment around a firm.				
Detailed Contents:				Reference Book, Publisher, Edition, Page	

		No.
Module 1	Legal aspects of business and contracts: Concept of law. Types of Law. Definition, Nature and types of contracts. Essentials of valid contract. Consideration and essentials of consideration. Free Consent. Legality and Validity of Contracts. Discharge of contracts. Arbitration: Meaning, Essential and Effects. Conciliation: Meaning, Procedure and Effect.	Legal Aspects of Business Concepts and Application, Parul Gupta, Vikas Publishing House , ISBN - 978-9352718368, Chapter 1,2,4,6,15
Module 2	Companies Act 2013: Characteristics and types of companies. Formation of companies; documents and registration process. Directors: Appointment, Powers, Duties and Liabilities. Company Meetings. Oppressions and Mismanagement	Elements of Company Law, N.D. Kapoor, Sultan Chand & Sons, 30 th Edition, ISBN - 978-9351610465, Chapter 1,2,3,10,14,15,19
Module 3	IPR: Types of IPR, overview and definitions. Patents and Patentability, working of patent and compulsory license, infringement. Meaning of copyright, ownership and assignment, licenses, Infringement. Meaning of Trademark, grounds of registration, infringement and passing off, assignment of trademark, collective trademark, certification marks. Definition of design, difference between copyright and design, Piracy of registered design. Trade secrets, meaning and essentials. Advantages and disadvantages of trade secrets	Business Legislation for Management, M C Kuchhal & V Kuchhal, Vikas Publishing House, 5 th Edition, ISBN- 978-9352718375, Chapter 10
Module 4	IT Act 2000: Objectives & Scope, Important definitions, E-Governance and offences & Penalties. Consumer Protection Act: Definitions: Consumer, Defect and Deficiency. Unfair and Restrictive trade practices. Role and Functions of Consumer Protection Councils. Rights of Consumer. Consumer Forum; Structure and jurisdiction. Power of consumer forum. Remedies under act.	Legal Aspects of Business Concepts and Application, Parul Gupta, Vikas Publishing House, ISBN - 978-9352718368, Chapter 28 & 30
Module 5	Socio-Political-Economic Environment: Economic systems. Financial systems. Economic policies and macro-economic scenario. Constitutes of political environment. Constitutional provisions: Freedom of Trade and Reasonable restrictions. Economic roles of government. Demographic structure of India. Socio-Cultural environment of India	Economic Environment of Business, V.K. Puri; S.K. Misra, Himalaya Publishing House. 9 th Edition, ISBN - 978-9352028870, Chapter 2,7, 8
Other Reference books and sources	<ol style="list-style-type: none"> 1. Bhandari, Munish, "Professional Approach to Corporate Laws and Practice", Bharat Law House, New Delhi. 2. Shukla - "Mercantile Law" 30th Ed. - S. Chand & Co. 3. N. D. Kapoor "Business Law" - S. Chand & Co. 4. Essentials Of Business Environment, K.Aswathappa, Himalaya Publishing House, 978-9350244746 	

Semester	I	Course Code	1T8	Type of Course	Core
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Course Name	MANAGERIAL SKILLS FOR EFFECTIVENESS		
Credits	3	Number of 1 hour lectures:	30
Detailed Course Objectives			
CO1	The student will be able to make proper use of group of words, synonyms and antonyms, phrases, idioms, proverbs for effective verbal communication		
CO2	The student will be able to write essays and CV using Word Processor		
CO3	The student will be able to draft business letters for given situations using Word Processor		
CO4	The student will be able to apply basic functions of PowerPoint and will also be able to create effective PowerPoint Presentations using templates		
CO5	The student will be able to use various spreadsheet functions and will also be create useful spreadsheets		
Detailed Contents:		Reference Book, Publisher, Edition, Page No.	
Module 1	Basics of Verbal Communication - Pairs and Group of words, Synonyms and Antonyms, sentence construction and punctuation, phrases/ idioms , proverbs		Foundation programme English & Business Communication. The Institute of company secretaries of India. (Study I)
Module 2	Essay Writing - Methods of expression, style and tone, synopsis and structure Letter Writing - Business correspondence personnel (job obligations, CV and Resume)		Foundation programme English & Business Communication. The Institute of company secretaries of India. (Study II & V)
Module 3	Writing Business Letters and Quotations - Letter of Enquiry, Sales Promotion, Complaint, Placing Order, Quotations		Foundation programme English & Business Communication. The Institute of company secretaries of India. (Study VI to IX) Computer Applications in Business, S.

		Sudalaimuthu and S. Anthony Raj, Himalaya Publication House, Chapter 10 (10.4)
Module 4	PowerPoint - Auto Content Wizard, Design Templates, Views, Working with slides, Page Setup, Animations, Colour Schemes, Background, Master Slide.	Computer Applications in Business, S. Sudalaimuthu and S. Anthony Raj, Himalaya Publication House, Chapter 10 (10.5)
Module 5	Spreadsheets - Spreadsheet basics, Standard Toolbar, Basic Functions, Sorting and Filtering, Charts, Statistical Functions, Data Management in Spreadsheet: Data Entry, Tables, Conditional Formatting, Data Sorting and Filtering, Data Validation. Formulas and Functions: Mathematical & Statistical Functions. Logical Functions in Spreadsheet: 'And', 'Or', 'If'. 'Lookup' functions and formula in spreadsheet. Data Visualization: Introduction to data visualization. Techniques of data visualization. Charts, Dynamic Tables, Pivot Tables, Dashboards.	Computer Applications in Business, S. Sudalaimuthu and S. Anthony Raj, Himalaya Publication House, Chapter 10 (10.6)
Other Reference books and sources	1. Business Communication for Managers, Payal Mehra, Pearson Education India; Second edition, ISBN-13: 978-9332576643 2. Business Communication, Asha Kaul, Prentice Hall India Learning Private Limited; 2 edition, ISBN-13: 978-8120338487 3. Mastering MS Office: Computer Skill Development - Be Future Ready, Bittu Kumar, V&S Publishers, ISBN-13: 978-9350578780 4. Microsoft Excel Power Pivot & Power Query For Dummies, Michael Alexander, Wiley, ISBN-13: 978-8126562305.	
List of Practical's/ Activities/ Assignments		
This is a practical oriented course with internal assessment. The assessment shall be based on work book / practical record book containing 25 practicals/ activities/ assignment carrying FOUR marks each.		
1. Give at least 10 examples of pairs and group of words and frame sentences indicating their usage. 2. What is meant by synonyms and antonyms. Explain with 5 examples each. 3. Give both synonyms and antonyms of the following words. (a) Absurd, (b) Diligent, (c) Fatal, (d) Joy, (e) Visible, (f) Yearn, (g) Zeal. 4. Use the following phrases/ idioms in sentences - (a) Cast a slur upon, (b) To come off with flying colours, (c) To get the better of, (d) To have one's hand full, (d) To have two strings to one bow, (e) To have an axe to grind, (f) To blow one's own trumpet, (g) To build castles in the air, (h) To kill two birds with one stone, (i) To pay one back in one's own coin.		

5. Write any ten proverbs with their meaning

Note: -Use MS Word for question number 6 to 15. Try to make use of all available features and functionalities in MS Word.

6. Write essay on Black money and Indian Economy

7. Write an essay on Woman Entrepreneurs

8. Write an essay on Stock Exchanges and their role

9. Prepare your own CV using suitable template of MS Word

10. Write a covering letter to forward above CV for a fresher position in a MNC.

11. Write a letter of enquiry to LIC regarding late payment of premium.

12. A retailer has requested you to supply 6 fans at 20% disc for a valued customer. Draft a reply stating that the rate of discount cannot exceed 15%. Make an attempt to get the order.

13. A TV set which you ordered for your office conference room from Messrs. G K & Sons, Nagpur, was delivered in a damaged condition. Write to the supplier.

14. Place an order for 300 boxes of coloured crayons subject to the manufacturer's agreeing to pack them in specially designed boxes for Diwali presentation with no additional charges.

15. Invite Interior decoration firms to submit a quotation for carrying out renovation work of your computer centre. They are to submit designs for interior decoration and quote their terms separately for painting in Plastic Emulsion and for oil Distemper

16. Prepare a template using your institute logo in PowerPoint. Using the same template list out the members of SAARC/ EEC/ LAFTA/ EFTA

17. Using PowerPoint draft out the steps/ procedures for calculation of mean mode and median.

18. Design an effective advertisement copy for a product of your choice using PowerPoint performance of the salesmen's.

19. Design a PowerPoint presentation on Principles of Accounting (Concepts and Conventions), Golden Rules of Accounting.

20. Design a PowerPoint presentation explaining any 5 transactions of journal entries and ledger posting.

21. Develop the students Mark List for 20 students in a worksheet and calculate total, average, percentage, and save it. Specify the result also. (Field Names: Sr. No., Name of Student, Course, Gender, Category, Enrolment Number, Mark1, Mark2, Mark3, Total, Average, percentage and Result)

22. Using Statistical function in spreadsheet, present a correlation analysis (Rank Correlation and Pearson Coefficient) and regression analysis for the following information-

Marks in Statistics	48	62	36	65	98	39	25	75	82	92
Marks in Economics	84	58	51	35	91	49	60	68	62	86

23. Using data available at <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=home/> GDP draw a pie chart of Gross Value Added. Explain the contribution of various sectors with help of a bar chart.

24. Using Spreadsheet calculate Mean, Median, Mode, Standard Deviation, Max, Min, Square Root, Square of the historical data for one month available at https://www.nseindia.com/products/content/equities/indices/historical_index_data.htm

25. Using Filters and Sort functions of spreadsheet rearrange the data (refer question no. 21) in following formats- Name of Students in Alphabetical Order, Descending order of % Marks, Ascending order of % Marks and also create a pivot table to represent the data

SEMESTER – II

Semester	II	Course Code	2T1	Type of Course	Core
Course Name	FINANCIAL MANAGEMENT				
Credits	3	Number of 1 hour lectures:	30		
Detailed Course Objectives					
CO1	Given financial cost parameters, the future manager will be able to calculate specific cost of capital (i.e. Cost of debt, preference, equity and retained earnings) and the weighted average cost of capital for any specific given firm.				
CO2	Given different financing options, the future manager will be able to analyze the effect of operating and financial leverage on EPS and recommend a suitable long term financing mix for an organization by applying EBIT-EPS analysis, Indifference Level of EBIT and Financial Break-even Analysis for				

	given financing options.	
CO3	Given the cash-flows pertaining to a project, the future manager will be able to estimate projects' cash flows to distinguish between value creating and value destroying investments using time-value intensive DCF techniques (viz. NPV, IRR, discounted payback period, profitability index) and Non-DCF techniques (i.e. Payback Period and Average rate of return approach)	
CO4	Given the details pertaining to elements of working capital for a given level of activity, the future manager will be able to ascertain the components of current assets and current liabilities and determine the gross and net operating working capital requirement.	
CO5	Given the expected dividends, future price of shares, investor expectations and funding requirements; the future manager will be able to compute the value of a share using various dividend discount models and illustrate whether dividend is relevant for firm valuation or not.	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Cost of Capital: Concept and Importance; Measurement of Specific Costs – Redeemable and Irredeemable Debt, Redeemable and Irredeemable Preference shares, Equity and Retained Earnings; Computation of Overall Cost of Capital using book value and market value weights.	Financial Management, Theory Concepts and Problems, 5 th Revised Edition, R.P. Rustagi, Taxmann Pulication, ISBN- 9878171949311 Chapter – 10 Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition, Chap No. 11
Module 2	Leverage: Operating, Financial and Combined Leverage; EBIT-EPS Analysis; Indifference Level of EBIT and Financial Break-even Analysis.	Financial Management, Theory Concepts and Problems, 5 th Revised Edition, R.P. Rustagi, Taxmann Pulication, ISBN- 9878171949311 Chapter – 11&12 Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition, Chap No. 18
Module 3	Capital Budgeting: Concept of Capital budgeting, Discounted and Non-discounted Cash	Financial Management, Theory Concepts and

	Flow Techniques – NPV, IRR, PI, Discounted PBP, ARR & PBP.	Problems, 5 th Revised Edition, R.P. Rustagi, Taxmann Pulication, ISBN- 9878171949311 Chapter – 7 Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition, Chap No. 9 & 10
Module 4	Working Capital Management: Concept of Gross and Net Working Capital, Working Capital Approaches, Estimation and Calculations of Working Capital requirements	Financial Management, Theory Concepts and Problems, 5 th Revised Edition, R.P. Rustagi, Taxmann Pulication, ISBN- 9878171949311 Chapter – 17&18 Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition, Chap No. 13
Module 5	Dividend Policy: Walter’s Model; Gordon’s Model and MM Hypothesis for Dividend Policy and Firm Valuation, Determinants and constraints of dividend decision	Financial Management, Theory Concepts and Problems, 5 th Revised Edition, R.P. Rustagi, Taxmann Pulication, ISBN- 9878171949311 Chapter – 15&16 Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition, Chap No. 30
Other Reference books and sources	1. Financial Management, I M Pandey, 10 th Edition, Vikas Publishing House Pvt Ltd, ISBN: 9788125937142 2. Financial Management, Comprehensive Text book with Case studies, M. Ravi Kishore, 7 th Edition, Taxmann Publications, ISBN: 9788171945207 3. Financial Management: Theory and Practice, Prasanna Chandra, 9 th Edition, ISBN-13: 978-9339222574 4. Financial Management: Problems & Solutions, AN Sridhar and Padmavati Sridhar, 5 th Edition, Packt Publsihers, ISBN: 9789350238929	

Semester	II	Course Code	2T2	Type of Course	Core
Course Name	MARKETING MANAGEMENT				
Credits	3	Number of 1 hour lectures:	30		
Detailed Course Objectives					
CO1	For a given marketing objective of a company the student manager will be able to develop a suitable marketing mix.				
CO2	For a given product the student managers will be able to apply the three steps of target marketing: market segmentation, target marketing, and market positioning.				
CO3	For various stages in the life cycle of the product the student managers will be able to recommend a suitable pricing strategy.				
CO4	For a given company the student managers will be able to evaluate different distribution channel options and their suitability for the company's product.				
CO5	For a given promotional objective of a company the student manager should be able to develop a suitable promotion mix (advertising, sales promotion, public relations, personal selling, and direct marketing etc.) for the product.				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	
Module 1	Introduction: Concept, nature, scope and importance of marketing; Marketing concept and its evolution; Marketing mix; Marketing environment – macro and micro components and their impact on marketing decisions; Market segmentation and positioning			Principles of Marketing, 13 th Edition, Philip Kotler, Gary Armstrong, Prafulla Agnihotri and Ehsan-UI-Haq, Pearson, ISBN – 978-81-317-3101-7, Chapter 1,2,3	
Module 2	Product Decisions: Concept of a product; Classification of products; levels of product, Major product decisions; Product line strategies and product mix strategies; Product life cycle – strategic implications; New product development and consumer adoption process. Packaging and labelling.			Principles of Marketing, 13 th Edition, Philip Kotler, Gary Armstrong, Prafulla Agnihotri and Ehsan-UI-Haq, Pearson, ISBN – 978-81-317-3101-7, Chapter 8,9	
Module 3	Pricing Decisions: Pricing objectives, Factors affecting price determination; Pricing policies methods and strategies, Initiating and responding to price change			Principles of Marketing, 13 th Edition, Philip Kotler, Gary Armstrong, Prafulla Agnihotri and Ehsan-UI-Haq, Pearson, ISBN – 978-81-317-3101-7, Chapter 10,11	

Module 4	Distribution Channels and Physical Distribution Decisions: Nature, functions, and types of distribution channels; Distribution channel intermediaries; Channel management decisions; Retailing and wholesaling.	Principles of Marketing, 13 th Edition, Philip Kotler, GaryArmstrong, Prafulla Agnihotri and Ehsan-Ul-Haq, Pearson, ISBN - 978-81-317-3101-7,Chapter 12,13
Module 5	Promotion Decisions: Communication Process; Promotion mix – advertising, personal selling, sales promotion, publicity and public relations; Determining advertising budget; Copy designing and testing; Media selection; Advertising effectiveness; Sales promotion –tools and techniques.	Principles of Marketing, 13 th Edition, Philip Kotler, GaryArmstrong, Prafulla Agnihotri and Ehsan-Ul-Haq, Pearson, ISBN - 978-81-317-3101-7,Chapter 15,16
Other Reference books and sources	1. Marketing Management, Rajan Saxena, 5 th Edition, McGraw Hill Education, ISBN-13: 978-9339223304 2. Introduction to Marketing, Adrian Palmer, 3 rd Edition, Oxford Publishing, ISBN: 9780199602131 3. Marketing Management, Philip Kotler and Keven Lane Keller, 15 th Edition, Pearson Education, ISBN-13: 978-9332587403 4. Marketing Management – Indian Context with Global Perspective, V S Ramaswamy & S Namakumari, 5 th Edition, Mc Graw Hill India, ISBN-13: 978-1259026416	

Semester	II	Course Code	2T3	Type of Course	Core
Course Name	HUMAN RESOURCE MANAGEMENT				
Credits	3	Number of 1 hour lectures:	30		
Detailed Course Objectives					
CO1	Students should be able to explain the importance of Human Resource Management for an organisation and also distinguish between Personnel and HR Management.				
CO2	For a given job profile, students should be able to develop a job analysis and produce a job description and job specification.				
CO3	Students should be able to design a Human Resource Plan for an organisation and construct its Selection Process				

CO4	Students should be able to justify the applicability of various techniques of Training	
CO5	Students should be able to outline the performance appraisal process and identify and explain the utility of various modern and traditional methods of Performance Appraisal.	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Introduction, Nature, scope, objectives, importance and functions of HRM , Human resource as an asset in organization; Difference between Personnel Management and Human Resource Management, Roles and Qualities of HR Manager ; human resource management in dynamic environment ; Introduction to Strategic HRM. Organizational and HR Strategies.	Human Resource Management – Text and Cases- Dr.S S Khanka, S.Chand Publication, Ch.1,3 Human Resource and Personnel Management – Text and cases, K. Aswathappa, Publication - McGraw- Hill Publishing co. ltd. Ch-1,3 Essentials of Human Resource Management & Industrial Relations – P.Subba Rao, 3 rd revised edition – Himalaya Publication- Ch-1,2
Module 2	Job Analysis – Meaning, Uses, Process and methods of collecting data for job analysis, Job Description, Job Specifications & Role Analysis, Concept of Job Design, Factors affecting Job Design, Techniques of Job Design, Cases and Exercises in understanding Job Analysis.	Human Resource and Personnel Management – Text and cases, K. Aswathappa, Publication - McGraw- Hill Publishing co. ltd. Ch-5 Essentials of Human Resource Management & Industrial Relations – P.Subba Rao, 3 rd revised edition – Himalaya Publication- Ch-3 Human Resource Management – Text and Cases- Dr.S S Khanka, S.Chand Publication, Ch.5
Module 3	Human Resources Planning; Need, importance & Objectives of Human Resources Planning; Factors affecting HRP; Recruitment and Selection—Meaning, Sources and Process; Induction and Placement	Human Resource Management – Text and Cases- Dr.S S Khanka, S.Chand Publication, Ch.4,6,7,8 Essentials of Human Resource Management & Industrial Relations – P.Subba Rao, 3 rd revised edition – Himalaya Publication- Ch-4,5,6 Human Resource and Personnel Management – Text and cases, K. Aswathappa, Publication - McGraw- Hill Publishing co. ltd. Ch-4,6,7,8

Module 4	Introduction of Training; Objectives and Importance of Training; Training Process, Training Needs Identification. Types and Techniques of Training and Development; Evaluation of Training, Management/Executive Development Programs-Need and Importance & Objectives	Essentials of Human Resource Management & Industrial Relations – P.Subba Rao, 3 rd revised edition – Himalaya Publication- Ch-9,10 Human Resource Management – Text and Cases- Dr.S S Khanka, S.Chand Publication, Ch.10,11 Human Resource and Personnel Management – Text and cases, K. Aswathappa, Publication - McGraw- Hill Publishing co. ltd. Ch-9
Module 5	Performance Appraisal- concept, objectives, Importance, Methods; Potential Appraisals Compensation Management- Concept and components; Job Evaluation; Components of salary, incentives, bonus, ESOPs, Fringe Benefits Ancillary Topics- Career Planning & Development, Employee Separations, Downsizing & Outplacement, HRIS, Industrial Relations.	Essentials of Human Resource Management & Industrial Relations – P.Subba Rao, 3 rd revised edition – Himalaya Publication- Ch-8,11,14, 15,16,19 Human Resource and Personnel Management – Text and cases, K. Aswathappa, Publication - McGraw- Hill Publishing co. ltd. Ch-10,11,12,13,21,22
Other Reference books and sources	<ol style="list-style-type: none"> 1. P. Jyothi and D.N Venkatesh (2013), “Human Resource Management”. Oxford Publication. 2nd Edition 2. V.S.P.Rao and C.B. Mamoria (2012), “Personal Management (Text and Cases)”, Himalaya Publications, Thirtieth Edition 3. Dr. Sunaina Sardana, “Human Resource Management”, Taxmann Publication Pvt. Ltd. 4. Human Resource Management, 11ed, David A. Decenzo, Stephen P. Robbins, Susan L. Verhulst, Wiley, ISBN: 978-8126553785 	

Semester	II	Course Code	2T4	Type of Course	Core
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Course Name	OPERATIONS MANAGEMENT		
Credits	3	Number of 1 hour lectures:	30
Detailed Course Objectives			
CO1	At the end of the course the students can apply the concept of operations management in manufacturing and service sector and will be able to plan and implement production and service related decisions.		
CO2	At the end of the course the student will be able to plan production schedules and plan resources (material and machine) required for production		
CO3	At the end of the course the students can design maintenance schedules in manufacturing units, identify and propose material handling equipments and implement industrial safety rules		
CO4	At the end of the course the students will be able to apply the concepts of purchase, stores and inventory management and analyze and evaluate material requirement decisions		
CO5	At the end of the course the students can measure performance related to productivity and will be able to conduct basic industrial engineering study on men and machines.		
Detailed Contents:		Reference Book, Publisher, Edition, Page No.	
Module 1	Introduction: Concept of Operations Management, Difference between Manufacturing & Services, Capacity and equipment selection decisions. Types of Production, Plant Location Factors, Types of Manufacturing & Service Layouts		Operations Management, By B Mahadevan, Pearson Publication Chapter 1-Page 4, Chapter 4-Page 116,
Module 2	PPC - Concept of Production Planning and Control, Planning Premise, Make to Stock, Make to Order and Assemble to Order, Process Planning, MPS (Master Production Schedule), MRP (Material Requirement Planning), MRP II, Material Handling		Operations Management, By B Mahadevan, Pearson Publication, Chapter 3 -Page 59, Chapter 15
Module 3	Maintenances Management - Types of Maintenance, Maintenance Costs, OEE (Overall Equipment Efficiency), Material handling - principles, types of MHE (Material Handling		Production and Operations Management, By S. Anil Kumar, N.Suresh, New Age

	Equipment), Industrial Safety, Ergonomics	International Publishers, Chapter 8-Page 205 Production and Materials Management, By K. Shridhara Bhat, Himalalaya Publishing house, Chapter 14,15 and Chapter 25
Module 4	Materials Management- Purchase management, Stores management, Vendor Selection, (Practical Problems of Vendor Selection), Inventory Management, Inventory Costs, Inventory management tools, Concept of EOQ (Practical Problems of EOQ).	Production and Operations Management By K. Aswathappa and K Shridhar Bhatt, Himalaya Publishing House, Chapter 21,22 and 23
Module 5	Industrial Engineering -Concepts of productivity, tools of increasing productivity,Labor and machine productivity. Introduction to work-study, work measurement, method study, motion study and time study	Industrial Engineering and Production Management, By Martand Telsang, S.Chand Publications, Chapter 2,3,4 and 5 Production and Operations Management, By S.Anil Kumar, N.Suresh, Second Edition, New Age International Publishers, Chapter 7
Other Reference books and sources	1. Procurement and Principles Management, Peter Baily, Barry Crocker, David Farmer, David Jessop, 11 th Edition, Pearson Education, ISBN: 978-9352868322 2. Purchasing and Materials Management, P. Gopalakrishnan, 1 st Edition, McGraw Hill Education, ISBN-13: 978-0074516508 3. Materials Management: An Integrated Approach, P. Gopalkrishnan, M. Sundaresan, Prentice Hall India Learning Private Limited, ISBN-13: 978-8120300279 4. Industrial Engineering and Production Management, Martand Telsang, 2nd Rev Edn 2006 edition, S Chand Publications, ISBN-13: 978-8121917735	

Semester	II	Course Code	2T5	Type of Course	Core
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Course Name	INTERNATIONAL BUSINESS		
Credits	3	Number of 1 hour lectures:	30
Detailed Course Objectives			
CO1	Students should be able to understand various concepts and terminologies involved in International Business and importance of international trade		
CO2	Students should be able to evaluate various modes of entry in to International business and should be able to select the best mode of entry given a situation.		
CO3	Students should be able to relate and discuss the presence of macro factors (PESTEL) on international business environment		
CO4	Students should be able to examine and elaborate the role of various Government institutions in India which support International trade.		
CO5	Students should be able to perceive the concepts in recent EXIM policy of India and relate it to the flow of FDI as well as direction of Indian foreign trade.		
Detailed Contents:		Reference Book, Publisher, Edition, Page No.	
Module 1	Introduction to International business, its importance and various concepts involved in it such as: entrepot trade, various tariff and non tariff barriers, regional trading blocs and types of trade agreements.		P. Subba Rao, international business, 4th edition, Himalaya Publishing house PP252-257, 269-282
Module 2	Modes of entry into International Business, Internationalization process and managerial implications case studies related to internationalization process. International business approaches: ethnocentric, polycentric, regiocentric, geocentric.		Soniya Gupta , International Business, Chapter 1 Tata McGraw Hill P. Subba Rao, international business, 4th edition, Himalaya PUBLISHING house PP 16-18
Module 3	Various Macro factors affecting International Business Environment: Political, Economical, Socio-cultural, Technological, Environmental and Legal factors.		Soniya Gupta , International Business, Chapter 2 Tata McGraw Hill
Module 4	Various Government Institutes supporting foreign trade and their role: DGFT, Export Promotion Council, ECGC, SEZs, EPZs and EOUs, EXIM Bank and FEMA		P. Subba Rao, international business, 4th edition, Himalaya PUBLISHING house PP142-143, 145-149,153-155

Module 5	Drivers of FDI, Flow of FDI in India , EXIM Policy of India Direction of India's Foreign Trade (imports and exports scenario), Role of RBI in exchange rate management	Kothari Monika, Export Promotion Measures in India, Deep & Deep Publication pp 16-19, 79-88
Other Reference books and sources	1. International Business – Environment and Operations, John D. Daniel, Lee Radbaugh, Daniel p Sullivan, Prashant Sawlan, 16 th Edition, Pearson Education, ISBN-13: 978-9352861880 2. International Relations, Pavneet Singh, 1 st Edition, McGraw Hill Education, ISBN-13: 978-9352602827 3. International Business (SIE), 6th Edition, Charles W L Hill, Arun K Jain, McGraw Hill Education, ISBN-13: 978-0070221796 4. International Business, 6th Edition, K. Aswathappa, McGraw Hill Education, ISBN-13: 978-9339222581	

Semester	II	Course Code	2T6	Type of Course	Core
Course Name	CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY				
Credits	3	Number of 1 hour lectures:	30		
Detailed Course Objectives					
CO1	Given the concept of CSR, the future manager will be able to identify the various activities which can benefit the organization under the banner of CSR.				
CO2	Given a chance, the future manager will be able to frame and recommend the CSR policy according to sustainable development.				
CO3	Given the framework, the future manager will be able to plan the CSR activity according to the various laws and regulations.				
CO4	Given the details pertaining to government and non government organizations, the future manager will be able to ascertain the role of various stakeholders in CSR activities and incorporate the guidelines issued by regulatory guidelines in CSR policy.				
CO5	Given the task of CSR , the future manager will be able to plan and implement various activities to be taken under CSR activity and evaluate its effectiveness.				

Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Introduction to CSR- Meaning & Definition of CSR, History & evolution of CSR, Motives of CSR, Benefits and Internal scope of CSR, Enterprise Social Responsibility, Concept of sustainability & Stakeholder Management. CSR through triple bottom line and Sustainable Business; environmental aspect of CSR; Chronological evolution of CSR in India.	Corporate Social Responsibility in India. Trends, Issues and Strategies By Sateesh Gouda M, A.G. Khan, S.L. Hiremath, Anchor Academic Publishing, 2017, Pg-9-42 Corporate Social Responsibility: A Very Short Introduction By Jeremy Moon, Oxford University Press ,
Module 2	Framework of Social Orientations- Management and Social Theories , Five types of managers, organization classification. International framework for corporate social Responsibility, Millennium Development goals, Sustainable development goals, Relationship between CSR and MDGs. United Nations (UN) Global Compact 2011. UN guiding principles on business and human rights. OECD CSR policy tool, ILO tri-partite declaration of principles on multinational enterprises and social policy.	Business Ethics, Text and cases by CSV Murthy , Himalaya Publishing House, ISBN 81-8318-418-1, 2008, Pg 369-372
Module 3	CSR-Legislation In India & the world- Section 135 of Companies Act 2013.Scope for CSR Activities under Schedule VII, Appointment of Independent Directors on the Board. The Drivers of CSR in India, Changing expectations of social responsibility, four faces of social responsibility, the regulatory environment in India Counter trends. Performance in major business and programs.	Business Ethics, Text and cases by CSV Murthy , Himalaya Publishing House, ISBN 81-8318-418-1, 2008, Pg 365-387
Module 4	Identifying key stakeholders of CSR & their roles- Role of Public Sector in Corporate, government programs that encourage voluntary responsible action of corporations. Role of Nonprofit & Local Self-Governance in implementing CSR; Contemporary issues in CSR & MDGs. Global Compact Self-Assessment Tool, National Voluntary Guidelines by Govt. of India. Understanding roles and responsibilities of corporate foundations	Business and Community: The Story of Corporate Social Responsibility in India ,By Pushpa Sundar, Sage Publications Corporate Social Responsibility in India By Bidyut Chakrabarty, Routledge publications, Pg, 99-121 https://globalcompactselfassessment.org/about/thistool
Module 5	Current trends and opportunities in CSR- CSR as a Strategic Business tool for Sustainable development. Review of successful corporate initiatives & challenges of CSR. Case Studies of Major CSR Initiatives.	India CSR Report 2019: Trends and Prospects of CSR By Girija Srinivasan, Narasimhan Srinivasan, SAGE Publications, Philanthropy in India: Promise to Practice By

	Meenaz Kassam, Femida Handy, Emily Jansons
Other Reference books and sources	<ol style="list-style-type: none"> 1. CV Baxi and Ajit Prasad, “Corporate Social Responsibility Concept and Cases, The Indian Experience”, Excel Books, 2006, ISBN 81-7446-449-2 2. Nayan Mitra, René Schmidpeter, “Corporate Social Responsibility in India: Cases and Developments After the legal mandate”, Springer publications 3. http://egyankosh.ac.in/handle/123456789/8107 4. http://egyankosh.ac.in/handle/123456789/16465 5. http://www.forbesindia.com/blog/beyond-the-numbers/corporate-india-and-csr/ 6. https://blog.ipleaders.in/csr-laws-india/ 7. https://www.ilo.org/empent/areas/mne-declaration/lang--en/index.htm 8. http://www.teachcsr.com 9. https://economictimes.indiatimes.com/blogs/ResponsibleFuture/sustainability-and-csr-trends-for-india-in-2017/

Semester	II	Course Code	2T7	Type of Course	Core
Course Name	COST ACCOUNTING				
Credits	3	Number of 1 hour lectures:	30		
Detailed Course Objectives					
CO1	Given an information about basic conceptual framework of cost, the student will be able of identify/ classify different elements/ classification of cost and will be able to prepare cost sheet and prepare quotations for various business proposals				
CO2	Given an information about cost, volume and profit for specific product for mention time period, a student will able to compute Break-even point, Marine of safety, Profit volume ratio, desired profit / desired sales as well as able to evaluate the decision making proposals(suitable				

	product mix / dropping a product line / fixation of selling price / make or buy decisions/Key Factor Analysis)	
CO3	Given information about relevant expenses, a student will be able to classify the cost by nature and estimate cost of operating a service	
CO4	Given an information about Expenses & Income / Receipt & Payment / Projected Sales, a student will be able to prepare relevant functional level budgets for an organisation	
CO5	Given an information about standard and actual performance, the student will be able to determine Direct Material and Direct Labour Variances.	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Conceptual framework of Cost Accounting: Basic Concepts of Cost Accounting, Objectives, Importance and Advantages of Cost Accounting, Cost Centre, Cost Unit, Elements of Cost, Classification and Analysis of Costs, Relevant and Irrelevant Costs, Differential Costs, Sunk Cost, Opportunity Cost. Unit & Output Costing - Preparation of Cost Sheet and Tender/ Quotations.	“Cost Accounting – Principles & Practices”- M N Arora (2013) Twelfth edition, Vikas Publishing House Pvt. Ltd. (1.1 – 1.15), (6.1 – 6.41)
Module 2	Marginal Costing And Profit Volume Relationship And Decision Making :- Introduction, Application of Marginal costing in terms of cost control, profit planning, dropping a product line, fixation of selling price, make or buy decisions, key or limiting factor, selection of suitable product mix, desired level of profits, level of activity planning- Break-even-analysis: Application of BEP for various Business problems	“Cost & Management Accounting” – Ravi Kishore (2016), Taxmann Publication, 6 th Edition, (484 – 493),(540-548)
Module 3	Operating Costing:- Concept of operating Costing Features of operating costing: Transport costing (Standing charge, Repair and Maintenance Charge and Running charges and log sheet), Canteen, Hospital and hotels costing.	“Cost & Management Accounting” – Ravi Kishore (2016), Taxmann Publication, 6 th Edition, (408 – 422)
Module 4	Budgeting and Budgetary Control – Concept of Budgeting and Budgetary Control, Essential features, Merits and Limitations of Budgetary Control. Types of Budgets, Static and Flexible Budgeting, Preparation of Cash Budget, Sales Budget, Production Budget and Master Budget,	“Cost & Management Accounting” – Ravi Kishore (2016), Taxmann Publication, 6 th Edition, (578 - 599)
Module 5	Standard Costing & Variance Analysis: Introduction, Meaning and limitations of Standard Costing, Standard costing as a management Tool, Historical costing, Estimated Costing and Standard Costing, Standard Cost and Budgeted Cost, Determination of Standard Cost for Direct Material, Direct Labour Cost. Variance Analysis: Direct Material Variance – Material Cost Variance, Material Rate Variance, Material Quantity Variance, Material Mix Variance, and	“Cost & Management Accounting” – Ravi Kishore (2016), Taxmann Publication, 6 th Edition, pg 631-653

	Material Yield Variance, Direct labour Variance – Labour Cost Variance, Labour Rate Variance, Labour efficiency Variance, Labour Mix Variance, Idle Time Variance and Labour Yield Variance.	
Other Reference books and sources	1. Cost Accounting: Texts and Problems, M C Shukla, T S Grewal, Dr. M P Gupta, Revised Edition, S Chand & Company, ISBN-13: 978-8121919630 2. Cost Accounting, RSN Pillai, V. Bagawathi, , Revised Edition, S Chand & Company, ISBN-13: 978-8121904933 3. Cost Accounting, M Y Khan P K Jain, Second Edition, McGraw Hill Education, ISBN-13: 978-9339203443 4. Cost Accounting Text Book – V.K. Saxena C.D. Vashishtha, Sultan Chand Publication, ISBN-13: 9788180546112	

Semester	III	Course Code	2T8	Type of Course	Elective
Course Name	MANAGEMENT CASE ANALYSIS				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	Given a situation a student will be able to construct SWOT for a concerned organisation or situation as well as he/she will be able to identify key actors/stakeholders in the given situation				
CO2	A student will be able to evaluate the dilemma (Problem/ Issues/ Concerns) in the case.				
CO3	A student will be able to develop suitable alternatives for the dilemma identified.				
CO4	A student will be able to analyse and evaluate the alternatives using the theoretical framework.				
CO5	A Student will be able to discuss suggest suitable roadmaps to overcome the identified dilemma.				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	

Module 1	Introduction – Persuasion, Augmentation and Case Method, What is a case?, How to Analyse a Case, Case Demonstration, Problems, Decisions and Evaluation	The Case Study Handbook, William Ellett, HBR Press, Revised Edition, ISBN-13: 978-1633696150, Part 1 Management Case Studies, A Student’s Handbook, Kulkarni, Patil Navalagi & Yaraddi, Notion Press ISBN 978-1-64324-309-2, (Page 3)
Module 2	Cases on General Management and Strategic Management (A student or group of student is expected to present/ analyse/ provide solution to minimum two cases or 4-5 caselets in the subject domain of General and Strategic Management.)	Management Case Studies, A Student’s Handbook, Kulkarni, Patil Navalagi & Yaraddi, Notion Press ISBN 978-1-64324-309-2, (Page 19-36)
Module 3	Cases on Marketing Management (A student or group of student is expected to present/ analyse/ provide solution to minimum two cases or 4-5 caselets in the subject domain of Marketing Management.)	Management Case Studies, A Student’s Handbook, Kulkarni, Patil Navalagi & Yaraddi, Notion Press ISBN 978-1-64324-309-2, (Page 37-62)
Module 4	Cases on Financial Management (A student or group of student is expected to present/ analyse/ provide solution to minimum two cases or 4-5 caselets in the subject domain of General and Financial Management.)	Management Case Studies, A Student’s Handbook, Kulkarni, Patil Navalagi & Yaraddi, Notion Press ISBN 978-1-64324-309-2, (Page 63-80)
Module 5	Cases on Human Resource Management (A student or group of student is expected to present/ analyse/ provide solution to minimum two cases or 4-5 caselets in the subject domain of General and Human Resource Management.)	Management Case Studies, A Student’s Handbook, Kulkarni, Patil Navalagi & Yaraddi, Notion Press ISBN 978-1-64324-309-2, (Page 81-102)
Other Reference books and	1. Management Cases, Revised Edition, Peter Drucker, HarperBusiness; Revised edition, ISBN-13: 978-0061435157 2. Case Studies in Management, Akhilesh Chandra Pandey, Case Studies in Management, ISBN-13: 978-9384588045	

sources	<p>3. Case Studies in Strategic Management, Sanjay Mohapatra, Pearson Education; First edition, ISBN-13: 978-8131759844</p> <p>4. Case Studies in Marketing, Kanwal Nayan Kapil, Pearson Education; First edition, ISBN-13: 978-8131756331</p> <p>5. Case Studies in Human Resource Management, Sanjeev Bansal, Jaya Yadav, Hargovind Kakkar, I K International Publishing House Pvt. Ltd, ISBN-13: 978-9384588854</p> <p>6. Case Studies in Finance, Rober Brunner, Kenneth Eades, Michael Schill, McGraw Hill Education; 6 edition, ISBN-13: 978-9339204822</p>
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Suggested Rubrics for Case Analysis Evaluation based on one evaluation case let analysis by an individual student at the end of the course:

Case Study Grading Rubric : An individual student shall be given a caselet and based on his/her analysis and presentation grading is to done					
Percentage Scale:		0-40 Marks	40-60Marks	60-80Marks	80 – 100Marks
		Below Standard	Approaching Standard	At Standard	Exceeds Standard
	%				
<p><i>Clear explanation of key strategic issues</i></p> <ul style="list-style-type: none"> • The problems, scope, and seriousness was clearly identified in the discussions. • There was a well focused diagnosis of strategic issues and key problems that demonstrated a good grasp of the company’s present situation and strategic issues. • Effective Executive Summary • Did not waste space summarizing information already found in the case. 	20%	<p>Shows little understanding of the issues, key problems, and the company’s present situation and strategic issues.</p> <p>Executive summary missing or poorly constructed</p>	<p>Shows some understanding of the issues, key problems, and the company’s present situation and strategic issues.</p> <p>Executive summary inadequate</p>	<p>Shows adequate knowledge of the issues, key problems, and the company’s present situation and strategic issues.</p> <p>Executive summary adequate</p>	<p>Shows superior knowledge of the issues, key problems, and the company’s present situation and strategic issues.</p> <p>Effective Executive Summary</p>
<p><i>Valid arguments; analysis of financial and other functional performance with relevant supportive detail</i></p> <ul style="list-style-type: none"> • Logically organized, key points, key arguments, and important criteria for evaluating business strategies were easily identified • Critical issues and key problems that supported the Case Analysis were identified and clearly analyzed and supported. 	20%	<p>Critical issues and key problems that supported the Case Analysis were poorly identified, analyzed, and supported.</p>	<p>Critical issues and key problems that supported the Case Analysis were not clearly identified, analyzed, and supported.</p>	<p>Critical issues and key problems that supported the Case Analysis were partially identified, analyzed, and supported.</p>	<p>Critical issues and key problems that supported the Case Analysis were clearly identified, analyzed, and supported.</p>

<p><i>Appropriate analysis, evaluation, synthesis for the specific industry identified</i></p> <ul style="list-style-type: none"> • There was complete data on which to base a thorough analysis • Key change drivers underlying the issues were identified. • Synthesis, analysis, and evaluations were clearly presented and supported in a literate and effective manner. 	20%	Analysis of key change drivers and the underlying the issues inadequate.	Analysis of key change drivers and the underlying the issues were not identified.	Analysis of key change drivers and the underlying the issues were partially identified	Analysis of key change drivers and the underlying the issues were clearly identified
<p><i>Conclusions and recommendations are congruent with strategic analysis</i></p> <ul style="list-style-type: none"> • Specific recommendations and/or plans of action provided. • Specific data or facts were referred to when necessary to support the analysis and conclusions. • Recommendations and conclusions were presented and supported in a literate and effective manner. 	20%	Effective recommendations and/or plans of action not provided. Specific data or facts necessary to support the analysis and conclusions was not provided.	Effective recommendations and/or plans of action inadequate. Specific data or facts were not referred when necessary to support the analysis and conclusions.	Effective recommendations and/or plans of action were partially provided. Specific data or facts were occasionally referred when necessary to support the analysis and conclusions.	Effective recommendations, solutions, and/or plans of action were provided. Specific data or facts were referred when necessary to support the analysis and conclusions.
<p><i>Presentation: Proper organization, professional writing, and logical flow of analysis. APA formatting</i></p> <ul style="list-style-type: none"> • Logically organized, key points, key arguments, and important criteria for evaluating the business logic easily identified. • Key points were supported with a well thought out rationale based on applying specific concepts or analytical frameworks to the data provided in the case. • Proper grammar, spelling, punctuation, 3rd person objective view, professional writing, and syntax. 	20%	Key points were poorly identified and supported with a well thought out rationale based on applying specific concepts or analytical frameworks to the data provided in the case. Grammar, spelling, punctuation, professional writing, and syntax needs significant improvement	Key points were not identified and supported with a well thought out rationale based on applying specific concepts or analytical frameworks to the data provided in the case. Grammar, spelling, punctuation, professional writing, and syntax needs improvement	Key points were partially identified and supported with a well thought out rationale based on applying specific concepts or analytical frameworks to the data provided in the case. Adequate grammar, spelling, punctuation, professional writing, and syntax	Key points were clearly identified and supported with a well thought out rationale based on applying specific concepts or analytical frameworks to the data provided in the case. Excellent grammar, spelling, punctuation, professional writing, and syntax

SEMESTER - III

Semester	III	Course Code	3P1	Type of Course	Core/ Elective
Course Name	SUMMER INTERNSHIP PROJECT (SPECIALIZATION BASED)				
Credits	6	Number of days:		45 to 60	
Detailed Course Objectives					
CO1	Student is able to construct the company profile by compiling the brief history, management structure, products / services offered, key achievements and market performance for his / her organization of internship.				
CO2	For his / her organization of internship, the student is able to assess its Strengths, Weaknesses, Opportunities and Threats (SWOT). Student is able to determine the challenges and future potential for his / her internship organization in particular and the sector in general.				
CO3	Student is able to test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.				
CO4	Student is able to apply various soft skills such as time management, positive attitude and communication skills during performance of the tasks assigned in internship organization.				
CO5	Student is able to analyze the functioning of internship organization and recommend changes for improvement in processes.				
GENERAL RULES & GUIDELINES					
<ul style="list-style-type: none"> ● At the end of second semester, all students will have to undergo summer training of 6-8 weeks with an industrial, business or service organization by taking up a Summer Internship Project (SIP). ● The condition of successfully completing the program shall not be deemed to have been satisfied unless a student undergoes summer training under the supervision of the department in organizations as approved by the Director/ Principal/ Head / Faculty from time to time. ● Alternatively Director/ Principal/ Head / Faculty of the Department/ College/ Institute may allocate the sector/ industry/ company specific project to the individual student. ● Each student will be required to give a presentation to the Department/ College/ Institute on the project undertaken during the SIP. The presentations should be scheduled within FOUR weeks of commencement of the third semester for the purpose of evaluation in the third semester. (Suggested Annexure II) ● Each student will be required to submit a project report as per format suggested in Annexure I to the Department/ College/ Institute for the work undertaken during this period within SIX weeks of commencement of the third semester for the purpose of evaluation in the third semester. ● Each student will be required to submit a feedback report from the SIP organisation as suggested in Annexure III to the Department/ College/ Institute. 					

- Evaluation of the SIP presentations shall be done jointly by one industry professional and one faculty member of the Department/ College/ Institute as per suggested criteria in Annexure IV.
- Evaluation of the SIP Report shall be done jointly by two faculty members of the Department/ College/ Institute as per suggested criteria in Annexure V.

EVALUATION SCHEME

- TOTAL MARKS FOR SIP = 100 MARKS (50 marks for presentation + 50 marks for the report).

ANNEXURE I - FORMAT FOR SUMMER PROJECT REPORT

- **Title Page:** including the project title, Student's name, name of the SIP organization, Name of the supervisor from SIP organisation, Name of the guide from Department/ College/ Institute and month and year of submission.
- **Certificate from the Department/ College/ Institute:** "This is to certify that the investigation described in this report titled "**Summer Project Report Title**" has been carried out by **Mr / Ms. Student's Name** during the summer internship project. The study was done in the organisation, **SIP Company Name**, in partial fulfilment of the requirement for the degree of Master of Business Administration of R. T. M. Nagpur University, Nagpur. This work is the own work of the candidate, complete in all respects and is of sufficiently high standard to warrant its submission to the said degree. The assistance and resources used for this work are duly acknowledged."
- **Certificate from the SIP organisation:** A copy of the certificate specifying that the student has successfully completed the summer project for the prescribed duration.
- **Acknowledgements page:** Acknowledging persons, organisations and other resources which were instrumental in completion of student's summer training.
- **Table of contents or index page.**
- **Part 1 (A) Company Profile:** Brief history, Management structure, Achievements, awards and latest developments, Products & Services offered, Performance & Market share, SWOT analysis.
- **Part 1 (B) Sector Overview:** Sector size and major players, Regulations and regulatory bodies, Sector's contribution to economy, Problems faced by the sector in general and the company in particular, Future potential of the sector.
- **Part 2 (A) Actual Work Done:** Week wise details of the work done including the details of any specific tasks or projects assigned by the company, Key learning week-wise, (If a specific project was allotted to you then you need to prepare the following: 1. Title of the project allotted, 2. Objectives of the project, 3. Research methodology adopted - Sampling method and sample size, data collection tools used, etc. 3. Analysis and interpretation of the data collected)
- **Part 2 (B) Findings and Suggestions.**

- **Part 2 (C) Conclusion.**
- **Appendices.**
- **Bibliography.**

- **Size of Report:** 25 to 35 pages
 - **Paper Size:** A 4
 - **Binding Types:** Paperback (Spiral)
 - **No. of Copies:** TWO (One to be submitted to the Department/ College/ Institute for record & one to be returned back to the student after evaluation).
 - **Font Type:** Times New Roman
 - **Font Size:** Headings 14, Text 12
- Line Spacing:** Single spacing.

ANNEXURE II - FORMAT FOR SUMMER PROJECT PRESENTATION

- **Title Slide 1:** The project title, Student's name, name of the SIP organization, Name of the supervisor from SIP organisation, Name of the guide from Department/ College/ Institute.
 - **Slide 2:** About the company - its products & services, Sector size and major players.
 - **Slide 3:** Performance & Market share.
 - **Slide 4:** Problems faced by the sector in general and the company in particular.
 - **Slides 5 to 7:** Week wise details of the work done including the details of any specific tasks or projects assigned by the company.
 - **Slide 8:** Key learning.
 - **Slide 9:** Findings and Suggestions.
 - **Slide 10:** Conclusion.
- Each Student shall make a presentation for duration of maximum 10 minutes which shall be followed by a question and answer session of maximum 5 minutes.

ANNEXURE III - SIP ORGANISATION FEEDBACK

Feedback to be solicited from the SIP organisation to rate the student on a scale of 1-10 (1 being poor and 10 being excellent) for the below mentioned parameters:

1. KNOWLEDGE OF SUBJECT / DOMAIN AREA.
2. PUNCTUALITY.
3. ATTITUDE.

4. COMMUNICATION SKILLS - ORAL.
5. COMMUNICATION SKILLS - WRITTEN.
6. ACCOMPLISHMENT OF THE ASSIGNED TASKS.
7. CONFIDENCE LEVEL.
8. GENERAL AWARENESS.
9. GRASPING ABILITY.
10. OVERALL PERSONALITY.

ANNEXURE IV - EVALUATION PERAMETERS FOR SIP PRESENTATION

Evaluation of the student's presentation to be done on a scale of 1-10 (1 being poor and 10 being excellent) for the below mentioned parameters:

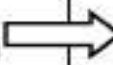
1. COMPANY & SECTOR ANALYSIS.
2. ATTEMPT TO RELATE PRACTICAL WORK WITH THEORY.
3. KEY LEARNINGS AND RECOMMENDATIONS.
4. HANDLING QUESTIONS.
5. OVERALL QUALITY OF PRESENTATION.

ANNEXURE V - EVALUATION RUBRIC FOR SIP REPORT

RUBRIC FOR SUMMER INTERNSHIP REPORT ASSESMENT.

NAME OF THE STUDENT: _____

DATE: _____

CRITERION	SUBSTANTIAL ACHIEVEMENT (8-10 Marks)	MODERATE ACHIEVEMENT (5-7 Marks)	POOR ACHIEVEMENT (0-4 Marks)
Description of Organizational Profile	Writes a clear description of company profile including its history, management structure, products / services offered, key achievements and market performance	Writes a limited description of company profile. However a majority of the points are covered.	Writes a very brief description of company profile excluding majority of the points.
Analysis of organization & Sector.	Performs a SWOT analysis for the company and presents all the key challenges & opportunities of the sector in general and company in particular.	A limited analysis of the company and the sector is performed. All the key elements of challenges & opportunities have not been identified.	Is unable to perform a proper SWOT analysis and identify the challenges & opportunities of the sector in general and company in particular.
Application of theoretical knowledge.	Details of the work done or project implemented during internship is documented in detail. Theoretical basis is used to identify the various issues in organization and its processes.	Work done or project implemented during internship is documented but with limited details. No proper theoretical basis for identification of issues in organization and its processes.	Documentation of work done or project implemented during internship is vaguely defined. No attempt has been made to relate theory with organizational or procedural problems.
Conclusions and Recommendations	Conclusions drawn are not global but specific & based on empirical evidences. Recommendations given are practical and feasibility & methodology of implementing the same is discussed.	Conclusions drawn are specific but empirical evidences are not properly presented. Recommendations given seem to be practical and feasible. However, methodology of implementing the same is not discussed.	Conclusions drawn are of global nature not based on empirical evidences. Recommendations given don't seem practical and feasibility & methodology of implementing the same is not discussed.
Feedback from organization.	A positive and high score of feedback is received on most of the parameters from the SIP organization.	An average and moderate score of feedback is received on most of the parameters from the SIP organization.	A low and poor score of feedback is received on most of the parameters from the SIP organization. (or feedback not submitted)
Total Points Scored (Out of 50 maximum possible) 			
Faculty 1 Initials	Faculty 1 Signature	Faculty 2 Initials	Faculty 2 Signature

Semester	III	Course Code	3T1	Type of Course	Elective
Course Name	MM1: SALES AND DISTRIBUTION MANAGEMENT				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	Given a situation, student manager will be able to identify appropriate Sales Forecasting method to be adopted by a company.				
CO2	Given a situation of newly launched company, student manager will be able to design an effective Sales Compensation Plan for Sales Executive.				
CO3	Given a situation of distribution channel of a company, student manager will be able to outline different levels of Marketing channel used by the company.				
CO4	Given a situation, student manager will be able to describe the process of Supply Chain and Reverse Logistics.				
CO5	Given a situation, student manager will be able to develop e-retailing strategy as a channel of distribution.				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	
Module 1	Introduction to Sales Management - Definition and meaning, Objectives, Sales Research, Sales Forecasting, Sales Forecasting methods, Sales Planning and control: Goal setting, Performance measurement, diagnosis and corrective actions, Estimating market and Sales Potentials			Sales Management – Decision Strategy and Cases, 5 th Edition, Richard R.Still, Edward W. Cundiff & Norman Govani, Pearson, ISBN 978-81-317-1089-0, Chapter 1	
Module 2	Sales Organisation - Setting up a sales organization, Personal Selling, Management of Sales force, Recruitment & Selection, Training, Motivation and Evaluation, Compensating Sales Force, Territory Management, Sales Budget, Sales Quota.			Sales Management – Decision Strategy and Cases, 5 th Edition, Richard R.Still, Edward W. Cundiff & Norman Govani, Pearson, ISBN 978-81-317-1089-0, Chapter 7,20,21,22	
Module 3	Physical Distribution - Definition, Importance - participants in physical distribution process - Different forms of channels - Functions of Marketing Channels, Unconventional channels - Channel Intermediaries - Wholesaling and Retailing , Channels			Sales Management – Decision Strategy and Cases, 5 th Edition, Richard R.Still, Edward	

	for Consumer goods, Industrial Goods & Services – Integrated Marketing Channels – Horizontal, Vertical, Multi-channel marketing Systems.	W. Cundiff & Norman Govani, Pearson, ISBN 978-81-317-1089-0, Chapter 9
Module 4	Supply Chain Management – concept – significance – components – Order processing – Material Handling – Transportation – Warehousing – Inventory Management – Reverse Logistics, E-enabled selling and distribution	Sales Distribution Management, K. Shridhara Bhat, Himalaya Publishing House Pvt Ltd, ISBN Number : 978-93-5051-411-5, Chapter 9-14,16
Module 5	E-commerce and e-retailing – E-commerce and e-retailing as a channel of distribution, Electronic intermediaries, Disintermediation and Re-intermediation, e-enabled logistics management and tracking systems.	Retail Management: Functional Principles and Practices, Gibson G. Vedamani, 5 th Edition, Pearson, ISBN – 978-93-868-7327-9, Chapter 29
Other Reference books and sources	1. Sales and Distribution Management: Text and Cases, 3rd Edition, Krishna K Havaladar & Vasant M Cavale, McGraw Hill Education, ISBN-13: 978-9352607730 2. Sales and Distribution Management, 2nd Edition, Tapan K Panda & Sunil Sahadeva, Oxford; ISBN-13: 978-0198077046 3. Sales and Distribution Management: A Practice based approach, Ramendra Singh, Vikas Publishing, ISBN-13: 978-9325994065 4. Sales Management: Concepts and Cases, 10ed, ISV, William L. Cron & Thomas E. Decarlo, Wiley, ISBN-13: 978-8126526383	

Semester	III	Course Code	3T2	Type of Course	Elective
Course Name	MM2: DIGITAL AND SOCIAL MEDIA MARKETING				
Credits	4	Number of hours:		40	
Detailed Course Objectives					

CO1	On studying this module, the students will be able to understand the concept of marketing in digital environment. They will also be able to relate traditional marketing concepts with digital marketing and evaluate the use of various channel options available for digital marketing.
CO2	On completing this module, the students will develop the concept of digital marketing research. They will also be able to examine online consumer behaviour and imagine its utility in online/offline marketing strategies
CO3	Upon studying this module, the students will be able to build an understanding of search engines and their utility in digital marketing area. They will also comprehend optimization and the keyword search methodology.
CO4	On properly studying this module, the student will be able to examine the utility of different social media in digital marketing and evaluate their use, as future managers, in actual marketing campaigns.
CO5	On studying this module, the student will be able to create favourable online reputation, later, as future managers, for organizations they serve. Students will also be able to form opinion on current trends in digital marketing area and estimate future trends therein.
Detailed Contents:	
	Reference Book, Publisher, Edition, Page No.
Module 1	Introduction: Digital Marketing and its Significance. Traditional marketing V/s digital marketing. Marketing in digital environment, Introduction to E-commerce, types of E-commerce & business models, advantages & Disadvantages, hybrid & multi-channel options, online media and types.
Module 2	Digital marketing research: Features of marketing research, steps in marketing research, methods of digital marketing research, audience profiling and segmentation. The internet: uses, purposes, online consumer behaviour, direct marketing. Online research methods, behavioural targeting, blogs and types, building customer profiles, competitor analysis, integrating online strategies, offline marketing strategies.
Module 3	Search Engine Marketing: Introduction, email campaign creation and management, search and display on search engines, pricing models, page rankings, search engine optimization (SEO) and process, key words, search engine marketing (SEM), paid and natural search, search methodology.
	Digital Marketing, Raghavendra K., Shruti Prabhakar, Himalaya Publ. House, 2016, page no. 1-79
	Digital Marketing, Raghavendra K., Shruti Prabhakar, Himalaya Publ. House, 2016, page no. 96-147, 155-174
	Digital Marketing, Raghavendra K., Shruti Prabhakar, Himalaya Publ. House, 2016, page no. 179-252.

Module 4	Social Media: Introduction to social media, Facebook, LinkedIn, Twitter, Youtube, creating a channel on Youtube, social media measuring, forums and discussion boards, forums and communities, blogs, viral campaigns, building online relationships with different stakeholders.	Digital Marketing, Raghavendra K., Shruti Prabhakar, Himalaya Publ. House, 2016, page no. 257-324. The Ultimate Web Marketing Guide, Michael Miller, Pearson, page no.315-343.
Module 5	Online Reputation and Recent Trends: Introduction, reputation management process, features of online reputation management, strategies and tools of online reputation management, handling negative comments, recent trends in digital marketing, localization of content and advertising, marketing using mobile networks, journey from traditional to mobile banking, consumer engagement and methods.	Digital Marketing, Raghavendra K., Shruti Prabhakar, Himalaya Publ. House, 2016, page no.329-348, 353-380.
Other Reference books and sources	<ol style="list-style-type: none"> 1. Internet Marketing: Start to Finish, Catherine Joun, Dunlie Greiling, Pearson, 2012. 2. Facebook Marketing: Designing Your Next Marketing Campaign, Justin Levy, Pearson, 2011. 3. Advertising, Promotion and other Aspects of Marketing, Terence Shimp, Craig Andrews, Cengage Learning, 2016. 4. Online Retailing: A New Paradigm, The ICFAI University Press, 2008. 	

Semester	III	Course Code	3T3	Type of Course	Elective
Course Name	MM3: INTEGRATED MARKETING COMMUNICATION AND BRAND MANAGEMENT				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	At the end of the course the student manager shall be able to Design the Integrated marketing communication Process for a company/product				
CO2	At the end of the course the student manager shall be able to develop a creative message strategy for a product and execute it.				
CO3	At the end of the course the student manager shall be able to implement and evaluate a IMC campaign.				

CO4	At the end of the course the student manager shall be able to Identify&Establish Brand Positioning for a given product	
CO5	At the end of the course the student manager shall be able to design/develop branding strategies for a product/company, brand marketing program and shall be able to evaluate a branding program.	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Marketing Communication: Introduction, Objectives, using MC to build brand, Introduction to IMC: concepts,IMC partners & industry organisation. How brand communication works, How brand decision makers respond to MC messages. IMC planning process	Principles of Advertising & IMC, Tom Duncan , McGraw-Hill , second edition page 1-190
Module 2	Creating Sending & Receiving IMC messages - How to develop creative message strategy, how to get a big idea; Message execution.	Principles of Advertising & IMC, Tom Duncan , McGraw-Hill , second edition page 263-321
Module 3	Media planning : Media classifications, Advertising & IMC Media Planning, consumer sales promotion, trade promotion, Personal selling ,Public relations, direct marketing, event marketing and customer services; Evaluating IMC campaigns	Principles of Advertising & IMC, Tom Duncan , McGraw-Hill , second edition page 330-601
Module 4	Brand Management & Brand Equity: Meaning, Scope of Brand, Brand Management. Branding Challenges & opportunities. Strategic Brand Management - need & process. Identifying & Establishing Brand Positioning & Values-Brand Equity, customer based brand equity, brand positioning.	Strategic Brand Management , Third edition , Kelvin Lane Keller, Pearson Education, Page No.23-160
Module 5	Planning & implementing brand marketing program, Measuring & implementing brand performance	Strategic Brand Management , Third edition , Kelvin Lane Keller, Pearson Education, Page No.161-424
Other Reference books and sources	1. Advertising & IMC: Principles and Practice, 10th Edition, Sandra Moriarty, Nancy Mitchell, William Wells, Pearson, ISBN-13: 978-0133506884 2. Product and Brand Management, Tapan Panda, Oxford University Press; First edition, ISBN-13: 978-0199460496	

	3. Principles of Integrated Marketing Communications, Lawrance Ang, Cambridge University Press; 1 edition, ISBN-13: 978-1107649187
	4. Advertising and Promotion: An Integrated Marketing Communications Perspective (SIE), McGraw Hill Education; Ninth edition, ISBN-13: 978-1259026850

Semester	III	Course Code	3T1	Type of Course	Elective
Course Name	FM1: INVESTMENT ANALYSIS & PORTFOLIO MANAGEMENT				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	The student will be able to apply concept of time value of money in computing the value of fixed income securities. The student will also be able to understand the relationship between interest rates, yield and bond prices.				
CO2	The student will be able to compute and compare the value of a company's equity share with other company's equity by using various methods and tools of equity valuation				
CO3	The student will be able to build and evaluate the relationship between the concept of risk and return and will be able to relate its implication on creating portfolio.				
CO4	The student will be able to learn the theoretical concepts of underlying the portfolio creation				
CO5	The student will be able to assess the tools and strategies for portfolio creation and evaluation and will also be able to evaluate the portfolios of mutual funds by using the tools of portfolio evaluation				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	

Module 1	FIXED-INCOME VALUATION: Introduction. <i>Bond Prices and the Time Value of Money:</i> Bond Pricing with a Market Discount Rate, Yield-to-Maturity, Relationships between the Bond Price and Bond Characteristics. <i>The Maturity Structure of Interest Rates.</i> <i>Yield Spreads:</i> Yield Spreads over Benchmark Rates, Yield Spreads over the Benchmark Yield Curve.	Investment Analysis & Portfolio Management - Prasanna Chandra, Tata McGraw Hill Publications, Chapter - 11
Module 2	EQUITY VALUATION - CONCEPTS AND BASIC TOOLS: Introduction. Estimated Value and Market Price. Major Categories of Equity Valuation Models: <i>Present Value Models:</i> The Dividend Discount Model; Background and Description of the Dividend Discount Model. The Gordon Growth Model, Multistage Dividend Discount Models. <i>Multiplier Models:</i> Relationships among Price Multiples, Present Value Models, and Fundamentals; The Method of Comparables; Illustration of a Valuation Based on Price Multiples; Enterprise Value. <i>Asset-Based Valuation</i>	Investment Analysis & Portfolio Management - Prasanna Chandra, Tata McGraw Hill Publications, Chapter - 13
Module 3	PORTFOLIO RISK AND RETURN - PART I: The Concept of Market Efficiency, Forms of Market Efficiency, Random Walk Theory, <i>Investment Characteristics of Assets:</i> Return, Other Major Return Measures and their Applications, Variance and Covariance of Returns, Historical Return and Risk, Other Investment Characteristics. <i>Portfolio Risk:</i> The Concept of Risk Aversion, Portfolio of Two Risky Assets, Portfolio of Multiple Risky Assets, The Power of Diversification.	Investment Analysis & Portfolio Management - Prasanna Chandra, Tata McGraw Hill Publications, Chapter - 4 & 7
Module 4	PORTFOLIO RISK AND RETURN - PART II: <i>Efficient Frontier and Investor's Optimal Portfolio:</i> Investment Opportunity Set, Minimum-Variance Portfolios, A Risk-Free Asset and Multiple Risky Assets, Optimal Investor Portfolio, <i>Capital Market Theory:</i> Portfolio of Risk-Free and Risky Assets, The Capital Market Line. <i>Pricing of Risk and Computation of Expected Return:</i> Systematic Risk and Non-systematic Risk, Calculation and Interpretation of Beta. <i>The Capital Asset Pricing Model:</i> Assumptions of the CAPM, The Security Market Line, Applications of the CAPM -	Investment Analysis & Portfolio Management - Prasanna Chandra, Tata McGraw Hill Publications, Chapter - 8
Module 5	PORTFOLIO MANAGEMENT - Specification of Investment Objectives and Constraints, Selection of Asset Mix, Formulation of Portfolio Strategy, Selection of Securities, Portfolio Execution, Portfolio Revision, Performance Evaluation, Portfolio and Mutual fund	Investment Analysis & Portfolio Management - Prasanna Chandra, Tata McGraw Hill Publications, Chapter - 21

	Performance evaluation – Sharpe Ratio, Treynor Ratio, Jensen’s Alpha, Sortino Ratio and M ² .	
Other Reference books and sources	1. Security Analysis and Portfolio Management, S. Kevin, 2d Edition, PHI Learning, ISBN-13: 978-8120351301 2. Security Analysis and Portfolio Management, 6e, Donald E. Fischer & Ronald J. Jordan, Pearson Education India, ISBN-13: 978-8177588118 3. Security Analysis and Portfolio Management, M. Ranganathan & R. Madhumathi, 2nd edition, Pearson Education India ISBN-13: 978-8131759202 4. Securities Analysis and Portfolio Management, V. A. Avadhani, 12th Edition, Himalaya Publishing House, ISBN-13: 978-9352029921	

Semester	III	Course Code	3T2	Type of Course	Elective
Course Name	FM2: PROJECT APPRAISAL AND FINANCE				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	The student will be able to assess capital budgeting decisions under uncertain and risk bearing situation and will also be able to build and interpret the decision tree approach for decision making				
CO2	The student will be able to choose between acquisition of long term assets either through lease or financing methods and will also be able to learn process of Private Equity and Venture Capital				
CO3	The student will be able to compare the various theories of capital structure and will be able to determine the impact of debt equity mix on value of firm				
CO4	The student will be able to evaluate and compare the pre and post merger financial position of the firms.				
CO5	The student will be able to determine/ estimate the cash requirement in a firm and will also be able to evaluate the impact of trade receivable policy of a firm on its profitability.				

Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Long-term Investment Decisions: Capital Budgeting–Identification of Cash Flows and evaluation of proposals, Risk and Uncertainty Analysis, Certainty Equivalent Approach, Sensitivity Analysis, Probability Distribution Approach and Decision Tree Approach	Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition Financial Management, Theory, Concepts and Problem, Taxmann Publications, 5 th Edition, ISBN: 9788171949311, Chapter 9
Module 2	Leasing, Hire-purchase & Project Finance -Types of leases, rationale for leasing, Mechanics of leasing, Operating lease, Leasing as financial decision, Lease Vs borrow & buy evaluation, Hire purchase arrangement, Choice between leasing & hire purchase, Project finance - Private Equity, Venture Capital.	Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition Financial Management, Theory, Concepts and Problem, Taxmann Publications, 5 th Edition, ISBN: 9788171949311, Chapter 24,25
Module 3	Capital structure & Value of firm - Assumptions & definitions, NI approach, NOI approach, Traditional Position, MM position, Taxation & capital structure, Trade off theory, Signaling theory , Pecking order theory, Factors determining Capital Structure, Financial Distress, Project Financing and Project Beta	Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition Financial Management, Theory, Concepts and Problem, Taxmann Publications, 5 th Edition, ISBN: 9788171949311, Chapter 13&14
Module 4	Mergers & Acquisitions - M & A -Exchange ratio Financial evaluation of mergers, M&A as capital budgeting decision, Economic value added & market value added Taxation aspects.	Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition Financial Management, Theory, Concepts and Problem, Taxmann Publications, 5 th Edition, ISBN: 9788171949311, Chapter 30
Module 5	Management of Cash - Motives of holding cash, factors determining the cash balance, Managing the cash flow, Cash budget, Reports for control, Cash collection & disbursement,	Financial Management, M. Y. Khan & P. K. Jain, McGraw Hill Publications, 6 th Edition

	Options for investing surplus funds & strategies for managing surplus funds, Models- The Baumol model, The Beranek Model, The Miller-Orr Model. Management of Receivables - Credit policies, Evaluating the debtors, Credit analysis & decision, Credit terms & collection policies, Control of accounts receivables, Heuristic approach, Factoring and forfaiting	Financial Management, Theory, Concepts and Problem, Taxmann Publications, 5 th Edition, ISBN: 9788171949311, Chapter 19&20
Other Reference books and sources	1. Financial Management, I M Pandey, 10 th Edition, Vikas Publishing House Pvt Ltd, ISBN: 9788125937142 2. Financial Management, Comprehensive Text book with Case studies, M. Ravi Kishore, 7 th Edition, Taxmann Publications, ISBN: 9788171945207 3. Financial Management: Theory and Practice, Prasanna Chandra, 9 th Edition, ISBN-13: 978-9339222574 4. Financial Management: Problems & Solutions, AN Sridhar and Padmavati Sridhar, 5 th Edition, Packt Publishers, ISBN: 9789350238929	

Semester	III	Course Code	3T3	Type of Course	Elective
Course Name	FM3: FINANCIAL DERIVATIVES				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	The student will be able to describe the concepts of derivatives and its trading and settlement procedures				
CO2	The student will be able to calculate the value of Futures and apply it for risk managed trading strategies.				
CO3	The student will be able to compute the value of Options and plan various option strategies.				
CO4	The student will be able to analyse and use the concept of Swaps and will also be able to make Swaps related decisions.				
CO5	The student will be able to relate concept of foreign exchange in currency conversion and apply currency forward rate agreements for hedging.				

Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Introduction to Derivatives Trading and Settlement - Introduction to risk management, managing risk, types of business risks, derivatives and derivative products, classification of derivatives, participants in derivative market, functions of derivatives Trading of Derivatives Contracts Futures and Options Trading System, The Trader Workstation, Futures and Options Market Instruments, Criteria for Stocks and Index Eligibility for Trading, Charges ; Clearing and Settlement - Clearing Entities, Clearing Mechanism, Settlement Procedure, Risk Management, Margining System	Derivatives and Risk Management, Rajiv Srivastav, 2 nd Edition, Oxford Higher Education Publishing, ISBN: 9780198089155, Chapter 1 NISM - Equity Derivative Module Study Material, Taxmann Publication, ISBN No.:9789387957084, Unit 1 &7
Module 2	Equity Futures Derivatives and Trading Strategies - Types of Futures - On the basis of Maturity, On the basis of the underlying asset; Margining in the Futures market; Terminologies used in the Futures Market; Futures Pricing - Cost of Carry Model; Trading Strategies using futures.	Derivatives and Risk Management, Rajiv Srivastav, 2 nd Edition, Oxford Higher Education Publishing, ISBN: 9780198089155, Chapter 2, Options, Futures and Other Derivatives, J.C. Hull and Sankarshan Basu, 7 th Edition, Pearson Publishing, ISBN -978-81-317-2358-6, Chapter 5 NISM - Equity Derivative Module Study Material, Taxmann Publication, ISBN No.:9789387957084, Unit 3
Module 3	Option Derivatives and Trading Strategies using options - Types of Options - Call Options, Put Options; Option Pay-Offs; Terminologies used in the Options Market; Option Pricing - Binomial Model and Black & Scholes Model; Trading Strategies using options- caps, collars, butterfly, straddle, strangle etc. Option Greeks.	Derivatives and Risk Management, Rajiv Srivastav, 2 nd Edition, Oxford Higher Education Publishing, ISBN: 9780198089155, chapter 8,10,11&12 Options, Futures and Other Derivatives, J.C. Hull and Sankarshan Basu, 7 th Edition, Pearson Publishing, ISBN -978-81-317-2358-

		6
Module 4	Swaps - Concept and Characteristics; Types of Swaps – Interest Rate Swaps and Currency Swaps; Structure of Interest Rate Swaps and Intermediated Interest Rate Swaps; Relation between Interest Rate Swaps and Forward Rate Agreements; Calculations on Swaps.	Derivatives and Risk Management, Rajiv Srivastav, 2 nd Edition, Oxford Higher Education Publishing, ISBN: 9780198089155, Chapter 7 Options, Futures and Other Derivatives, J.C. Hull and Sankarshan Basu, 7 th Edition, Pearson Publishing, ISBN -978-81-317-2358-6, chapter 28,31,32
Module 5	Foreign Exchange risk & Corporate Exposure Management - Types of Exposure - Transaction, Economic and Translation; Foreign Exchange Risk - Types, Risk Management Techniques - External and Internal. International portfolio diversification and transfer pricing, Currency Derivatives and its application, Risk Management practices in India.	Foreign Exchange - Practice, Concept and Control, C. Jeevanandam, Sultan Chand and Sons Publication, ISBN - 81-8054-717-1, Chapter 10,11,14
Other Reference books and sources	1. Financial Derivatives-Theory, Concepts and Problems, 2nd Edition, S.L. Gupta, PHI Learning Pvt Ltd, ISBN: 9788120353480 2. Fundamentals of Financial Instruments: An Introduction to Stocks, Bonds, Foreign Exchange and Derivatives, Wiley, ISBN-13: 978-8126534043 3. Derivatives Principles and Practice, 1st Edition, Sundaram & Das, McGraw Hill Education, ISBN-13: 978-1259097096 4. Options Futures & Other Derivatives 9e, John C. Hull & Sankarshan Basu, Pearson Education India ISBN-13: 978-9332559417	

Semester	III	Course Code	3T1	Type of Course	Elective
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Course Name	HRM1: MANPOWER PLANNING, RECRUITMENT AND SELECTION		
Credits	4	Number of hours:	40
Detailed Course Objectives			
CO1	Students should be able to explain the factors affecting HRP and HRP process of an organisation.		
CO2	Students should be able to determine the process of demand and supply forecasting while doing human resource planning.		
CO3	Students should be able to devise the manpower plan for an organisation.		
CO4	Students should be able to formulate Recruitment and Selection process on the basis of HRP.		
CO5	Students should be able to outline the Recent Trends in Manpower Development and Planning		
Detailed Contents:		Reference Book, Publisher, Edition, Page No.	
Module 1	Manpower Planning: Meaning of HRP, Factors Affecting Manpower Planning, Need for Manpower Planning, Process of Manpower Planning, Importance of Manpower Planning, Obstacles in Manpower Planning, Advantages of Manpower Planning, Successful Manpower Planning	Human Resource Management – Text and Cases- K Ashwatthapa, 6 th Edition; Tata Mac Graw Hill Publication Ch-4 Essentials of Human Resource Management & Industrial Relations – P Subbarao, 3 rd Revised Edition; Himalaya Publishing House Ch-4	
Module 2	Manpower Forecasting: Concept, Factors affecting HRP, HRP at different levels of management, Integration of strategic planning and HRP, Process of HRP – Introduction Demand Forecasting – Techniques of demand forecasting, Supply forecasting, Control and Review mechanism.	Human Resource Management – Text and Cases- K Ashwatthapa, 6 th Edition; Tata Mac Graw Hill Publication, Ch-4 Essentials of Human Resource Management & Industrial Relations – P Subbarao, 3 rd Revised Edition; Himalaya Publishing House Ch-4	
Module 3	Developing a Manpower Plan: Use of HRIS in HRP, HR Plan Implementation, Managerial Succession Planning, Requisites of Successful HRP, Recent Trends in HRP	Human Resource Management – Text and Cases- K Ashwatthapa, 6 th Edition; Tata Mac Graw Hill Publication, Ch 4 Essentials of Human Resource Management &	

		Industrial Relations – P Subbarao, 3 rd Revised Edition; Himalaya Publishing House Ch 4
Module 4	<p>Recruiting & Selecting Human Resources- Sourcing of candidates, Recruitment, Factors governing recruitment, Strategic Management & Recruitment- Centralised & Decentralised Modern Sources and Techniques of Recruitment.</p> <p>Selection- concept, Selection Process, use of Psychological tests, Types of tests, Psychometric tests, online test, Importance of tests, Interviews- interviewing skills, Evaluation of Selection Programs, Recent Trends in Selection. Barriers to effective selection, Ancillary Topics- Induction, Placement, Employer branding</p>	<p>Human Resource Management – Text and Cases- K Ashwatthapa, 6th Edition; Tata Mac Graw Hill Publication Ch 6,7, 8</p> <p>Essentials of Human Resource Management & Industrial Relations – P Subbarao, 3rd Revised Edition; Himalaya Publishing House Ch 5,6,29</p>
Module 5	Recent Trends in Manpower Planning: Introduction, E-Manpower planning, e-Recruitment, e-selection Competency mapping, Knowledge management, E-Manpower Development, Concept of Global Recruitment.	<p>Human Resource Management – Text and Cases- K Ashwatthapa, 6th Edition; Tata Mac Graw Hill Publication Ch.28,29</p> <p>Essentials of Human Resource Management & Industrial Relations – P Subbarao, 3rd Revised Edition; Himalaya Publishing House Ch.27,28,29</p>
Other Reference books and sources	<ol style="list-style-type: none"> 1. Essentials of Human Resource Management & Industrial Relations – P Subbarao, 3rd Revised Edition; Himalaya Publishing House 2. Manpower Planning and Recruiting: Including Induction, Iain Maitland, Infinity Books, ISBN-13: 978-8179291139 3. Recruitment and Selection: Theory and Practices, Dipak Kumar, Cenage Learning, ISBN-13: 978-8131531600 4. Human Resource Planning, 3rd Edition, Dipak Kumar Bhattacharya, Excel Books, ISBN-13: 978-9350620571 	

Semester	III	Course Code	3T2	Type of Course	Elective
Course Name	HRM2: PERFORMANCE MEASUREMENT SYSTEM				
Credits	4	Number of hours:	40		
Detailed Course Objectives					

CO1	Students should be able to distinguish the concept of Performance appraisal & Performance Management and also should be able to establish relationship of performance management with Strategic Planning.
CO2	Students should be able to determine the Mechanism of Performance Management, and also explain the various steps in performance planning and performance execution.
CO3	Students should be able to justify the use of various modern and traditional methods of Performance Appraisal under given situation.
CO4	Students should be able to justify the use of various Performance Assessment Models under given situations; also the student should be able to determine the steps of giving a constructive feedback.
CO5	Students should be able to discuss the importance and Principles of ethics in performance management.
Detailed Contents:	
	Reference Book, Publisher, Edition, Page No.
Module 1	<i>Introduction to Performance Management:</i> Concept – Performance appraisal, Performance Management, Performance management system, Objectives and functions of Performance Management system, Linkage of Performance Management to strategic planning.
	Performance management – Herman Aguinis, Pearson publication, Ch 3 Performance management – A.S.Kohli & T.Deb, Oxford publication, Ch2,3
Module 2	<i>Process of Performance Management:</i> Introduction to Performance Management Process, Performance Management Planning Process, Mechanism of Performance Management Planning and Execution.
	Performance management – Herman Aguinis, Pearson publication, Ch 2 Performance management – A.S.Kohli & T.Deb, Oxford publication, Ch 5
Module 3	<i>Performance Appraisal:</i> Definitions & Objectives of PA and Characteristics of PA, Importance, Advantages & Disadvantages of PA, Process of PA, Pitfall of PA, Achieving effective PA, Methods of PA, <i>Performance Appraisal Methods:</i> Performance Appraisal Methods, Traditional Methods, Modern Methods
	Performance management – A.S.Kohli & T.Deb, Oxford publication, Ch 7
Module 4	Models for Assessing Performance-Balance score card; Objectives and process of Performance monitoring, Performance management linked with reward systems. Building a High Performance culture-Performance Management & Employee Development.
	Performance management – Herman Aguinis, Pearson publication, Ch 8 Performance management – A.S.Kohli & T.Deb, Oxford publication, Ch 7,8,10

Module 5	Ethics in Performance Appraisal: Ethics – An Overview, Ethics in Performance Management, Principles of ethical performance management Ethical issues and dilemmas in performance management	Performance management – A.S.Kohli & T.Deb, Oxford publication, Ch 12
Other Reference books and sources	1. Human Resource Management: Text and Cases, V. S. P. Rao, Excel Books, ISBN-13: 978-8174464484 2. Human Resource Management: Text and Cases, 6th Edition, K. Aswathappa, McGraw Hill Education, ISBN-13: 978-0070682139 3. Human Resource Management, 15th Edition, Gary Dessler, Pearson Education, ISBN-13: 978-9352862658 4. Performance Management: Concepts, Skills and Exercises, 2nd Edition, Robert L Cardy & Brian Leonard, Prentice Hall India Learning Private Limited, ISBN-13: 978-8120343238	

Semester	III	Course Code	3T3	Type of Course	Elective
Course Name	HRM3: COMPENSATION AND BENEFITS MANAGEMENT				
Credits	4	Number of hours:	40		

Detailed Course Objectives

CO1	Students should be able to compare the applicability of various Job Evaluation methods under given situations.
CO2	Students should be able to determine the importance of Wage Differentials and Differentiate between different types of wages
CO3	Students should be able to align the compensation strategy with business strategy
CO4	Students should be able to design and develop the incentive and benefits plans
CO5	Students should be able to outline the various Statutory Provisions related to Compensation

Detailed Contents:

Reference Book, Publisher, Edition, Page No.

Module 1	Job Evaluation / Grade Structure - a. Purpose and Methods of Job Evaluation, Ranking Systems, Job Classification / Grading method, Points System, Factor Comparison Method, Packaged Point Plans, Implementation, Job evaluation approach to compensation management	Human Resource Management – Text and Cases- Dr.S S Khanka, S.Chand Publication, Ch.14
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		Essentials of Human Resource Management & Industrial Relations – P Subbarao, 3 rd Revised Edition; Himalaya Publishing House, Ch 14 Compensation Management – Dipak Kumar Bhattacharya, Oxford University press, Ch 4
Module 2	Compensation Planning – Concept of Minimum Wage ,Fair wage, Living Wage , Nature and objectives of Compensation, Wages, Wage Fixation, wage fixation institutions in India, Wage differentials, Wage Plans – Rowan /Halsey; Components of Compensation –Base compensation – Perks, Fringe Benefits, Pay for Performance – Incentives; Bonuses- concept & methods of calculation	Human Resource Management – Text and Cases- K Ashwatthapa, 6 th Edition; Tata Mac Graw Hill Publication, Ch 11,12,13,15 Human Resource Management – Text and Cases- Dr.S S Khanka, S.Chand Publication, Ch.15 Essentials of Human Resource Management & Industrial Relations – P Subbarao, 3 rd Revised Edition; Himalaya Publishing House, Ch 16
Module 3	Strategic Perspective of Compensation – Aligning compensation strategy with Business strategy, Competency Based Compensation program, Managing Compensation; Compensation as a retention strategy.	Compensation Management-Dr.Kanchan Bhatia, Himalaya Publishing House, Ch.2,3
Module 4	Incentive Plans and Fringe Benefits- Characteristics, benefits and types of Incentive Plans, Profit/Gain Sharing – Concept and issues; Fringe benefits – Concept, need & objectives of fringe benefits, Fringe benefits in India.	Compensation Management-Dr.Kanchan Bhatia, Himalaya Publishing House, Ch.6
Module 5	Statutory Provisions related to Compensation - Payment of Wages Act 1936, Minimum Wages Act 1948, Payment of Bonus Act 1965, Employees State Insurance Act 1948, Employees Provident Fund Act 1952, Payment of Gratuity Act 1972	Compensation Management-Dr.Kanchan Bhatia, Himalaya Publishing House, Ch.10
Other Reference books and sources	1. Essentials of Human Resource Management & Industrial Relations – P Subbarao, 3 rd Revised Edition; Himalaya Publishing House 2. Performance Appraisal and Compensation Management: A Modern Approach, 2nd Edition, Dewakar Goel, Prentice Hall India Learning Private Limited, ISBN-13: 978-8120345652 3. Compensation Management, 2nd Edition, Dipak Kumar Bhattacharya, Oxford University Press, ISBN-13: 978-0199456543 4. Compensation: Special Indian Edition George Milkovich, Jerry Newman & C S Venkatratnam, 9th Edition, McGraw Hill Education, ISBN-13: 978-0070151581	

Semester	III	Course Code	3T1	Type of Course	Elective
Course Name	OM1: LOGISTICS AND SUPPLY CHAIN MANAGEMENT				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	At the end of the course the student will be able to analyze the business requirement and apply supply chain strategies				
CO2	The student will be able to design effective distribution network for a company.				
CO3	The student shall be able to reduce transportation costs by applying optimization techniques.				
CO4	The student shall be able to map the supply chain requirement as per the resources available by identifying the non value added services within the supply chain.				
CO5	The student will be able to measure the performance of the supply by applying various metrics in different areas				
Detailed Contents				Reference Book, Publisher, Edition, Page No.	
Module 1	Supply Chain Management: Concept, Decision Phases in Supply chain, Supply chain strategies, Drivers of supply chain performance, competitive advantage through supply chain management.			Supply Chain Management, Text and Cases, By V. V. Sople, Pearson Publications, Chapter 1 Supply Chain Management, A Managerial Approach, By Amit Sinha & Herbert Kotzab, McGrawHill Publication, Chapter 2 Supply Chain Management, Text and Cases, By Janat Shah, Pearson Publication, Chapter 2	
Module 2	Supply Chain Network: Factors influencing distribution network design, Design options for			Supply Chain Management, Text and Cases,	

	distribution network, Designing distribution network in various business applications, E-supply chain, and impact of uncertainty on network design.	By Janat Shah, Pearson Publication, Chapter 6
Module 3	Network Optimization: Optimization approach and techniques, Role of transportation in supply chain, factor influencing transport decisions, modes of transportation and selection process Warehousing Management, Reverse Logistics	Supply Chain Management, A Managerial Approach, By Amit Sinha & Herbert Kotzab, McGrawHill Publication , Chapter 9 and 12
Module 4	Procurement and Suppliers Relationship: Procurement overview, Purchase process and purchasing cycle, Supplier Relationship Management, Supplier segmentation and Supplier evaluation	Supply Chain Management, A Managerial Approach, By Amit Sinha & Herbert Kotzab, McGrawHill Publication, Chapter 13
Module 5	SCM Performance Measures: Importance of performance measure, Introduction to SCOR Model, Types of Performance Measures - Productivity Measure, Quality Measure, Customer Service Measure and Cost Measure	Supply Chain Management, Concepts and Cases, By Rahul Altekar, Eastern Economy Edition, Chapter 7
Other Reference books and sources	<ol style="list-style-type: none"> 1. Operations and Supply Chain Management, 8ed, ISV, Russel & Taylor, 8th Edition, Wiley, ISBN-13: 978-8126556823 2. Supply Chain Management, 6th Edition, Sunil Chopra, Peter Meindl & D. V. Kalra, Pearson Education India, ISBN-13: 978-9332548237 3. Supply Chain Management: Strategy, Planning, and Operation, Global Edition, 7th Edition, Sunil Chopra, Pearson Education India, ISBN-13: 978- 1292257891 4. Logistics Management, Satish C Ailawadi & Rakesh P Singh, 2d Edition, Prentice Hall India Learning Private Limited, ISBN-13: 978-8120345041 	

Semester	III	Course Code	3T2	Type of Course	Elective
Course Name	OM2: QUALITY TOOLKIT FOR MANAGERS				
Credits	4	Number of hours:	40		

Detailed Course Objectives		
CO1	The student will be able to analyze the dimensions of Quality and apply quality systems for effective quality improvement.	
CO2	The student will be able to select appropriate statistical tools for quality analysis.	
CO3	The student will be able to recommend appropriate SPC tools to improve process quality.	
CO4	The student will be able to set bench marks for the organization and apply TQM tools for quality improvement.	
CO5	The student will be able to apply productivity tools for improving efficiency in the plant.	
Detailed Contents		Reference Book, Publisher, Edition, Page No.
Module 1	Introduction to Quality Concepts: Dimensions of Quality, Cost of Quality, Quality philosophies, Quality systems, contribution of Quality gurus.	Total Quality Management, Text and Cases, By K. Shridhara Bhat, Himalaya Publishing House, Chapter 1 and 3 Quality Management, By Kanishka Bedi, Oxford Chapter 7
Module 2	Quality Assurance and Control - Concepts of Quality Assurance, Objectives, Quality Manual, Specification and Design Control, Process control, inspection and testing, Quality assurance in Services	Quality Management, By Kanishka Bedi, Oxford, Chapter 13
Module 3	Statistical Process Control (SPC): 7 tools of quality, control charts for variable and attributes, control chart techniques, X bar, R bar correlation. Pareto diagrams, cause and effect diagrams scatter diagrams, run charts, histograms, and flow charts.	Production and Operations Management, By K.Aswhathappa and K. Shridhara Bhat, Himalaya Publiding House, Chapter 17 Operations management, Theory and Practice, By. B.Mahadevan, Pearson Publication, Chapter 8
Module 4	TQM tools: TQM Frame work, Benchmarking, benchmarking process, QFD (Quality function	Total Quality Management, Text and Cases,

	Deployment), TPM (Total Productive Maintenance) and FMEA (Failure More and Effects Analysis).	By K. Shridhara Bhat, Himalaya Publishing House Quality Management, By Kanishka Bedi, Oxford Chapter 2
Module 5	Quality Improvement Techniques: KAIZEN, Six Sigma, ISO, 5S, QC, Poka-Yoke, Lean Manufacturing, Service Quality	Production and Operations Management, By R.Paneerselvam, third edition, Eastern Economy Edition, Chapter 20 Operations Management, By B Mahadevan, Pearson Publication, Chapter 5,Page 171
Other Reference books and sources	1. Total Quality Management, 3 rd Editio, Poornima M. Charantimath, Pearson Education, ISBN-13: 978-9332579392 2. Total Quality Management (TQM) 5 th edition, Basterfeild & Urdhwareshe, Pearson Education, ISBN-13: 978-9353066314 3. Quality Management, R. Panneerselvam & P. Sivasankaran, Prentice Hall India Learning Private Limited, ISBN-13: 978-8120349438 4. Total Quality Management, V. Vijayan & H. Ramakrishna, S. Chand Publishing, ISBN-13: 978-9384319557	

Semester	III	Course Code	3T3	Type of Course	Elective
Course Name	OM3: OPERATIONS RESEARCH				
Credits	4	Number of hours:	40		
Detailed Course Objectives					

CO1	The students will be able to attempt operation related problems by suggesting various operation research tools.
CO2	The students will be able to analyze LPP and Game Problems and find solutions for business decisions.
CO3	The students will be able to analyze and evaluate assignment problems to find solutions.
CO4	The students will be able to analyze and evaluate Transportation problems to optimize costs.
CO5	The students will be able to apply PERT/ CPM tools for optimizing time and cost in project management.
Detailed Contents:	
	Reference Book, Publisher, Edition, Page No.
Module 1	Introduction to Operation Research: Concept of Operation research, Main phases of operation research, Problem solving and decision making. Application of Operation research in Business.
	J K Sharma, Operations Research Problems Solution, McMillan Publication, Chapter 1 Operation Research By S. Kalavathy, Fourth Edition, Vikas Publications, Chapter 1
Module 2	Linear Programming & Game Theory: Formulation of Linear Programming problems, graphical method for solution of LPP, Game models, 2 persons, zero sum games and their solutions. Solution of $2 \times n$ and $m \times 2$ games by graphical methods.
	J K Sharma, Operations Research Problems Solution, McMillan Publication, Chapter 3 and Chapter 16
Module 3	Assignment: Assumptions and formulation of Assignment problems, Hungarian method, Maximization problems.
	J K Sharma, Operations Research Problems Solution, McMillan Publication, Chapter 14
Module 4	Transportation: Steps involved in transportation problems, Initial feasible solutions - NWCR, LCM, VAM, Testing degeneracy, testing optimality, MODI method.
	J K Sharma, Operations Research Problems Solution, McMillan Publication, Chapter 13 Operation Research By S. Kalavathy, Fourth Edition, Vikas Publications, Chapter 8
Module 5	PERT / CPM: Network rules and network diagrams, calculation of Earliest Start and Finish Times, Latest Start and Finish Times, identification of critical path, and project duration.
	J K Sharma, Operations Research Problems Solution, McMillan Publication, Chapter 17 Operation Research By S. Kalavathy, Fourth Edition, Vikas Publications, Chapter 15

Other Reference books and sources	1. Operations Research, 7 th Edition, PK Gupta & DS Hira, S Chand ISBN-13: 978-8121902816 2. Operations Research – Introduction to Management Science, Kanti Swaroop, PK Gupta, Man Mohan, Sultan Chand and Sons, ISBN-13: 978-9351611011 3. Operations Research: An Introduction, 9e Hamdy A Taha, Pearson Education India, ISBN-13: 978-9332518223 4. Operations Research: Principles and Applications, 3 rd Edition, G. Srinivasan, PHI Learning Private Limited, ISBN-13: 978-8120353107
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Semester	III	Course Code	3T1	Type of Course	Elective
Course Name	BA1: DATA VISUALIZATION FOR MANAGERS				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	The student will be able to identify and use Interactive data visualization software desktop tools and will also be able to create Interactive data visualization software desktop workspace				
CO2	The student will be able to connect data and will also be able to use Interactive data visualization software's File Types effectively.				
CO3	The student will be able to create analytics pane and will also be able to use Sort, Filters, Sets, Groups and Hierarchy functions				
CO4	The student will be able to create calculations to enhance the data visualisation				
CO5	The student will be able to build effective dashboard				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	
Module 1	Creating Visual Analytics with Interactive data visualization software Desktop -			Tableau your Data, Daniel G Murray, 2 nd Edition, Wiley Publishing, ISBN-13: 978-	

	Shortcomings of Traditional Information Analysis, Business Case for visual analysis, The Interactive data visualization software Software Ecosystem, Introducing Interactive data visualization software Desktop Workspace	8126573448, Chapter 1
Module 2	Connecting Data - How to connect Data, What are generated values, Use of Data Connection and Data Extract, Joining Database Table with Tableau, Blending different Datasources in single Worksheet, Data Quality Problem	Tableau your Data, Daniel G Murray, 2 nd Edition, Wiley Publishing, ISBN-13: 978-8126573448, Chapter 2
Module 3	Building Visualisation - Fast and Easy Analysis via “Show me”, how “Show Me” works, Trendlines and Reference Lines, Sorting Data in Interactive data visualization software, Enhancing views with Filters, Sets, Groups and Hierarchies	Tableau your Data, Daniel G Murray, 2 nd Edition, Wiley Publishing, ISBN-13: 978-8126573448, Chapter 3
Module 4	Creating Calculations to Enhance Data- Aggregation, Calculated Values and Table Calculations, Using Calculation Dialogue box, Binding Formulas using Table Calculations, Table Calculation Functions, Flexibility to Calculation Parameters, Function Reference appendix	Tableau your Data, Daniel G Murray, 2 nd Edition, Wiley Publishing, ISBN-13: 978-8126573448, Chapter 4
Module 5	Bringing together with Dashboard - Dashboard as facilitator, Interactive data visualization software for improving Dashboard, Right and Wrong Ways to build a Dashboards, Best practices to build Dashboard, Building advanced Dashboard, Sharing Dashboard with Interactive data visualization software Reader and Server, Designing Mobile Consumption, Interactive data visualization software and Load Speed	Tableau your Data, Daniel G Murray, 2 nd Edition, Wiley Publishing, ISBN-13: 978-8126573448, Chapter 8
Other Reference books and sources	<ol style="list-style-type: none"> 1. Tableau 10 Complete Reference: Transform your business with rich data visualizations and interactive dashboards with Tableau 10, Joshua Milligan Packt Publishing Limited, ISBN-13: 978-1789957082 2. Visual Analytics with Tableau, Alexander Loth, John Wiley & Sons, ISBN-13: 978-1119560203 3. Tableau Cookbook - Recipes for Data Visualization, Shweta Sankhe-Savale, Packt Publishing Limited, ISBN-13: 978-1784395513 4. Tableau: Creating Interactive Data Visualizations, Jen Stirrup, Ashutosh Nandeshwar, Ashley Ohmann, Matt Floyd, Packt Publishing Limited, ISBN-13: 978-1787124196 	

Semester	III	Course Code	3T2	Type of Course	Elective
Course Name	BA2: DATA MINING				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	Given overview of Data Mining and Data pre-processing, the future manager will be able to outline major research challenges of data mining, Kinds of data and applications, Data Cleaning; Data Integration; Data Reduction; Data Transformation and Data Discretization.				
CO2	Given the overview of Data Warehousing, the future manager will be able to classify the Concept of Data Warehousing using Data Cube and OLAP and also able to identify the process of Data Generalisation				
CO3	Given the details pertaining to Pattern Mining, the future manager will be able to evaluate Patterns using colossal patterns, mining compressed or approximate patterns; explore patterns and its applications.				
CO4	Given the details pertaining to Pattern Mining, the future manager will be able to analyse clusters using partitioning method, hierarchical method, density based method and grid based method				
CO5	Given the details pertaining to Pattern Mining, the future manager will be able to correlate the use of data mining to the society and also will be able to explain the trend in data mining.				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	
Module 1	Data Mining Concept - Introduction, Data Mining Roots, Data Mining Process, Large Data Sets, Data Warehouse for Data Mining, Business Aspect of Data mining, Preparing Data - Representation, Characteristics and Transformation of Raw Data, Missing data, Time Dependent Data, outlier analysis			Data Mining: Concepts Models, Methods and Algorithms, Mehmed Kantardzic, 2 nd Edition, Wiley IEEE, Chapter 1 & 2	
Module 2	Data Reduction - Dimensions of large data sets, feature reduction, relief algorithm, entropy measures for ranking features, PCA, Value Reduction, Feature Discretisation - Chi Merge Technique, case reduction Learning from Data- Learning Machine, SLT, Types of Learning methods, Common Learning Tasks, SVM, kNN-Nearest Neighbour Classifier, Model Selection vs Generalisation, Model Estimation, 90% Accuracy: Why not?			Data Mining: Concepts Models, Methods and Algorithms, Mehmed Kantardzic, 2 nd Edition, Wiley IEEE, Chapter 3&4	

Module 3	Decision Trees and Decision Rules- Decision Trees, C4.5 algorithm-DT, Unknown Attribute Values, Pruning Decision Trees, C4.5-DR, CART algorithm and Gini Index, Limitations of decision tree and decision rules, Artificial Neural Networks – Models of Artificial Neurons, Architecture of ANNs, Learning process, Learning Tasks using ANN, Multilayer Perceptrons(MLPs), Competitive Network and Competitive Learning, SOMs	Data Mining: Concepts Models, Methods and Algorithms, Mehmed Kantardzic, 2 nd Edition, Wiley IEEE, Chapter 6&7
Module 4	Association Rules- Market Basket Analysis, Algorithm Apriori, From frequent itemsets to association rules, Improving efficiency of Apriori Algorithm, EP growth model, Associative Classification Method, Multidimensional Association- Rules Mining	Data Mining: Concepts Models, Methods and Algorithms, Mehmed Kantardzic, 2 nd Edition, Wiley IEEE, Chapter 10
Module 5	Web Mining and Text Mining- Web Mining, Web Content, structure and usage mining, HITS and LOGSOM algorithm, Mining Path Traversal Patterns, Page Rank Algorithm, Text Mining, LSA,	Data Mining: Concepts Models, Methods and Algorithms, Mehmed Kantardzic, 2 nd Edition, Wiley IEEE, Chapter 11
Other Reference books and sources	1. Data Mining Practical Machine Learning Tools and Techniques, 2nd Edition, Elsevier Publication. 2.Introduction to Data Mining (Second Edition), Pearson Publication 3.Data Mining: The Textbook, Springer Publication 4.Mining of Massive Data, Second Edition, Cambridge University Press 5. https://towardsdatascience.com *Open Source BA tools like OrientDB, MongoDB, NoSQL, Trifacta Rapidminer etc should be used to elaborate the contents above.	

Semester	III	Course Code	3T3	Type of Course	Elective
Course Name	BA3: DATA SCIENCE USING R				
Credits	4	Number of hours:	40		
Detailed Course Objectives					

CO1	Given overview of types of Data, the future manager will be able to read data from different files and create matrices and data frames using R
CO2	Given the overview of functions, subset and loop; the future manager will be able to explain the character functions, date function, package, control statement and do loop.
CO3	Given the basic statistical data, the future manager will be able to draw charts, histogram and plots, and measure central tendencies.
CO4	Given the data for testing of hypothesis, the future manager will be able to test the hypothesis by applying t-test, ANOVA and Chi-square test
CO5	Given the data of variables, the future manager will be able to apply Linear Regression, Logistic regression, Cluster Analysis, Time Series, Decision Tree and Random Forest
Detailed Contents:	
	Reference Book, Publisher, Edition, Page No.
Module 1	Basic fundamentals, installation and use of software, data editing, use of R as a calculator, functions and assignments, Use of R as a calculator, functions and matrix operations, missing data and logical operators.
	Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R By Christian Heumann, Michael Schomaker and Shalabh, Springer, 2016 Appendix A https://swayam.gov.in/nd1_noc19_ma33/preview
Module 2	Conditional executions and loops, data management with sequences, Data management with repeats, sorting, ordering, and lists
	Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R By Christian Heumann, Michael Schomaker and Shalabh, Springer, 2016 Appendix A https://swayam.gov.in/nd1_noc19_ma33/preview
Module 3	Data management with repeats, sorting, ordering, and lists, Vector indexing, factors, Data management with strings, display and formatting
	Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R By Christian Heumann, Michael Schomaker and Shalabh, Springer, 2016

		Appendix A https://swayam.gov.in/nd1_noc19_ma33/preview
Module 4	Data management with display paste, split, find and replacement, manipulations with alphabets, evaluation of strings, data frames, Data frames, import of external data in various file formats, statistical functions, compilation of data.	Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R By Christian Heumann, Michael Schomaker and Shalabh, Springer, 2016 Appendix A https://swayam.gov.in/nd1_noc19_ma33/preview
Module 5	Graphics and plots, statistical functions for central tendency, variation, skewness and kurtosis, handling of bivariate data through graphics, correlations, programming and illustration with examples,	Introduction to Statistics and Data Analysis - With Exercises, Solutions and Applications in R By Christian Heumann, Michael Schomaker and Shalabh, Springer, 2016 Appendix A https://swayam.gov.in/nd1_noc19_ma33/preview
Other Reference books and sources	<ol style="list-style-type: none"> 1. Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data by EMC Education Services (2015) 2. Data Mining for Business Intelligence: Concepts, Techniques, and Applications in Microsoft Office Excel with XLMiner by Shmueli, G., Patel, N. R., & Bruce, P. C. (2010) 3. Data Analytics Using R, Seema Acharya, McGraw Hill Education, ISBN-13: 978-9352605248 4. R for Everyone: Advanced Analytics and Graphics, 2nd Edition, Jared P. Lander, Pearson Education, ISBN-13: 978-9386873521 	

Semester	III	Course Code	3T1	Type of Course	Elective
Course Name	ED1: ENTREPRENEURIAL THEORY AND PRACTICES				

Credits	4	Number of hours:	40
Detailed Course Objectives			
CO1	On completion of module, the student will be able understand the concept of entrepreneurship and what entrepreneurs do. They will also be able to relate the work of few prominent Indian entrepreneurs with the learned concept and compare the work of a manager with that of an entrepreneur.		
CO2	On completing this module, the student will learn how entrepreneurship evolved from its earlier disorganized form to the current Government supported form. They will also be able to justify the role of EDPs in growth of entrepreneurship.		
CO3	Upon studying this module, the students will be able to explain the theories of entrepreneurship and also how the entrepreneurial knowledge gained can be applied to developing entrepreneurial ventures in different economic sectors in India.		
CO4	On properly studying this module, the student will be able to examine the impact of different financial aspects on entrepreneurship and can evaluate his/her own ability to set up a small scale venture.		
CO5	On studying this module, the student will be able to create a mental map of the network of Government support system and various institutions purposely designed and set up, at national, state and district level, for assisting entrepreneurial ventures.		
Detailed Contents:			Reference Book, Publisher, Edition, Page No.
Module 1	Evolution of the concept of entrepreneurship. The entrepreneur: characteristics and functions, types of entrepreneurs, distinction between manager and an entrepreneur. Intrapreneur: concept, characteristics, barriers, intrapreneurial climate and culture. Factors contributing to entrepreneurship development. Theories of entrepreneurship. Indian entrepreneurs and their ventures (cases).		1. Entrepreneurial Development, S.S. Khanka, S. Chand & Co., 2016. 2. Entrepreneur Development, Satish Taneja, Himalaya Publishing House, 2010, pages 64-75. 3. Dynamics of entrepreneurial development and management, Vasant Desai, Himalaya Publishing House, pages 54-66.
Module 2	Post-independence growth of entrepreneurship in India, role of entrepreneurship in economic development. Entrepreneurship development programmes: objectives, phases, evaluation and problems of EDPs. Entrepreneurial competencies: meaning, major competencies and developing competencies.		1. Entrepreneurial Development, S.S. Khanka, S. Chand & Co., 2016, pages 36-50, 214-246.
Module 3	Theory of achievement motivation, Prof. David McClelland's contribution, Kakinada experiment. Women entrepreneurship in India, problems of women entrepreneurship. Rural entrepreneurship in India and its importance, problems of rural entrepreneurship. Entrepreneurship in various sectors: tourism, agriculture and social. Micro and small scale enterprises.		1. Entrepreneurial Development, S.S. Khanka, S. Chand & Co., 2016, pages 36-132. 2. Small scale industries & entrepreneurship, Vasant Desai, Himalaya Publishing House, pages 3-55.

Module 4	Steps for starting a small scale industry, ownership pattern. Financial analysis: Ratio analysis, investment process, break-even analysis, profitability analysis, budget and planning process. Sources of finance: development finance, project financing.	1. Dynamics of entrepreneurial development and management, Vasant Desai, Himalaya Publishing House, Page 626-644, 303-395 and 423-504. 2. Small scale industries & entrepreneurship, Vasant Desai, Himalaya Publishing House, pages 101-117.
Module 5	Entrepreneurial support systems: Institutional finance to entrepreneurs (various institutions), institutional support to entrepreneurs (various institutions), lease and hire purchase, benefits in taxation to entrepreneurs, Government policy and support to SSI. Sickness in small scale industries.	1. Entrepreneurial Development, S.S. Khanka, S. Chand & Co., 2016, Page 379-441. 2. Dynamics of entrepreneurial development and management, Vasant Desai, Himalaya Publishing House, Page 707-721.
Other Reference books and sources	1. Entrepreneurship: A South-Asian Perspective, Kuratko, T.V. Rao, Cengage Learning, 2012. 2. Entrepreneurship Development, Satish Taneja, Himalaya Publishing House, 2012. 3. Essentials of Entrepreneurship and Small Business Management, Scarborough & Cornwall, Pearson, 2016. 4. Entrepreneurial Development, S.S. Khanka, S. Chand & Co., 2016	

Semester	III	Course Code	3T2	Type of Course	Elective
Course Name	ED2: BUSINESS PLAN FORMULATION				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	On completion of module, the student will be able understand the concept and importance of a business plan in entrepreneurship. They will also be able to explain the elements of a good business plan, in order to be effective.				

CO2	On studying this module, the students will be able to classify projects into categories and will also be able to formulate a basic business plan (project).
CO3	Upon going through this module, students will be in a position to understand how to develop ideas for a business project. They will also be able to assess the role of environment on different economic sectors and opportunities in India.
CO4	On properly studying this module, the student will be able to examine the importance of project appraisal and can evaluate the different parameters that contribute to feasibility of a business project.
CO5	Detailed study of this module will enable students to formulate steps in starting a small enterprise and visualise a model of small business. They will be able to relate the project to various permissions required for entrepreneurial ventures.
Detailed Contents:	
	Reference Book, Publisher, Edition, Page No.
Module 1	Business plan: meaning and significance of a business plan, major contents, formulation of a business Plan, common mistakes in business plan.
Module 2	Project: classification, project cycle, phases. Project identification. Project formulation.
Module 3	Project ideas: entrepreneurial environment scanning, identification of opportunities, selecting a product, network analysis, project report.
Module 4	Project appraisal: meaning and concept, methods of project appraisal, project feasibility analysis, sample feasibility report.

		102. 2. Entrepreneurial Development, S.S. Khanka, S. Chand & Co., 2016, pages 321-333.
Module 5	Steps in starting a small enterprise, whom to approach for what, sample project profile.. Osterwalder's business model canvas.	1. Small scale industries & entrepreneurship, Vasant Desai, Himalaya Publishing House, pages 407-420. 2. Essentials of Entrepreneurship and Small Business Management, Scarborough & Cornwall, Pearson, 2016, pages 150-157.
Other Reference books and sources	1. Entrepreneurship Development and Small Business Enterprises, 2e, Poornima M Charantimath, Pearson Education India, ISBN-13: 978-8131762264 2. Project Management, Vasant Desai Himalaya Publications, ISBN-13: 978-9351420378 3. Entrepreneur 5 P.M. to 9 A.M.: Launching a Profitable Start-Up, Kanth Miriyala, Reethika Sunder, Rupa Publications India; First edition ISBN-13: 978-8129123930 4.	

Semester	III	Course Code	3T3	Type of Course	Elective
Course Name	ED3: SOCIAL ENTREPRENEURSHIP				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	Under given circumstances the Learner shall identify the motivating factors and success factors of a Social enterprise.				
CO2	In context of the Indian Society, the learner shall enlist the socio economic challenges and identify the Opportunities for creation of a Social				

	Enterprise	
CO3	Under exemplified conditions the Learner shall be able to discover the business models of Social Entrepreneurship.	
CO4	Under different circumstances the learner will be able to select an appropriate form of Social enterprise.	
CO5	Given the case the learner shall be able to interpret the business model and illustrate the reasons for success of a social enterprise.	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Concept of Social Enterprise, Purpose, Motivation, Characteristics of Social Entrepreneurs, Success Factors of Social Enterprise	ENTERPRISING NONPROFITS: A TOOLKIT FOR SOCIAL ENTREPRENEURS -J. Gregory Dees,, Jed Emerson, and Peter Economy, John Wiley & Sons, 2001, Chapter 1
Module 2	Social Entrepreneurship: Socio-Economic Issues ad challenges in Indian Context, Concept of Sustainability, Sustainable Development Goals , Opportunity Recognition in Social Enterprise	Entrepreneurship in the Social Sector, Jane Wei-Skillern, James Austin, Herman Leonard and Howard Stevenson,Sage Publications, 2007
Module 3	Social Entrepreneurship Business Models: Profit-Purpose Tension (PPT), Profit-Purpose Alignment (PPA) and Philanthropic; Business Model Innovation	Entrepreneurship in the Social Sector, Jane Wei-Skillern, James Austin, Herman Leonard and Howard, Stevenson, Sage Publications, 2007
Module 4	Forms of Social Enterprise: Profit and non-profit Proprietorships, Partnership , company ,Non-Governmental organisation - Society - Trust and Company (sec. 25) registration, Selection of forms of Social Enterprise	ENTERPRISING NONPROFITS: A TOOLKIT FOR SOCIAL ENTREPRENEURS -J. Gregory Dees,, Jed Emerson, and Peter Economy, John Wiley & Sons, 2001
Module 5	Case Studies in Social Entrepreneurship: 1. Micro Finance: A Case of Grameen Bank, Bangladesh; 2. Population Services International, the US-based NGO's War on AIDS: Making the Marketing Mix, the Myanmar Way;	Case Studies on Social Entrepreneurship - Vol. I, ICFAI Books ,Edited by Girija P ICFAI Business School Case Development Centre,ISBN : 978-81-314-1912-0

	3. Aravind Eye Hospitals: A Case in Social Entrepreneurship	
Other Reference books and sources	1. The Social Entrepreneur's Playbook, Expanded Edition: Pressure Test, Plan, Launch and Scale Your Social Enterprise, Ian C. MacMillan, James D. Thompson, Wharton Digital Press, ISBN-13: 978-1613630327 2. Strategic Tools for Social Entrepreneurs: Enhancing the Performance of Your Enterprising Nonprofit, J. Gregory Dees, Jed Emerson, and Peter Economy, John Wiley & Sons, 2 nd Edition, ISBN-13: 978-0471150688 3. Social Entrepreneurship: The Art of Mission-Based Venture Development, Peter C. Brinckerhoff, John Wiley & Sons; ISBN-13: 978-0471362821	

Semester	III	Course Code	3T1	Type of Course	Elective
Course Name	IB1: INTERNATIONAL MARKETING MANAGEMENT				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	At the end of the course the student shall be able to differentiate between domestic marketing and international marketing and understand clearly features of International Marketing.				
CO2	At the end of the course the student shall be able to plan, explain and practice various procedures in International marketing.				
CO3	At the end of the course the student manager shall be able to design and develop Global Product Policy decisions.				
CO4	At the end of the course the student manager shall be able to design/develop strategies for International Service Sector Marketing				
CO5	At the end of the course the student manager shall be able to design/develop functional level strategies for Global Branding.				
Detailed Contents:				Reference Book, Publisher, Edition, Page	

		No.
Module 1	Introduction of International Marketing - Definition, Features of International Marketing, Basis of International Marketing, Trends in International Marketing, Issues in transcending International Boundaries, Intellectual Property Protections.	International Marketing (An Asia Pacific Focus) Wiley India Pvt Ltd ISBN 978-81265,-1848-7-
Module 2	Planning for International Marketing - Introduction, Global Marketing a Need of the Day, International Marketing Plan, Mode of Payment, Methods of Payment on Import, Consignment Purchase, Cash in Advance (Pre-payment), Down Payment, Open Payment, Documentary Collections, Letter of Credit	International Marketing (An Asia Pacific Focus) Wiley India Pvt Ltd ISBN 978-81265,-1848-7-
Module 3	International Marketing Mix - Identification of Market, Consumer Index , Global Product policy Decisions, promotion, pricing, distribution strategy	International Marketing (An Asia Pacific Focus) Wiley India Pvt Ltd ISBN 978-81265,-1848-7-
Module 4	International Service Sector Marketing - Introduction, GATS Principles, Standardization of International Services, Service Quality, Measurement of Service Quality, International Direct Marketing & Social Media Marketing	International Marketing (An Asia Pacific Focus) Wiley India Pvt Ltd ISBN 978-81265,-1848-7-
Module 5	Global Branding - Attributes, Benefits, Values, Culture, Personality, User, Global Brand Development, Implication of Brand Equity concept, Global Branding opportunities and challenges.	International Marketing (An Asia Pacific Focus) Wiley India Pvt Ltd ISBN 978-81265,-1848-7-
Other Reference books and sources	1. International Marketing, 2 nd Edition, Rakesh Mohan Joshi, Oxford University Press ISBN-13: 978-0198077022 2. International Marketing, 4th Edition, R. Srinivasan, PHI Learning, ISBN-13: 978-8120352384 3. Global Marketing Management, 8e, Warren J Keegan, Pearson Education, ISBN-13: 978-9332584327 4. International Marketing Management, Subhash Jain, CBS; 3 edition, ISBN-13: 978-8123912752	

Semester	III	Course Code	3T2	Type of Course	Elective
Course	IB2: EXPORT DOCUMENTATION AND PROCEDURES				

Name			
Credits	4	Number of hours:	40
Detailed Course Objectives			
CO1	Students should be able to understand various preliminaries for exports and IEC codes and should be able to analyze functions of export marketing organizations and trading houses.		
CO2	Students should be able to understand various preliminaries of import and should be able to perceive concepts involved in import documentation and procedures.		
CO3	Students should be able to relate the concepts with selection of products and markets for exports as well as examine the pricing and payment methods in exports		
CO4	Students should be able to understand and elaborate various concepts in Export documentation, export procedures and contracts.		
CO5	Students should be able to perceive the procedures and intricacies of excise clearance and should be able to understand various shipment and post-shipment formalities		
Detailed Contents:			Reference Book, Publisher, Edition, Page No.
Module 1	Classification of goods for exports, methods of exporting, Export Marketing organizations in India and their functions, trading houses, registration formalities, IEC code : procedure and exemptions, export license		Jain Khushpat, Export Import Procedures and documentation, Himalaya Publishing House Chapter 1 & 2
Module 2	Preliminaries of Import, Import documentation; Transport documents, bill of entry, airway bill, certificate of inspection & measurement, freight declaration. Import procedures		Jain Khushpat, Export Import Procedures and documentation, Himalaya Publishing House Chapter 5, 7 and 12
Module 3	Selection of Products and markets for exports : FPS, FMS, Export pricing strategies, Export price quotations, Components of export price: FOB & CFR price, Methods of export payment, Letter of credit		Jain Khushpat, Export Import Procedures and documentation, Himalaya Publishing House Chapter 3 & 4

Module 4	Export Documentation: ADS, Export documentation in India and various documents. Export procedures : pre-shipment , shipment and post shipment procedures, Export contract	Jain Khushpat, Export Import Procedures and documentation, Himalaya Publishing House Chapter 6 & 8
Module 5	Excise clearance and quality inspection: procedure for central excise clearance for exportable goods, pre-shipment inspection & its procedure, marine insurance, role of C&F agents, shipping and customs formalities and various procedures in exports shipping	Jain Khushpat, Export Import Procedures and documentation, Himalaya Publishing House Chapter 10 & 11
Other Reference books and sources	1. Export Import Procedures - Documentation and Logistics, C. Rama Gopal, NEW AGE; First edition, ISBN-13: 978-8122418507 2. IBO-4 Export Import Procedures and Documentation, Sudhir Kochhar, Gullybaba Publishing House (P) Ltd; 1 edition (2012), ISBN-13: 978-9381066560 3. Export Management, D.C. Kapoor, Vikas Publication.; First edition (2002), ISBN-13: 978-8125909392 4. Export Import Management, Parul Gupta, McGraw Hill Education; First edition, ISBN-13: 978-9387067592	

Semester	III	Course Code	3T3	Type of Course	Elective
Course Name	IB3: INTERNATIONAL FINANCE				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	Students Should be able to perceive various concepts involved in International Monetary system and various concepts like international liquidity and SDR				
CO2	Students should be able to understand methods of exchange rate determination , understand working of foreign exchange market and relate these concepts with existing scenario in India				
CO3	Students should be able to understand and analyze currency contracts and options. They should be able to examine risks involved in foreign trade and ways to manage the risks.				
CO4	Students should be able to understand management of short term finance in Multinational corporations and international financing decisions including funding and borrowing decisions				

CO5	Students should be able to understand and analyze various concepts like BOP, transfer pricing , structure of International banking and standards of international accounting	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Challenges of International Finance, International Monetary system, International Monetary Fund (IMF), International Liquidity and Special Drawing Rights (SDR)	Apte Prakash G., International Finance, Tata McGraw Hill Ch1
Module 2	Structural Models of Exchange rate determination, Exchange rate of Indian Rupee, Structure of Foreign exchange market, currency trading, exchange rate quotations and arbitrage, forward contracts, Exchange rate regimes and foreign exchange market in India	Apte Prakash G., International Finance, Tata McGraw Hill Ch 2 & 3
Module 3	Currency Future Contracts, Currency Options, valuation of options, Defining and managing Financial exposure and risk, risk management process, coping with operating exposure	Apte Prakash G., International Finance, Tata McGraw Hill Ch 4, 5 & 6
Module 4	Short term Financial management in Multinational Corporation, International Financial decision, Funding and borrowing options, Sourcing equity globally	Apte Prakash G., International Finance, Tata McGraw Hill Ch 7 & 8
Module 5	Balance of Payments, Transfer Pricing, Export financing in India, International Banking and International Accounting	Shailaja G. , International Finance, University Press India P. Ltd Ch.9, 15, 18, 19 and 20
Other Reference books and sources	1. International Finance, 1/e, Rajiv Srivastava, Oxford University Press, ISBN-13: 978-0199453597 2. International Finance: Theory and Policy, Paul R. Krugman , Maurice Obstfeld, & Marc Melitz, 10 th Edition, Pearson Education, ISBN-13: 978-9332585775 3. International Financial Management, Alan C. Shapiro, Peter Moles & Jayanta Kumar Seal, Wiley (2016), ISBN-13: 978-8126558728 4. Foreign Exchange - Practice, Concept and Control, C. Jeevanandam, Sultan Chand and Sons Publication, ISBN - 81-8054-717-1	

Semester	II	Course Code	3T8	Type of Course	Core
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Course Name	STRATEGIC MANAGEMENT		
Credits	3	Number of 1 hour lectures:	30
Detailed Course Objectives			
CO1	The student will be able to evaluate alternative paradigms of strategy and their influence on strategic decision making.		
CO2	The student will be able to analyse and develop the vision and mission statement for given organisations and will also be able to differentiate between the external and internal components of environment while performing SWOT analysis.		
CO3	The student will be able to design and develop corporate level strategies for any organization.		
CO4	The student will be able to design/develop business level strategies for any organization.		
CO5	The student will be able to evaluate all levels strategies and will also be design/develop functional level strategies for any organization.		
Detailed Contents:		Reference Book, Publisher, Edition, Page No.	
Module 1	Introduction to Strategic Management and Business Policy - Evolution of strategic management and business policy, understanding strategy, strategic decision making, schools of thought of strategy formation, introduction to strategy management		Strategic Management and Business Policy, Azhar Kazmi, 3 rd edition, McGraw Hill Education, Chapter 1
Module 2	Strategic Intent and Strategy Formulation- Vision, Mission and Values, Organisational Values and their impact on strategy, preparation of vision and mission statement, organisational objectives, Environmental Appraisal, Concept of environment, SWOT Analysis, Environmental Sectors, Environmental Scanning		Strategic Management – Concept and Cases, Upendra Kachru, Excel Books, Chapter 2 Strategic Management and Business Policy, Azhar Kazmi, 3 rd edition, McGraw Hill Education, Chapter 3
Module 3	Corporate Level Strategies - Strategy formulation, Growth Strategy, Corporate Parenting, Portfolio and other analytical models, short term corporate strategies.		Strategic Management – Concept and Cases, Upendra Kachru, Excel Books, Chapter 7

Module 4	Competitive Strategy/ Business Level Strategy- Porter's competitive strategies, Resource based theory, Competing for tomorrow's market.	Strategic Management – Concept and Cases, Upendra Kachru, Excel Books, Chapter 8
Module 5	Functional and Operational Implementation - Functional Strategy, Financial Plans and Policies, Marketing Plans and Policies, Personnel Plans and Policies, Operational Plans and Policies , Strategy Evaluation and Selection Techniques - Evaluation of Strategy, Assessing suitability, Life Cycle Analysis, Positioning, Value Chain Analysis, Business Profile, Gap Analysis	Strategic Management – Concept and Cases, Upendra Kachru, Excel Books, Chapter 9 (page no. 340-347) Strategic Management and Business Policy, Azhar Kazmi, 3 rd edition, McGraw Hill Education, Chapter 13 (13.1, 13.3,13.4,13.5,13.6)
Other Reference books and sources	1. Strategic Planning & Formulation of Corporate Strategy, V S Ramaswami, S Namaumari, Publication - Macmillan, India. 2. Strategic Management, 9 th Edition – John A Pearce II, Richard B Robinson, Jr Publication-Tata McGraw- Hill Publishing Company Limited, New Delhi. 3. Crafting & Executive Strategy -14 th edition, Arthur A. Thompson Jr, A. J. Strickland III, Publication-Tata McGraw- Hill Publishing Company Limited, New Delhi. 4. Management Policy & Strategic Management – R. M. Srivastava Publication – Himalaya Publishing House.	

SEMESTER – IV

Semester	IV	Course Code	4T1	Type of Course	Elective
Course Name	MM4: RETAIL SALES MANAGEMENT AND SERVICES MARKETING				
Credits	4	Number of hours:		40	
Detailed Course Objectives					
CO1	On completion of this module the students will be able to utilise the knowledge gained on Retail Industry and the existing retail environment. The student will also be able to plan their retail business as future manager by applying retail segmentation.				

CO2	On completing this module, the students will be able to take part in the decisions involved in running a retail firm. They will also be able to form their own opinion on various retail formats and recommend strategies for retail planning.	
CO3	On completing this module, the students will be able to draw relationship between retail merchandising, marketing communication, CRM and retail success. They will also be in a position to predict impact of changing trends in Indian market scenario on retail business.	
CO4	On completion of this module, the students will be able to analyse concepts, functions, and techniques of the craft of service marketing services and will also be able to identify critical issues in service design & delivery. As future managers they will also be able to adapt a particular model of service marketing to a firm they work with.	
CO5	On completing this module, the students will be able to examine the application of integrated marketing communication (IMC) to retail business and develop an effective service marketing system for retail business. Students will also be in a position to recommend ethical rules for conduct of retail business in India.	
Detailed Contents:		
	Reference Book, Publisher, Edition, Page No.	
Module 1	<i>Introduction to Retailing:</i> Introduction, Meaning of Retailing, Economic Significance of Retailing, Retailing Management Decision Process, Product Retailing vs. Service Retailing, Types of Retailers, Retailing Environment, Indian vs. Global Scenario <i>Retail Marketing Environment-</i> In Elements in a Retail Marketing Environment, Environmental Issues <i>The Retail Marketing Segmentation:</i> Segmentation in Retail, Targeted Marketing Efforts, Criteria for Effective Segmentation, Dimensions of Segmentation, Positioning Decisions	Swapna Pradhan, RETAILING MANAGEMENT TEXT & CASES , Tata McGraw Hill Companies.3-50
Module 2	Store Location and Layout: Introduction, Types of Retail Stores Location, Factors Affecting Retail Location Decisions, Country/Region Analysis, Trade Area Analysis, Site Evaluation, Site Selection, Location Based Retail Strategies Retail Marketing Strategies: Introduction, Target Market and Retail Format, Strategy at different levels of Business, Building a Sustainable Competitive Advantage, the Strategic Retail Planning Process, Retail Models, Retail “EST” model ,the Strategic Retail Planning Process, Differentiation Strategies, Positioning Decisions	Swapna Pradhan, RETAILING MANAGEMENT TEXT & CASES , Tata McGraw Hill Companies, 85-145
Module 3	Retail Merchandising: Introduction, Understanding Merchandising Management, Activities of a Merchandiser, Retail Merchandising Management Process Private Branding in Retail-Introduction, Difference between a Store/Private, Brand and a National Brand, Growth Drivers of Private Label, Global Scenario of Private Labels, Indian Market Scenario, Advantages of Private Label, Disadvantages of Private Label Integrated Marketing Communication in Retail, Customer Relationship Management in Retailing-Components of CRM, CRM and Loyalty Program, Technology in Retail Marketing Decisions	Swapna Pradhan, RETAILING MANAGEMENT TEXT & CASES , Tata McGraw Hill Companies., 167-238, 341-360 Retail Management , Barry Berman & Joel R Evans, 405-595
Module 4	Services Marketing Introduction, concept and evolution of services marketing, meaning of service marketing, myths encountered in services, need for service marketing, and growth in Services Marketing. Services Marketing Mix and Gaps Model Introduction, 7Ps of service marketing, service	Service Marketing ,S MJha pg no – 1-79,,633-713

	gaps framework, perceived service quality, models of service marketing. Service Design and Service Delivery Introduction, Service delivery process	
Module 5	Integrated Services Marketing: Introduction, meaning and Importance, Features of Integrated Service Marketing, Integrated Marketing Communication for Service, Reasons for growing importance of integrated marketing communication, Advantages of integrated marketing communication, Integrated Service Marketing Mix, Developing an effective and efficient service marketing system, Integration of service quality measures and managing quality Emerging Issues in Service Marketing , Service Marketing Research for Global Markets and Rural Markets, Innovations in Services Marketing, Ethical Aspects in Service Marketing	Service Marketing , Valarie Azeuthaml, Dwayne, Mary Bitner & Ajay Pandit pg no-495-562,
Other Reference books and sources	1. Retailing Management, Michael Levy, Barton Weitz, Dhruv Grewal, McGraw-Hill Education; 10 edition, ISBN-13: 978-1260084764 2. Retail Marketing Management, David Gilbert, Pearson Education; 2 edition, ISBN-13: 978-8177588255 3. Retail Management, Barry Berman Joel R Evans, Patrali Chatterjee, Ritu Srivastava, Pearson Education; Thirteenth edition, ISBN-13: 978-9332587694 4. Services Marketing, Rajendra Nargundkar, McGraw Hill Education; 3 edition, ISBN-13: 978-0070682122	

Semester	IV	Course Code	4T1	Type of Course	Elective
Course Name	FM4: MANAGING BANKS AND FINANCIAL INSTITUTIONS				
Credits	4	Number of hours:		40	
Detailed Course Objectives					
CO1	The student will be able to identify role of banking in economic development of country.				
CO2	The student will be able to assess the impact of monetary policy and its instruments on banking sector				

CO3	The student will be able to analyse the health and risk of bank balance sheet and will also be able to appraise credit management parameters of a bank	
CO4	The student will be able to identify the NPAs and will also be able to appraise the process of securitisation.	
CO5	The student will be able to distinguish the utility of various non banking institutions like insurance, housing finance and credit rating	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Nature and role of Financial System- Structure of Financial System, Financial System and Economic Development, Indian Financial System – The Banking System.	Banks and Institutional Management – A new orientation, 2 nd Edition, Vasant Desai, Himalaya Publishing house, ISBN -978-93-5024-093-9, Chapter 2,4&5
Module 2	The Reserve Bank of India - Monetary Policy of RBI	Banks and Institutional Management – A new orientation, 2 nd Edition, Vasant Desai, Himalaya Publishing house, ISBN -978-93-5024-093-9, Chapter 7&8
Module 3	Commercial Banks and Functions of Commercial Banks , Liabilities of Bank, Credit Management	Banks and Institutional Management – A new orientation, 2 nd Edition, Vasant Desai, Himalaya Publishing house, ISBN -978-93-5024-093-9, Chapter 9,10,11&12
Module 4	Banking Innovations, NPAs, and Securitisation	Banks and Institutional Management – A new orientation, 2 nd Edition, Vasant Desai, Himalaya Publishing house, ISBN -978-93-5024-093-9, Chapter 13,14&15
Module 5	Non Banking Financial Institutions and Services: Life Insurance, General Insurance, Housing Finance, Credit Rating	Banks and Institutional Management – A new orientation, 2 nd Edition, Vasant Desai,

		Himalaya Publishing house, ISBN -978-93-5024-093-9, Chapter 18,19,23&28
Other Reference books and sources	1. Bank Financial Management, IIBF, Macmillan Education India (2018), ISBN-13: 978-9387000650 2. Advance Bank Management, IIBF, Macmillan Education India (2018), ISBN-13: 978-9387000643 3. Bank Management and Financial Services(Indian Edition), Peter Rose & Sylvia Hudgins, 8 th Edition, McGraw Hill Education, ISBN-13: 978-9339204815 4. Principles And Practice Of Bank Management, 2nd Revised Ediion, Dr. P. Subba Rao & Dr. Promod Kumar Khanna , Himalaya Publishing House, ISBN-13: 978-9350241073	

Semester	IV	Course Code	4T1	Type of Course	Elective
Course Name	HRM4: TEAM DYNAMICS				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	Students should be able to justify the applicability of various theories of Motivation in given situation and appraise the role of motivation in Team Behavior				
CO2	Students should be able to determine the importance of Interpersonal Communication and application of FIRO-B and Johari Window.				
CO3	Student should be able to explain the various steps of Group Formation and types of team				
CO4	In a given situation, Students should be able to justify the Conflict resolution strategy.				
CO5	Students should be able to apply various OD Intervention tools under given situation.				
Detailed Contents:				Reference Book, Publisher, Edition, Page	

		No.
Module 1	Motivation- Concepts, Theories of Maslow, Herzberg, Application of Motivation concept, Intrinsic and Extrinsic Motivation, Role of Motivation in Team Behavior.	Organisational Behavior – Stepohen Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall Publication, Ch - 6,7,11
Module 2	Interpersonal Communication- Meaning and Importance of Interpersonal Communication, Transactional Analysis; Discovering the interpersonal orientation through FIRO-B ,Discovering facets of interpersonal trust through Johari window, communication skills, Negotiation skills	Organisational Behaviour - Dr. S S Khanka – S.Chand Publication, Ch 11 Organisational Behavior – Stepohen Robbins; Timothy Judge, Ch 11, 28 Seema Sanghi; Pearson Prentice Hall Publication, Ch.2 Web site reference: https://www.themyersbriggs.com/en-US/Products-and-Services/FIRO
Module 3	Group and Team Decision making-Concept of Group and Team, synergy of Team work ; Social loafing; Stage of Group Formation, Types of Team, Team Processes, Team Decision making; team morale	Organisational Behavior – Stepohen Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall Publication, Ch 9, 10 Organisational Behaviour - Dr. S S Khanka – S.Chand Publication, Ch 15, 16
Module 4	Conflict Management- Meaning of Conflict , Types of conflict; Levels of Conflict; conflict resolution in teams, competitive vs collaborative behavior, developing collaboration	Organisational Behavior – Stephen Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall Publication, Ch 15 Organisational Behaviour - Dr. S S Khanka – S.Chand Publication, Ch 17
Module 5	Strategies for Team building and OD- Concept of OD; Process of OD; OD Interventions; Experiential learning methodologies-T- group sensitivity training, encounter groups, appreciative enquiry	Organisational Behaviour - Dr. S S Khanka – S.Chand Publication, Ch 28 Organisational Behavior - Stepohen Robbins; Timothy Judge, Seema Sanghi; Pearson Prentice Hall

		Publication Ch 19
Other Reference books and sources	1. Group Dynamics for Teams, Daniel J. Levi, SAGE Publications, Inc; Fifth edition, ISBN-13: 978-1483378343 2. ORGANISATIONAL BEHAVIOUR: Text & Cases, Uma Sekaran, McGraw Hill Education; 2 edition, ISBN-13: 978-0070581906 3. Essentials of Organizational Behavior, 13e, Stephen P. Robbins & Timothy A. Judge, Pearson Education, ISBN-13: 978-9332587984 4. Organisational Behaviour, Neeru Vashishtha, Taxmann Publications Private Limited, ISBN-13: 978-8171949991	

Semester	IV	Course Code	4T1	Type of Course	Elective
Course Name	OM4: SALES AND OPERATIONS PLANNING				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	At the end of the course the student will be able to develop short term, medium term and long term forecasting needs in the organization.				
CO2	The student will be able to apply forecasting models for forecasting.				
CO3	The student will be able to develop aggregate planning by applying aggregate strategies.				
CO4	The student will be able to plan MPS and calculate bill of materials and MRP for production plan.				
CO5	The students will be able to plan distribution of finished goods taking into consideration various inputs and constraints.				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	
Module 1	Need for Operations planning and control, Forecasting – Need for forecasting, Time horizons			Operations Management, Theory and Practice, By B. Mahadevan, Pearson	

	of forecasting – Short term, Medium term and Long term, Stages of forecasting, Sources of data	Publications, Chapter 13
Module 2	Models of Forecasting – Time Series, Moving Averages, Causal Methods and Econometric Model	Operations Management, Theory and Practice, By B. Mahadevan, Pearson Publications, Chapter 13
Module 3	Aggregate Planning – Need for Aggregate Production planning, Capacity adjustments, Basic Strategies, Level and Chase Strategies	Operations Management, Theory and Practice, By B. Mahadevan, Pearson Publications, Chapter 14
Module 4	MPS and MRP – Concepts of MPS and MRP, Bill of Materials, Capacity requirement planning, Relation between MPS,CRP and MRP	Operations Management, Theory and Practice, By B. Mahadevan, Pearson Publications, Chapter 15
Module 5	Distribution Planning – Sales Orders, Lead time considerations, Inventory analysis and distribution planning, Use of ERP	Operations Management, Theory and Practice, By B. Mahadevan, Pearson Publication, Chapter 12s
Other Reference books and sources	1. Sales and Operations Planning, 3 rd Edition, T.F. Wallace, Robert A Stahl, T.F. Wallace; Third edition, ISBN-13: 978-8184047394 2. Operations Management : Theory and Pract, B. Mahadeva, Pearson Education India; Third edition, ISBN-13: 978-9332547520 3. Operations and Supply Chain Management, F. Robert Jacobs & Richard Chase , McGraw Hill Education; Fourteenth edition, ISBN-13: 978-9339204105 4. Sales Management – Decsion Strategy and Cases, 5 th Edition, Richard R.Still, Edward W. Cundiff &Norman Govani, Pearson, ISBN 978-81-317-1089-0	

Semester	IV	Course Code	4T1	Type of Course	Elective
Course Name	BA4: WEB AND SOCIAL MEDIA ANALYTICS				
Credits	4	Number of hours:	40		
Detailed Course Objectives					

CO1	The student will be able to choose the right tools for website design for measured outcomes.	
CO2	The student will be able to construct a modern metrics of better performance from eight specific metrics for web performance.	
CO3	The student will be able to develop a model for moving quickly from data to actions on a particular website.	
CO4	The student will be able to develop the model for measuring the success of a Mobile & Social Media Campaign..	
CO5	The student will be able to develop a model for the website Outcome.	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Choosing Right Tools for Website : Paradox of data, Defining Web Analytics 2.0 over Click Stream Analysis, Four steps approach for the predetermined success for a website,	Web Analytics 2.0 By Avinash Kaushik, Wiley International Inc, Publishing House, Chapter 1 & 2
Module 2	New Web Analytics 2.0 Mind set : Eight Critical web Metrics. Click Stream Analysis, Best Web Analytics Reports	Web Analytics 2.0 By Avinash Kaushik, Wiley International Inc, Publishing House, Chapter 3, 4 & 5.
Module 3	Leveraging Qualitative Data : Lab usability studies, Usability alternatives, Surveys & Web Enabled User Research Options, Power of Testing & Experimentation.	Web Analytics 2.0 By Avinash Kaushik, Wiley International Inc, Publishing House, Chapter 6 & 7.
Module 4	Mobile & Social Media Analytics : Measuring New Social Web - Data Challenge, Analysing Off Line Customer Experiences, Analysing Mobile User Experiences, Measuring the success of blogs, Quantifying the success of Twitter.	Web Analytics 2.0 By Avinash Kaushik, Wiley International Inc, Publishing House, Chapter 9.
Module 5	Website Outcome - Goal Completion, Goal Value, Goal Conversion Rate, Goal abandonment Rate, Goal Reports, Goal Reports, E-Commerce, Shopping Analysis, Product Performance, Sales Performance, affiliate Marketing, Customer Loyalty	Web Analytics 2.0 By Avinash Kaushik, Wiley International Inc, Publishing House, Chapter 10..
Other Reference books and sources	1. Social Media Analytics 1/e, Ganis/Kohirkar, Pearson Education India; First edition., ISBN-13: 978-9332578463 2. Big Data Analytics Using Splunk: Deriving Operational Intelligence from Social Media, Machine Data, Existing Data Warehouses, and Other Real-Time Streaming Sources (Expert's Voice in Big Data), Peter Zadrozny & Raghu Kodali, Apress; 1st ed. Edition, ISBN-13: 978-1430257615 3. Web Analytics Action Hero: Using Analysis to Gain Insight and Optimize Your Business, 1e, Brent Dykes, Pearson Education India, ISBN-13: 978-9332502208 4.	

Semester	IV	Course Code	4T1	Type of Course	Elective
Course Name	ED4: ENTREPRENEURIAL MARKETING				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	The student will be able to interpret the micro and macro environment of the firm				
CO2	The student will be able to use entrepreneurial approaches to marketing functions.				
CO3	The student will be able to describe consumer buying decision process				
CO4	The student will be able to justify the franchising mechanism as a tool for entrepreneurial marketing				
CO5	The student will be able to justify and elaborate the tools of relationship marketing				
Detailed Contents:				Reference Book, Publisher, Edition, Page No.	
Module 1	Definition of Entrepreneurship Marketing, The entrepreneurship marketing environment, Macro Environment of Entrepreneurial Marketing , Micro Environment of Entrepreneurial Marketing			Entrepreneurship Marketing, Principles and Practice of SME Marketing by: Sonny Nwankwo Publisher: Routledge First Edition 2011, Chapter 2&5	
Module 2	Theoretical approaches to marketing in small businesses, Marketing activities by entrepreneurial firm, Entrepreneurial approaches to the marketing functions ; Product, Price, Place, Promotion, Process, People, Physical evidence.			Entrepreneurship Marketing, Principles and Practice of SME Marketing by: Sonny Nwankwo Publisher: Routledge First Edition 2011 Chapter 1&4	

Module 3	Understanding consumers in entrepreneurship marketing; Levels of involvement and problem-solving types, consumer buying decision process, influences of the buying decision process.	Entrepreneurship Marketing, Principles and Practice of SME Marketing by: Sonny Nwankwo Publisher: Routledge First Edition 2011, Chapter -6,7&8
Module 4	Franchising in entrepreneurship marketing, Benefits, Issues affecting success and failure of Franchising , Steps in establishing a franchise	Entrepreneurship Marketing, Principles and Practice of SME Marketing by: Sonny Nwankwo Publisher: Routledge First Edition 2011, Chapter 19
Module 5	Relationship marketing and networks in entrepreneurship; The Six-Markets Model Of RM; Networks for entrepreneurial RM, The Future direction of RM and Networks	Entrepreneurship Marketing, Principles and Practice of SME Marketing by: Sonny Nwankwo Publisher: Routledge First Edition 2011, Chapter 15
Other Reference books and sources	1. Entrepreneurial Marketing: An Effectual Approach, Edwin J. Nijssen, Routledge; 2 edition, ISBN-13: 978-1138712911 2. Entrepreneurial Marketing, Ian Cheston, Palgrave Macmillan; New edition, ISBN-13: 978-1137500908 3. Entrepreneurial Marketing: Global Perspectives, Zubin Sethna, Rosalind Jones, Paul Harrigan , Emerald Group Publishing Limited, ISBN-13: 978-1781907863 4.	

Semester	IV	Course Code	4T1	Type of Course	Elective
Course Name	IB4: INTERNATIONAL HUMAN RESOURCE MANAGEMENT				
Credits	4	Number of hours:	40		
Detailed Course Objectives					

CO1	Students will be able to differentiate between international and domestic HRM and analyze issues in IHRM and competencies of international managers	
CO2	Students will be able to understand recruitment and selection process for expatriates and various concepts involved in it such as HR outsourcing	
CO3	Students will be able to perceive concepts involved in training and development of expatriates and concepts such as diversity training and cross cultural team building.	
CO4	Students will be able to understand and examine various international performance management processes and compensation of expatriates	
CO5	Students will be able to understand and analyze various cultural dimensions, cultural sensitivity as well as should be able to elaborate collective bargaining and employee relations in various countries.	
Detailed Contents:		Reference Book, Publisher, Edition, Page No.
Module 1	Concept of international HRM , differences between international and domestic HRM, Strategic role of International HR department, HR cycle, Issues in IHRM , competencies required for international managers	Gupta S.C., International Human resource Management- text and cases, Macmillan Publication Ch.1 & 2
Module 2	HR Planning and Information Systems , recruitment and selection of expatriates, International labour market sources, attracting and selecting international managers and selecting expatriates, selection tests, Adjustment model, HR outsourcing	Gupta S.C., International Human resource Management- text and cases, Macmillan Publication Ch.3
Module 3	Expatriate Training & development: cultural awareness training, cultural integrator, developing an international mind-set, types of cross-cultural training, cultural assimilators, diversity training, cross-cultural team building	Gupta S.C., International Human resource Management- text and cases, Macmillan Publication Ch.4
Module 4	Multinational performance management, performance management of expatriates and variables that influence performance, performance feedback, compensation of expatriates and its various approaches, cultural impact and compensation policy , termination of contract	Gupta S.C., International Human resource Management- text and cases, Macmillan Publication Ch.5 & 6
Module 5	Convergence of cultures, culture change, determinants of culture, importance of cultural sensitivity and its effect on management approaches, Hofstede's cultural dimensions, bridging cultural gap, preference of cultural types of various countries, culture excellence approach, managing diversity, Industrial relations, collective bargaining , trade unions and employee	Gupta S.C., International Human resource Management- text and cases, Macmillan Publication Ch.11, 12, 13 & 16

	relations across countries	
Other Reference books and sources	1. International Human Resource Management, K. Aswathappa & Sadhna Dash, McGraw Hill Education; 2 edition, ISBN-13: 978-0071077941 2. International Human Resource Management, Anne-Wil Harzing, Ashly Pinnington, SAGE Publications India Private Limited; Fourth edition, ISBN-13: 978-9386062895 3. International Human Resource Management, Peter J. Dowling, Marion Festing , Allen D. Engle , Cengage Learning India Private Limited, ISBN-13: 978-9386668585 4. International Human Resource Management, P.L. Rao, Excel Books, ISBN-13: 978-8174465962	

Semester	IV	Course Code	4P5	Type of Course	Elective
Course Name	PROJECT WORK AND VIVA VOCE				
Credits	4	Number of hours:	40		
Detailed Course Objectives					
CO1	In a specialization domain of his / her choice, student manager will be able to choose an appropriate topic for study and will be able to clearly formulate & state a research problem				
CO2	For a selected research topic, student manager will be able to compile the relevant literature and frame hypotheses for research as applicable				
CO3	For a selected research topic, student manager will be able to plan a research design including the sampling, observational, statistical and operational designs if any				
CO4	For a selected research topic, student manager will be able to compile relevant data, interpret & analyze it and test the hypotheses wherever applicable				
CO5	Based on the analysis and interpretation of the data collected, student manager will be able to arrive at logical conclusions and propose suitable recommendations on the research problem				
CO6	Student manager will be able to create a logically coherent project report and will be able to defend his / her work in front of a panel of examiners				
Detailed Contents:				Reference Book, Publisher, Edition, Page	

		No.
Module 1	Revision and Review of Business Research Course (1T3) with practical/ application orientation	Business Research Methods – William G. Zikmund, 7 th Edition, Cengage Learning, ISBN – 978-81-315-0029-3, Chapter 6&7
Module 2	Synopsis proposal formulation – Format, Tools and Techniques	http://intra.tesaf.unipd.it/pettenella/Corsi/ReaserchMethodology/ResearchSynopsisWriting.pdf

10 instructional hours may be engaged by a designated faculty members while 30 tutorial hours should be engaged by individual project supervisors/guides

Guidelines for Project Work and Viva Voce

1. For Project work a batch of Maximum **TWENTY** students per guide /supervisor has to be allotted by the Institute. The Guide/Supervisor shall act as an internal examiner for project Examination.
2. The guide or the supervisor shall be appointed by the institute and should be teaching to MBA Programme with minimum qualifications as prescribed by AICTE for Assistant Professor. The guide / supervisor shall be responsible for conducting tutorials for allotted number of students under his/her guidance.
3. **ONE copy** of Project work (Printed and hardbound) shall be submitted to the College/Department at least one month before commencement of MBA Sem IV Examination for evaluation purpose. The college/Department shall retain the copy of Project Work for evaluation and the list of 'Project Work Titles' of all students shall be submitted to the University.

4. Following documents must be attached with the project report -

- i. A certificate from the Supervisor to the effect that the candidate has satisfactorily completed the Project work for not less than one session and that the Project work is the result of the candidates own work and is of sufficiently high standard to warrant its presentation for examination
- ii. A certificate obtained through anti-plagiarism software stating that the original content of the project work report is more than 80% must be attached at the beginning of the project report.
- iii. A declaration by the candidate that the Project is the result of his/her own research work and the same has not been previously submitted to any examination of this University or any other University. The Project shall be liable to be rejected and /or cancelled if found otherwise.
- iv. A pre-approved and duly signed synopsis should be attached at the end of the project report.

Rubric for evaluation of project report and viva voce

Rubric:ProjectSynopsis/ProposalEvaluation

	Excellent (16-20 Marks)	Good (11-15 Marks)	Average (6-10 Marks)	Poor (0-5 Marks)	Score
Synopsis: Identification of Problem Domain and Detailed analysis of Feasibility, Objectives and Methodology of Project Proposal	<ul style="list-style-type: none"> Detailed and extensive explanation of the purpose and need of the project Detailed and extensive explanation of the specifications and the limitations of the existing systems All objectives of the proposed work are well defined; Steps to be followed to solve the defined problem are clearly specified 	<ul style="list-style-type: none"> Good explanation of the purpose and need of the project Collects a great deal of information and good study of the existing systems; Good justification to the objectives; Methodology to be followed is specified but detailing is not done 	<ul style="list-style-type: none"> Average explanation of the purpose and need of the project; Moderate study of the existing systems; collects some basic information Incomplete justification to the objectives proposed; Steps are mentioned but unclear; without justification to objectives 	<ul style="list-style-type: none"> Moderate explanation of the purpose and need of the project Explanation of the specifications and the limitations of the existing systems not very satisfactory; limited information Only Some objectives of the proposed work are well defined; Steps to be followed to solve the defined problem are not specified properly 	
Quality of Literature Review	<ul style="list-style-type: none"> Information is gathered from multiple, research-based sources. 	<ul style="list-style-type: none"> Information is gathered from multiple sources. 	<ul style="list-style-type: none"> Information is gathered from a limited number of sources. 	<ul style="list-style-type: none"> Information is gathered from a single source. 	
Project Report and References	<ul style="list-style-type: none"> Project report is according to the specified format References and citations are appropriate and well mentioned 	<ul style="list-style-type: none"> Project report is according to the specified format References and citations are appropriate but not mentioned well 	<ul style="list-style-type: none"> Project report is according to the specified format but some mistakes In-sufficient references and citations 	<ul style="list-style-type: none"> Project report not prepared according to the specified format References and citations are not appropriate 	

Discussion and Conclusions	<ul style="list-style-type: none"> • Discussion and conclusions tie the problem statement, experiments, and results well to tell an overall story. • Future work clearly outlined. 	<ul style="list-style-type: none"> • Some discussion and conclusions drawn, but missing some points in terms of linkage of results to problem statement 	<ul style="list-style-type: none"> • Major components missing in the discussion. • Little attempt to tie together experiments and problem statement/claims 	<ul style="list-style-type: none"> • Little discussion or conclusions drawn. 	
Oral Presentation and viva voce	<ul style="list-style-type: none"> • Contents of presentations are appropriate and well delivered • Contents of presentations are appropriate and well delivered • Clear voice with good spoken language but less eye contact with audience • Comprehensive Q&A for all questions 	<ul style="list-style-type: none"> • Contents of presentations are appropriate but not well delivered • Eye contact with only few people and unclear voice • Comprehensive Q&A for some questions 	<ul style="list-style-type: none"> • Contents of presentations are appropriate but not well delivered • Eye contact with only few people and unclear voice • Average Q&A 	<ul style="list-style-type: none"> • Contents of presentations are not appropriate and not well delivered • Poor eye contact with audience and unclear voice • Poor Q&A 	

Semester	IV	Course Code	4S6	Type of Course	Elective
Course	EXIT SEMINAR AND OPEN DEFENCE				

Name			
Credits	4	Number of hours:	40
Detailed Course Objectives			
CO1	The student will be able to apply knowledge of management theories and practices to solve business problems		
CO2	The student will Foster Analytical and Critical thinking abilities for data-based decision making		
CO3	The student will acquire Ability to develop Value Based Leadership ability		
CO4	The student will develop the Ability to understand, analyse and communicate global, economic, legal, and ethical areas of business		
CO5	The student will acquire the Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.		
Guidelines and Format for Exit Seminar and Open Defence			
<p>Exit Seminar is a culmination and presentation of all the learning that has happened in last 4 semesters of MBA program. The idea is to check the key learnings of a student manager and to map them with the program outcomes so as to assess the attainment of program outcomes. The Viva-Voce should be targeted at assessment of following POs.</p> <p>MBA Program Outcomes:</p> <ol style="list-style-type: none"> 1. Apply knowledge of management theories and practices to solve business problems 2. Foster Analytical and Critical thinking abilities for data-based decision making 3. Ability to develop Value Based Leadership ability 4. Ability to understand, analyse and communicate global, economic, legal, and ethical areas of business 5. Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment. <p>This will also present the student portfolio evaluation i.e. a systematic and organized collection of a student's work that exhibits the direct evidence of a student's efforts, achievements and progress over a period of time including Theory Papers, SIP, Live Projects, MOOCs, etc.</p> <p>Format for Presentation-</p> <p>Presentation should include following-</p> <ol style="list-style-type: none"> 1. Summary of Learnings from core courses across semesters 2. Summary of Learning from elective 1 courses 			

3. Summary of Learning from elective 2 courses
4. Summary of Learning from MOOCs
5. Summary of Learning from Summer Internship Project
6. Summary of Learning from Project Work
7. Exhibition of student portfolio i.e. a systematic and organized collection of a student's work that exhibits the direct evidence of a student's efforts, achievements and progress over a period of time including Theory Papers, SIP, Live Projects, MOOCs, etc.
8. Level of Attainment of PO1 with justification
9. Level of Attainment of PO2 with justification
10. Level of Attainment of PO3 with justification
11. Level of Attainment of PO4 with justification
12. Level of Attainment of PO5with justification
13. Concluding Remark

Open Defence - The external examiner should ask questions to check the attainment of 5 POs

Evaluation of Exit Seminar:

- The individual presentation should ideally last for 15-20 minutes followed by Open Defence Question-Answer session (10-15 minutes).
- The External Examiner (appointed by the University) should evaluate Maximum 20 (Maximum 10 at One Institute) Exit Seminars.

Rubric for Evaluation- the external examiners based on exit seminar, presentation and open defence performance shall evaluate the student as Excellent (9-10 marks), Good (5-8 marks) or Average (0-4 marks) and mention the score in the rubric

Name of Institute:	
Name of Student:	
Roll No. :	Enrolment No.:
Parameter [Excellent (9-10 marks), Good (5-8 marks) or Average (0-4 marks)]	Score
Learnings from core courses	

Learnings from elective 1 courses		
Learnings from elective 2 courses		
Learnings from SIP/ Project		
Assessment of Student Portfolio		
Attainment of PO1 (Apply knowledge of management theories and practices to solve business problems)		
Attainment of PO2 (Foster Analytical and Critical thinking abilities for data-based decision making)		
Attainment of PO3 (Ability to develop Value Based Leadership ability)		
Attainment of PO4 (Ability to understand, analyse and communicate global, economic, legal, and ethical areas of business)		
Attainment of PO5 (Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment)		
Name of Examiner:	Signature of Examiner and Date:	
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