RTU

MBA Syllabus

2021-22

THIRD SEMESTER MBA TEACHING SCHEME

THIRD SEMESTER MBA TEACHING SCHEME

S. No.	Course Type	Paper Code	Paper Title	No of Sessions		Credits	Internal/ Minimum Marks	External/ Minimum Marks	Total
				Per Semester	Per Week				
			Theory Courses : Dual Specialization is proposed: Six Subjects (Three from each group) The student will get specialized in two Majors.						
1	PEC1			24	2	3	30/12	70/28	100
2	PEC2			24	2	3	30/12	70/28	100
3	PEC3			24	2	3	30/12	70/28	100
4	PEC1			24	2	3	30/12	70/28	100
5	PEC2			24	2	3	30/12	70/28	100
6	PEC3			24	2	3	30/12	70/28	100
7	MCC		Audit Course	12	1	0	30	70	100*
8	REW	M-316	Summer Training Project Report	48	4	3	120/60	80/40	200
9	PEC1	M-317	Major Lab (Functional Area I)	24	2	1	60/30	40/20	100
10	PEC2	M-318	Major Lab (Functional Area II)	24	2	1	60/30	40/20	100
11	PCC3	M-319	Managerial Skills Development Lab	24	2	1	60/30	40/20	100
12	SODECA		Social Outreach, Discipline & Extra Curriculum Activities	-			-	100/40	100
			Total for III Semester	**276**	**23**	**24**	**510**	**790**	**1200**

*Note: Marks of audit course will not be considered for credit purpose

List of Functional Areas for MBA (Third Semester)

Group A [FINANCE]

S. No.	Subject Code	Subject Title
Semester III		
1.	M-310	Security Analysis & Portfolio Management
2.	M-311	International Financial Management
3.	M-312	Marketing of Financial Services
4.	M-313	Corporate Taxation
5.	M-314	Banking and Finance

Group B [MARKETING]

S. No.	Subject Code	Subject Title
Semester III		
1.	M-320	Integrated Marketing Communication
2.	M-321	Retail Management
3.	M-322	Sales Distribution and Logistics Management
4.	M-323	Product & Brand Management
5.	M-324	Industrial Marketing

Group C [HUMAN RESOURCE MANAGEMENT]

S. No.	Subject Code	Subject Title
Semester III - Electives		
1	M-330	Training & Development
2	M-331	Strategic Human Resource Management
3	M-332	Manpower Planning
4	M-333	Compensation Management
5	M-334	Human Resource Development

Group D [Operations & Supply Chain Management]

S. No.	Subject Code	Subject Title
III Semester		
1	M-340	Materials Management
2	M-341	Total Quality Management
3	M-342	Manufacturing Planning & Control
4	M-343	Management of Business Process Outsourcing
5	M-344	Export, Import Procedures and Documentation

Group E [INFORMATION TECHNOLOGY MANAGEMENT]

S. No.	Subject Code	Subject Title
III Semester		
1	M-350	Software Engineering
2	M-351	E-Business
3	M-352	Strategic Management of Information Technology
4	M-353	Information Security and Cyber Law

Group F [BUSINESS ANALYTICS]

S. No.	Subject Code	Subject Title
III Semester		
1	M-360	Data Science & Analytics
2	M-361	Data Warehousing & Mining
3	M-362	Big Data Technologies
4	M-363	BlockChain Technologies

M-316: SUMMER TRAINING PROJECT REPORT

Objectives   1. To provide an opportunity for students to apply theoretical concepts in real life world decision making.

2. To sensitize students to the nuances of corporate culture and familiarize them with the corporate code of behavior.

Learning Outcomes   1. To facilitate the fundamental understanding of the functioning and organization of business.

2. Communicate and collaborate effectively and appropriately with different professionals in the work environment to manage resources, work under deadlines, identify and carry out specific goal oriented tasks..

3. To develop ability to take responsibility, make sound decisions and apply technical skills effectively.

- Summer Training Project offers an opportunity to put learning into practice and it also serves as an important experiential channel for students to move towards finalizing their preferences on various specializations.

- At the end of the second semester examination, it is mandatory for every student of MBA to undergo on-the- job practical training in any manufacturing, service or financial organization. The training will be of **6 to 8 weeks** duration. The college/institute will facilitate this compulsory training for students.

- During the training, the student is expected to learn about the organization and analyze and suggest solutions to a live problem. The objective is to equip the students with the knowledge of actual functioning of an organization and problems faced by them for exploring feasible solutions.

- During the course of training, the organization (where the student is undergoing training) may assign a problem/project to the student.

- The student, after the completion of training will submit a report to the College/Institute which will form part of the third semester examination. The report must be submitted after three weeks of Summer Internship completion. The report (based on training and the problem/project studied) prepared by

the student will be known as Summer Training Project Report. It should reflect in depth study of an organization where the student undergoes training.

- One comprehensive chapter must be included about the organization where the student has undergone training. This should deal with brief history of the organization, its structure, performance, products/services and problem faced. This chapter will form Part 1 of the report. Part 2 of the report will contain the study of problem undertaken during training. The average size of report ordinarily will be of minimum **100 pages** in standard font size (12) and double spacing. Two neatly typed (one sided only) and soft bound copies of the report will be submitted to the College/Institute. The report will be typed on A-4 size paper.

- The report will have three certificates, one by the Head of the Department, another by the Faculty guide and third one from reporting officer of the organization where the student has undergone training. These three certificates should be attached in the beginning of the report.

- The Summer Training Project Report comprises of 200 marks and will be evaluated by two examiners (external and internal). The evaluation will consist of (1) Project Report evaluation (2) Project Presentation and Viva Voce. The Project Report evaluation will comprise of 120 sessional marks and would be evaluated by internal project guide. The Presentation and Viva Voce would comprise of 80 marks and would be evaluated by two examiners (1 external and 1 internal).

Break-up of components for evaluation of Summer Training Project Report

	Components							Marks	Total Marks
	Interaction with Mentor/ faculty supervisor							20	
	Project daily-activity record							20	
	Project Report Internal Evaluation: Evaluation Criteria								
Internal Evaluation Criteria	SN		Unsatisfactory	Satisfactory	Good	Excellent	Score		120
			4	**8**	**12**	**16**			
	1	Understanding of Objectives and relevance with topic						80	
	2	Research Methodology							
	3	Data Analysis & Interpretation							

	4	Conclusion and Recommendations						
	5	Presentation Query handling						
External Evaluation Criteria	Project Report External Evaluation: Evaluation Criteria							80

	SN		Unsatisfactory 4	Satisfactory 8	Good 12	Excellent 16	Score	
	4	Conclusion and Recommendations						
	5	Presentation Query handling						
External Evaluation Criteria	**Project Report External Evaluation: Evaluation Criteria**							**80**
	1	Understanding of Objectives and relevance with topic						
	2	Research Methodology						
	3	Data Analysis & Interpretation						
	4	Conclusion and Recommendations						
	5	Presentation Query handling						

- It is mandatory that the student will make presentation in the presence of teachers and students. The student is expected to answer the queries and questions raised in such a meeting.
- The student shall prepare the Summer Training Report as per the format given in the Summer Training Manual as prescribed by the University
- The students will also be required to submit a completed feedback form from these summer organizations.

Student's Name:
Programme:

SUMMER TRAINING APPRAISAL

You are requested to provide your opinion on the following parameters.

4: Excellent   3: Good   2: Satisfactory   1: Unsatisfactory

1. Technical knowledge gathered about the industry and the job he/she was involved. ☐
2. Communication Skills: Oral / Written / Listening skills ☐
3. Ability to work in a team ☐
4. Ability to take initiative ☐
5. Ability to develop a healthy long term relationship with client ☐
6. Ability to relate theoretical learning to the Summer Training Project ☐
7. Creativity and ability to innovate with respect to work methods & procedures ☐
8. Ability to grasp new ideas and knowledge ☐
9. Presentations skills ☐
10. Documentation skills ☐
11. Sense of Responsibility ☐
12. Acceptability (patience, pleasing manners, the ability to instill trust, etc.) ☐
13. His/her ability and willingness to put in hard work ☐
14. In what ways do you consider the student to be valuable to the organization? ☐
Consider the student's value in term of:
    (a) Qualification ☐
    (b) Skills and abilities ☐
    (c)) Activities/ Roles performed ☐
15. Punctuality ☐
Any other comments _____

Assessor's Overall rating ☐

Assessor's Name:
Designation:

Organization name and address:
Email id:

Contact No:

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

SUMMER TRAINING PROJECT

(Instructions & Guidelines)

Training Methodology and

Training Report Preparation ....
Training Methodology: Tips ....
Guidelines for Training......................

Enclosures:

1. Specimen of Certificate
2. Specimen of Title Cover
3. Training Evaluation Form
4. Feedback Form

IMPORTANT:

1. Summer Training Project during summer at the end of 2nd Semester will be held for 6-8 Weeks. Students have to work on a project. Industrial and Technical visits should also be organized.

2. Students will have to give presentation on their Summer Training Project after coming back. One slot of 2 periods per week is to be provided in 3rd Semester for presentation.

3. For Summer Training Project 200 marks are assigned in 3rd Semester

FOREWORD

This document will serve a reply to several queries right from choosing a training site to submission of the report.

The main purpose of Summer Training Project is to prepare students for employment in their chosen discipline at the conclusion of two years of postgraduate studies.

Summer Training Project helps to gain first- hand experience of working as management professional, including the technical application of management methods. It provides opportunity to work with other management professionals. During training period a student can experience the discipline of working in a professional organization and can also develop technical, interpersonal and communication skills. It also facilitates the fundamental understanding of the functioning and organization of business.

Many companies regard this period as a chance to assess students for future employment. The ability to take responsibility, make sound decisions and apply technical skills is highly regarded. Further, students can also evaluate companies for which they might wish to work or make decisions about fields of management, which they enjoy.

You should make considerable effort and give sufficient thought obtaining the most relevant and effective Summer Training Project. It is difficult but desirable to obtain experience in a range of activities including design, analysis and experimental and on-site activities.

TRAINING METHODOLOGY AND TRAINING REPORT PREPARATION

SUMMER TRAINING PROJECT

Summer Training Project forms an integral component of any professional course like Management. The real problem a manager faces and tackles live problem is the industry and the field. The institute where he pursues his studies cannot provide him that practical knowledge on all aspects of learning. Often the study of a subject is said to be incomplete until the student has been exposed to its practical aspects. The theoretical studies build the manager in him by providing him pools of knowledge whereas the practical applications make him agile and competent. If theoretical knowledge teaches him the principles and policies, the practical exposure tells him how to use those principles.

EXPECTATIONS

Training may be defined as a short-term process utilizing a systematic and organized procedure by which training personnel acquire technical knowledge and skills for a definite purpose. It provides an opportunity for students to apply theoretical concepts in real life situations at the work place. It is to sensitize students to the nuances of corporate culture and familiarize them with the corporate code of behavior. It enables students to manage resources, work under deadlines, identify and carry out specific goal oriented tasks. Further, it enables students to discover their professional strengths and weaknesses and align them with the changing business environment. A management trainee, while undertaking training must keep in mind these objectives.

A student is expected to complete his Summer Training Project with the sole objective of enhancing his practical knowledge. A successful training should be in accordance with the needs and objectives set before hand. Ask yourself these questions.

1. What do you want and hope to accomplish through training?
2. Should the training be formal or informal i.e. what are going to be your training priorities?
3. When and where should training be taken?
4. How should training be related to your curriculum and how much independent of it?

Summer Training Project must be undertaken only in an actual job environment and using only the tested principles and methods of learning like instructional methods, demonstrations and examples. He must ensure that the training site has such arrangement and environment that will assist him in achieving these objectives.

SELECTION OF THE SITE

The student trainees must ensure that the training site will provide him full opportunity not only to learn the practical applications of the subject chosen but also help him to achieve the above stated objectives and expectations. It will always be better if he chooses a site that will offer him an opportunity to develop multi-disciplinary interests along with the pursuance of a certain training program. He must also look forward for getting an opportunity of placement in the same company/site after completing his degree. Often, the impression made during the training has a long lasting effect.

TRAINING REPORT

A technical report is an account, usually in detail, of some matter such as (a) a work completed or in progress, (b) findings from an investigation, information, search or study; (c) solution to a problem and/or (d) offering of specific theoretical of practical data. While undertaking training and pursuing a project, the management student must be involved in one or more of these activities.

ANATOMY OF A TRAINING REPORT

A well-organized report is divided into easily recognizable parts arranged in an effectual sequence. A training report is a formal report, which is a full scape, detailed tightly structured document. It may contain the following parts arranged for effective communication in the report in the sequence shown as below:

Front Matter

Title Page

Letter of Transmittal

Certificate

Preface

Acknowledgement

Table of Contents

Lists of Illustrations

Main Text

Introduction (Chapter 1)

Discussion (Body of the report)

Conclusion and Recommendations (last chapter)

Back Matter

Appendices

References

Bibliography

HOW TO BEGIN WRITING

A time proved good way to write a report is first to subdivide the job into essential steps and then to complete the corresponding parts step by step. Follow these steps carefully while preparing training or a project report.

Step 1: Preliminary Planning

The writing of a report proceeds more confidently and smoothly if the trainee understands the true nature of the desired end products. He must also know where he is heading for and how far he has progressed toward completion at any instant. This requires careful planning and scheduling. Planning is a flexible process because it must be adjusted to suit every individual's requirement. He must prepare a time schedule and a deadline on which the report must be completed.

Step 2: Collecting Material

Factual material counts principally of data obtained through tests and measurements, investigations, studies, surveys, observation and analysis of such data, calculation and prediction and recommendations too. No attempt should be made to insert the theoretical principles found in the textbooks.

The need is also felt to maintain a daily diary giving full details of day-to-day activity. This also serves as a record and ready references of the training schedule at a later stage. This diary is also to be submitted along with the report.

Step 3: Making an Outline

After the material has been collected, it must be organised and written upon in a well-ordered pattern. To achieve this, the student must decide which topic should be discussed first, which next and so on. The plan for this sequence is the outline. An outline is a safeguard against repetition and omission and a guide to stratification of the subject matter. Report writing moves faster when it follows an outline. It also imparts to the report a degree of unity and coherence. It is always advisable to prepare a written outline as soon as the collected material has been scrutinized. This will help the student to establish a relationship between the various topics of the report. An outline shall also help him to think analytically about the subject.

Step 4: Writing a Rough Draft

When the trainee has collected and sorted the material and completed the outline, this initial writing step will produce the first version of the report. It will however, be seen only as a piece of connected prose derived from the mass of notes and other material. It will lack quality, both technical and rhetorical that is why it is called a rough draft. But it is a trial version of the written report.

Often the trainee faces the difficulty in writing the first draft. The only solution is "start writing at once whatever you have reviewed through collected material and the outline." Therefore, the first advice is to start writing immediately. The second is to write fast putting your thoughts on paper before you forget them. This means you should not stop to make corrections or beautify sentences. You should only record the ideas as they come, giving no thought at the time to correct spelling, grammar,

and sentences structure and paragraphing. Once the material is on paper, it can easily be corrected.

Always use your favourite method of writing long had with personal abbreviations refer freely to illustrations and tables or sketches. The sole criterion is your ability to read the draft. Do not hesitate to include line drawings, half tone pictures, flow diagrams, graphs and charts.

Step 5: Revision and Rewriting

This is the improvement phase for correcting the mistakes in the rough draft, adding items, which were forgotten, or which have lately been suggested, removing items, which have been proved irrelevant or superfluous. During this phase, the student is concerned with all the details that he temporarily ignored for the sake of speed while writing the first draft such as language mechanisms, style, technical accuracy and so on. He should now try to view the rough draft dispassionately as if he is correcting somebody else's writing faults. As he reads the rough draft, he should be alert for errors and bad writing of all kinds.

It is better to make three separate readings, concentrating each time on one correction area:

1. Read the rough draft first time for technical accuracy and avoid worrying about other matters. Ask these questions: Is the technical content true and clearly presented? Are there errors and contradictions?
2. Read the second time for logic. Ask whether the topics follow a meaningful sequence and whether the conclusions are valid.
3. Read the third time for language mechanisms. Be critical of every sentence, check grammar, spelling, punctuation, sentence structure and sentence variety. Ask whether the draft lacks unity and coherence.

During each reading, make your corrections, additions, deletions on the rough draft itself. Then prepare that to the second draft incorporating all the revisions. Again read and revise the second draft for any additional revisions and visualizing whether its contents are ready for final presentation.

Step 6: Final Draft

Working on the final draft is largely mechanical and of productive nature. The final draft is made ready for the reader or the evaluator/examiner and this is the last change to correct mistakes, polish the writing and systematize the structure.

This step requires gathering together of all material, which has been prepared or collected in the preceding phases and the consolidation of the material. This includes the revised draft, illustrations and supplementary material. Prepare the last version of the report by putting all the material together. Illustration must be inserted, pasted or drawn onto the pages of the final draft itself. Number the text pages with Arabic numerals.

Follow these six steps to prepare your report and get the satisfaction of having authored and produced a work of which originality you can claim. Any short cut methods, copying from the reports of predecessors and just repeating what others have earlier written, clearly show the lack of enthusiasm and initiative on the part of

the trainees. Such reports, at the time of evaluation, fail to draw any attention and are rated as under-average or average reports. On the other hand, if the report displays the trainee's hardwork, his initiative, his enthusiasm and real effort in making that report, it is rated as a work of merit. Such a report will always create a good impression at any instance when it is submitted for scrutiny.

There are some parts of the report, which cannot very well be written until all information is final and the pagination is complete. These parts are:

1. Abstract

2. Letter of transmittal

3. Acknowledgement

4. Preface or foreword

5. Index / Table of Contents

All this material is front matter and should be composed in rough draft and carried through revisions as necessary. The abstract must give the gist of the report analytically outlining what the trainee has worked on. In the acknowledgement, all sources from where help has been derived during the training should be duly acknowledged. This includes, besides teachers of the college, such persons like training manager, supervisors, superintendents and other technical staff. The preface is an account justifying why that site / topic was chosen and what inspired the student in due course. This shall also include a brief description of what he is going to present in the report, the abstract of its contents and the structure. Any additional illustrations, graphs sketches and tables are to be appended at the end. Finally, an index or a list of contents is prepared with pagination and chapter names and numbers. Ensure that chapterization is strictly in accordance with the outline of the report and no sections/sub- sections have been left out.

Project Work during Training

Often during the training a single student is given a project to complete. The project is solely to give you an opportunity to become well versed with a specific section of the training site or get an exposure of its working methods. It is also possible that the project is a part of their routine work, survey or investigation, and by undertaking the project the student is only going to assist them. Whatever is the mode or purpose of the project, show diligence and enthusiasm? You must adopt an inquisitive approach, finding more about the project, its specifications and utility. If possible, complete the project (or component) before completing your training and submit the account of your work in the form of a project report. This report shall serve as an evidence of the work done. If the project is a part of your training program, it must always be included in your report. Otherwise also, such an inclusion in the training report shows the innovative bent of your mind. The evaluation becomes much easier since it clearly indicates that training was not just a routine excursion for you but an opportunity to learn and add something to your knowledge. And you have availed of that opportunity fully.

The project entrusted to the trainee will always be related to advances in Management pertaining to Marketing, Finance, HR, Operation & Supply Chain Management, IT,

Business Analytics etc. It will also be linked with one or more of the activities of the plant/training centre. Often their personnel, from technical, administration, finance or HRD, will also be involved in that Project. Try to get a separate testimonial for your project work from one of the officials.

TRAINING METHODOLOGY: A FEW TIPS

A lot of mistakes can be avoided and improvement can be made if certain measures are adopted before proceeding on the training and during the later phases.

BEFORE THE TRAINING

1. Read the instructions carefully in this training manual and follow them strictly to avoid any complications of any nature.
2. Fill up the necessary forms and letters and Performa's provided in this manual.
3. Stick to the information supplied regarding the training site, confirmation etc. In the event of any change of training site or any other matter, inform the Training Officer of your institute immediately before proceeding on training.
4. The students are required to carry their identity cards, and two recent passport size photographs for verifications, gate pass etc.
5. They are also required to carry and furnish their personal bio-data, bonds, securities and clearance certificates issued by the police for various purposes of training.
6. They should also ensure their accommodation etc. because normally training centres do not provide hostel facilities.

DURING THE TRAINING

1. The student should reach the training centre well before the date of commencement of the training. They should also intimate about the commencement of training to Training Officer of your Institute as early as possible or within two days of joining their training
2. They must be regular, punctual and well behaved. They should not leave the training centre without the prior permission of the Training Supervisor.
3. They should maintain a daily diary to be checked and signed by the training supervisor from time to time. If required they must prepare a daily / weekly report and submit it to the supervisor.
4. They should take safety precautions as normally no compensation for any accident is payable to the trainee. They should also abide by the rules and regulations of the training organization.
5. While visiting the different sections of the training centre, they should collect the practical / data. They should also inquire the reasons for any deviations from the standard theoretical values. They may also collect information about personnel working on the site/ field / job regarding their qualification, experience etc. Remember that it will not be possible to revisit the training centre to collect material or rebuild the training experience once the training is over. All these data should be prominently included in the training Report. They should also study relevant trade literature collected from site / office / market. All these should be suitably incorporated in the training report.
6. At the end of the training they must clear their dues and other expenses incurred by them at the training centre including the damages, if any. They

must also get a formal relieving certificate / no dues certificate before leaving the centre.

7. Collect a certificate of training upon completion, which should indicate the period of training, the nature of work involved during the training and the performance of the student.

AFTER THE TRAINING

1. Always prepare the outline of the training report just 2 or 3 days before the completion of the training. Upon completion put all the material together and arrange them according to daily diary or the outline.

2. Consult your outline with training supervisor before leaving and also discuss it with the teacher regarding important contents of the report. They will furnish all necessary details, guidelines and literature, which will help you to prepare the report.

3. Always follow the 6 step method described in this manual for writing your training report.   This is necessary to systematize and accelerate your work.

1. Always work with deadlines while writing chapters and finish them as visualized. Do not make any last minute entries or contribution as it may not be possible to revisit the training centre or recast the training experience.

2. Make good presentations of the report; neatly typed, with hardbound cover containing all the required details. Often-in campus interviews or direct interviews your training / project reports are evidence of your hard work, intellectual interests and even temperament.

GENERAL GUIDELINES FOR TRAINING:

This consists of important areas on which a student should collect relevant information while undergoing Summer Training Project in an organization:

Broad Areas-

1. Inputs- Raw Materials

2. Production Process

3. End Products and Specification

4. Organizational Structure

5. Financial setup

6. Sales and Marketing strategies

7. Plant Design

8. Materials Management system

9. Quality Control System

10. Management Information System

11. Utilities and Waste Management

12. Plant Economy

13. Human Resource Management

The guidelines for above-mentioned broad areas are as below:

1. Inputs: Raw Materials, details of raw materials pertaining to various products including quantity, specifications, sources of supply, vendor location, geographical availability, procurement cost, etc.
2. Production Process: Process flow diagram of manufacturing process, various stages in production.
3. End Products and Specification: List of final products, market growth of products, product demand and supply, competitors, customers for products
4. Organizational Structure: Organization chart for the whole organization showing various levels of authority, span of control at each level, type of arrangement at each level in terms of line, line and staff and functional details etc.
5. Financial setup: Balance sheet, Profit and Loss account and other financial instruments.
6. Sales and Marketing strategies: Various sales and marketing strategies employed by the organization must be studied.
7. Plant Design: Capacity of plant, its measurement and utilization, Plant Size, location and layout.
8. Materials Management System: Procedure adopted in stores for receipt of raw materials, goods and components, various forms and documents used for movement of materials and issue authorization, stores organization; centralized or decentralized, codification methods used for different materials, system of replenishment for inventory items, controls like ABC analysis, procedure for indenting spares etc.
9. Quality Control System: Methods used for controlling quality of raw materials, process and manufactured items, SQC application, testing machines used, implementation of ISO 9000.
10. Management Information System: Documents/reports used for information system at operational, tactical and strategic levels, communication network at various levels, organization of coordination meetings and decisions taken.
11. Utilities and Waste Management: List of utilities and auxiliary services needed, Information about waste generated, methods of reducing waste, environment pollution problems created ash disposal, and effluent treatment system.
12. Plant Economy: Project costing, components of production cost- direct and indirect, financial analysis- balance sheet, income statement, accounting for inventory, breakeven/profitability analysis.
13. Human Resource Management: Recruitment policy, retention policy to reduce turnover rate, employees benefits etc.

(Specimen of the certificate to be submitted with the training report)

CERTIFICATE

Ref. No.:

This is to certify that Mr./Ms. _____ son/daughter of Sh. _____ a student of _____ (class) _____ (session) from _____ (institute) has undertaken Summer Training Project at our organization concern from _____ to _____. The nature of work seen and observed/ studied/ performed by him/her during the training was _____ . (kindly give the description)

His/her performance and conduct during the training was found satisfactory/ good/ excellent.

Place :   **Signature**
Date: **(Official Seal)**

NOTE: This certificate should be from an authentic officer not below the rank of Executive.

(Specimen of the title cover of the training report)

PRACTICAL TRAINING REPORT

SUBMITTED BY

Name   :   _____

                                           (In Capital Letters_

Institute Roll No.   :   _____

Session   :   _____

Training Period   :   _____ to _____ days _____

SUBMITTED TO

Professor & Head
Department of Training & Placement

Name of the College

SUMMER TRAINING PROJECT EVALUATION FORM

Name of Student_____ Institute Roll No. _____

Session _____

Name of Organization _____

Address _____

Place _____ Pin _____ Phone _____ Fax No. _____

Duration of Training Period from _____ to _____ No. of Working Days _____

1) How to you rate the overall training programme as an educational experience?

Excellent (   )   Very good (Good (   )   Fair (   )   Poor (   )
)

2) To what extent will it help you in future?

To large extent (   )   To some extent (   )   Negligible extent (   )

3) Indicate subject/ area to which training was found relevant.

_____

_____

4) Indicate the level of interest taken by the training organization

High (   )   Moderate (   )   Low (   )

5) Any other comments/ suggestions

_____

_____

Dated : _____

Signature of the Students

Note: A free and frank assessment of the Training experience would be helpful in improving the Training Programme.

FEED BACK FORM

1. Name of the Industry : _____

2. Concerned Group : _____

3. Turn Over (in terms of Capital) :_____ (in terms of Product)

4. Work Force :

5. Description of Product Range: _____

6. Description of Process: _____

7. Area of Training: _____

8. Contact details of the Person responsible for Summer Training Project:

    a. Name of contact person: _____

    b. Designation: _____

    c. Communication address: _____

    d. Phone No. with STD code: _____

    e. Mobile No. : _____

    f. Email Address: _____

Name of the student : _____

Institute Roll No: _____

Class: _____

Phone : _____ Mobile No. : _____

Email: _____

Dated : _____

Signature of the Student

M-317/M-318 Major Functional Area Lab I & II

Semester III

Course Objectives:

1. To give industry exposure to students by complementing traditional classroom teaching/learning with focus on group activity, field work, experiential learning, self-study projects, Industry Exposure.

2. To imbibe Research acumen in students thereby developing Inter-personal, Analytical, Cross-Cultural and Entrepreneurial Skills to aid them in establishing and managing their careers in chosen field of specialization.

Learning Outcomes:

1. Develop critical skills, practical knowledge and aptitude in the area or specialization.

2. Demonstrate the ability to probe into real life problems through an analytical approach.

3. Acquire skills specific to area of specialization in accordance with the corporate requirements.

Guidelines:

- The Lab work would comprise of total four Practical Component/Field based assignments out of 12 Practical Component/Field based assignments of Dual Majors opted by a student in III Semester and IV Semester. For example if a student has opted for first major as Finance and second major as Marketing then in course M-304 the lab work would comprise of 02 Practical Component/Field based assignments of Finance (two out of total of 06 projects in three papers opted in first major) and 02 Practical Component/Field based assignments of Marketing (two out of total of 06 projects in three papers opted in second major). Similarly, in IV Semester in course M-405 the lab work would comprise of 02 Practical Component/Field based assignments of Finance (two out of total of 06 projects in three papers opted in first major) and 02 Practical Component/Field based assignments of Marketing (two out of total of 06 projects in three papers opted in second major). Thus, a student will work on four Practical Component/Field based assignments in Semester –III and four Practical Component/Field based assignments in Semester-IV.

In addition to it each student in the Major Lab-Functional Area I & II (Semester III & IV) will also undertake hands on experience on any one software pertaining to the functional area along with any one Book Review related to the Functional Area as depicted in the table below:

> ➢ Practical Component/Field Based Assignments (To select 02 out of 06 Proposed against the three papers opted by student in the Functional Area I and Functional Area II respectively.)
> ➢ Hands on practice on any one software.
> ➢ Book Review (Any one).

- The students shall work on the Major Lab-Functional Area I & II (Semester III & IV) for the below mentioned Functional Areas as per the details enclosed herewith.

S.No.	Subjects	Group
1	Financial Management	Group A
2	Marketing Management	Group B
3	Human Resource Management	Group C
4	Operations and Supply Chain Management	Group D
5	Information Systems	Group E
6	Business Analytics	Group F

- There shall be regular class room interactions as per the number of hours allotted to it.

- The reports shall be prepared using word processor Viz., MS word, using Times New Roman font sized 12, on a page layout of A4 size with 1" margin on all sides and 1.5 line spacing. Each Major Lab-Functional Area I & II(Semester III & IV) shall not exceed 60 pages.

- In course M-304 student will prepare a report and PowerPoint Presentation of projects undertaken in each of dual majors i.e. two reports (one report and presentation of first major opted by the student and one report and presentation of second major opted by the student in III Semester). The student will submit one hard copy and one soft copy of each report in PDF file (Un-editable format) to the Institute on the date prescribed by the Institute or one week before the commencement of the examination. Similarly, in course

M-405 in IV Semester student will prepare a report and PowerPoint Presentation of projects undertaken in each of dual majors i.e. two reports (one report and presentation of first major opted by the student and one report and presentation of second major opted by the student in IV Semester). The student will submit one hard copy and one soft copy of each report in PDF file (Un-editable format) to the Institute on the date prescribed by the Institute or one week before the commencement of the examination.

- Major Lab-Functional Area I & II(Semester III & IV)carries 100 marks consisting of 60 marks for internal evaluation by the internal examiner, 40 marks for external evaluation by external examiner through viva-voce examination. The Major Lab-Functional Area I & II(Semester III & IV) will be evaluated by two examiners (external and internal). The evaluation will consist of (1) Report evaluation (2) Presentation and Viva Voce.

- **Course M-304 carries 100 marks consisting of 60 marks for internal evaluation by the internal faculty, 40 marks for external evaluation through Presentation/Viva-voce examination.**

- Course M-405 also carries 100 marks consisting of 60 marks for internal evaluation by the internal faculty, 40 marks for external evaluation through Presentation/Viva-voce examination.

- It is mandatory that the student will make presentation in the presence of faculty and students. The student is expected to answer to the queries and questions raised in such a meeting.

- Break-up: of components for evaluation of Major Lab Functional Area I & Functional Area II (Semester III and IV) is as follows:

Internal Evaluation Criteria			
	Components	**Marks**	**Total Marks**
Internal Evaluation Criteria	Attendance	05	60
	Class Participation and Interaction	05	
	Practical Component/Field Based Assignments :(2x15)	30	
	Hands on practice on any one software	10	
	Book Review(Any one)	10	

		External Evaluation: Evaluation Criteria						
	SN		**Unsatisfactory**	**Satisfactory**	**Good**	**Excellent**	**Score**	
			2	**4**	**6**	**8**		
External Evaluation Criteria	1	Understanding of Objectives with topic						40
	2	Understanding of Reliance of topic						
	3	Interpretation & Analysis						
	4	Presentation						
	5	Query handling						

Course Title
Finance (Group A)
Semester III

Course Objectives:	1. To develop a practical outlook among students regarding financial concepts and tools. 2. To inculcate problem solving acumen among students for addressing problems related to the field of finance.
Learning Outcomes:	1. Students will be able design portfolios of investors based on market conditions. 2. Students will be able to successfully apply theoretical concepts of finance in the real financial world. 3. Students will be able to acquire practical skills required by financial service sector industry.

S.No.	Component	
1.	**Practical Component/ Field Based Assignments**	
	M-310 - SECURITY ANALYSIS & PORTFOLIO MANAGEMENT	

	Title/Activity	1. Develop a portfolio comprising five listed shares on Indian stock Exchange considering the current market scenario.
		Following points should be kept in mind while designing the portfolios
		    a) The choice of stocks should be based on detailed analysis done on past performance of the companies.
		    b) Portfolios have to be designed from the perspective of two types investors who are planning to exit in short run and who are planning to stay in market for long run.
		    c) Describe the current scenario under which the portfolio is being developed – Bullish or bearish.
		    d) Calculate the risk and return component based on the observations made during the month.
		2. Conduct a survey of 50 respondents through a questionnaire to know their financial planning, investment patterns in equity, debt and insurance products.

	M-311-INTERNATIONAL FINANCIAL MANAGEMENT	
	Title/Activity	1.Study and document India's Current Account (BOP) transactions for last five years. Examine and comment on the constituents of Current Account transactions that affect BOP surplus/deficit for the said study period. Also suggest remedies for BOP deficit, if any. 2. Examine and prepare a report on the constituents of Capital Account. Analyze the trend of FDI and FPI inflows in the Capital Account during the study period and indicate their impact on the Indian Economy and volatility in the Indian Financial Markets.

		M-312-MARKETING OF FINANCIAL SERVICES
	Title/Activity	1. Study and prepare report on marketing strategies adopted by any three broking firms of India for selling financial products and services. 2. Conduct a questionnaire-based survey of 50 respondents taking their feedback on their perception towards banking, insurance or any financial services companies and services offered by them.
		M-313-CORPORATE TAXATION
	Title/Activity	1.Study and prepare a report on tax planning of any three firms with reference to their financial management decisions for past three years. 2. Critically assess and prepare a report on the effectiveness of GST collection since its launch.
		M-314-BANKING AND FINANCE
	Title/Activity	1. Prepare a report on electronic payment systems used by the banking industry and online payment gateways. 2. Study and document different lines of credit offered by the banks to retail customers in India.
2.	**Hands on Practice Software**	1.R Software 2.E-Views (Student version free download) 3.Money Bhai 4.Investar 5.Zoho Books (Trial Version)
3.	**Book Review**	• Benjamin Graham(2013)The Intelligent Investor, Harper Business • Morgan Housel ,The Psychology of Money(2020),Jaico Publishing House • Saurabh Mukherjea(2018)Coffee Can Investing: The Low Risk Road to Stupendous Wealth, Portfolio

Books Recommended:
1. Prasanna Chandra Investment Analysis and Portfolio Management, Tata McGraw Hill ,2017.
2. S. Kevin, Fundamentals of International Financial Management, PHI, EEE, 2012.
3. Dr. Vinod K Singhania & Dr Monica Singhania, Corporate Tax Planning and Business tax Procedures, Taxmann Publication, Latest Edition
4. V.A. Avadhani Marketing of Financial Services, Himalaya Publishing House, 2013.

Course Title
Marketing (Group B)
Semester: III

Course Objectives:	1. To determine when and how to use various functions of Marketing such as sales promotion, personal selling, direct marketing, New product development strategy, Brand Management etc. 2. To comprehend market realities and devise effective strategies to win over competition and gain market share.
Learning Outcomes:	1. To acquire knowledge, concepts, tools necessary to overcome challenges, and issues of marketing in a changing technological landscape. 2. Understand facets of software in marketing & develop in depth understanding of Softwares used in Marketing Practices. 3. Systematically identify relevant marketing theory and concepts, relate these to appropriate methodologies and evidence, apply appropriate techniques and draw appropriate conclusions.

S.No.	Component	
1.	**Practical Component/Field Based Assignments**	
	M-320-INTEGRATED MARKETING COMMUNICATION	
	Title/Activity	1. Pick a brand and gather all its marketing communication materials. How effectively has the brand mixed and matched marketing communications? Has it capitalized on the strengths of different media and compensated for their weaknesses at the same time? How explicitly has it integrated its communication program? 2. Choose a popular event. Who sponsors it? How are they building brand equity with their sponsorship? Are they integrating the sponsorship with other marketing communication?
	M-321-RETAIL MANAGEMENT	
	Title/Activity	1. Visit a kirana store and a supermarket and compare the following: a) store arrangement b) Number of brands carried. c)pricing policies (discount policy) d)service quality. 2. Visit a department store and evaluate the in-store marketing effort .Which categories or brands seem to be receiving the biggest in-store push? What unique in-store merchandising efforts do you see?

	M-322-SALES DISTRIBUTION AND LOGISTICS MANAGEMENT	
Title/Activity	1. Interview three salesperson and write a brief report about what they like and dislike about their jobs, their salary, travelling allowances, sales quotas, Territorial Plans, Reasons for choosing career in Sales and Qualities required to be successful in sales. 2. Identify Area sales manager of 5 different FMCG companies. Follow the trail of each sales call, the number of calls made and how and on which activities he/she spends time. Research suggests that about 50% of their total time is spend on sales and services and rest time is spend on other administrative functions. Make a list of these tasks and the percent of time spent by each ASM in completing each task. Also perform a comparative analysis of distribution channel of these five FMCG companies.	

	M-323-PRODUCT & BRAND MANAGEMENT	
Title/Activity	1. Pick a brand. Identify all its brand elements and assess their ability to contribute to Brand equity. Also mention, your favourite brand characters? Do you think they contribute to brand equity in any way? Can you relate their effects to the customer based brand equity model? 2. Pick a brand assess its effort to manage brand equity in the last five years. What actions has it taken to be innovative and relevant? Can you suggest any changes to its marketing program.	

	M-324-INDUSTRIAL MARKETING	
Title/Activity	1. Conduct one week of Industry survey in the context of B to B marketing by visiting minimum five companies. Carefully study their Product Development and promotion strategies . The data collected can be analyzed using appropriate statistical software and report the findings. 2. Identify one company predominantly in the industrial marketplace from one of the following industries: Manufacturing, general services, professional services, information/ communications technology, media, wholesaling, and financing. For the selected company: • Briefly describe company's industrial products and services. • Identify at least one B2B customer of the company. Evaluate the relationship between the company and the customer.	

		• Analyse the company's customer value proposition and competitive differentiation in the business markets.; • Explain the differences between the marketing practices of this company and those often adopted by B2C companies.
2.	**Hands on Practice on any one software**	1. Hoot suite 2. Racker RMS CRM. 3. Digital Marketing Boot Camp 4. Zest 5. Oktopost
3.	**Book Review (Any one)**	1. Tony Treacy (2021), How to Become a Master of Persuasion: Establishing Value and Convincing Your Customers of It, Business Expert Press 2. Paul Darley(2021), The Art of Relationship Sales, Smart Business Network 3. Scott Miller, (2021), Marketing Mess to Brand Success: 30 Challenges to Transform Your Organization's Brand (and Your Own)

Books Recommended:
1. George E. Belch & Michael A. Belch: Advertising & Promotions, An Integrated Marketing Communications Perspective, 12th   Edition, Tata McGraw Hill, 2021.
2. Swapna Pradhan, Retailing Management, McGrall Hill India publication, 2020.
3. Tapan K. Panda and Sunil Sahadev, Sales and Distribution Management,Oxford University Press,2019.
4. Kevin Lane Keller, Vanitha Swaminathan, Strategic Brand Management. Building, Measuring and Managing Brand Equity, 5th Global Edition, Pearson Education, 2020.
5. Heidi Taylor, B2B Marketing Strategy: Differentiate, Develop and Deliver Lasting Customer Engagement, First Edition, Kogan Page, 2017.

Course Objectives:	1. To bridge the gap between theoretical knowledge and its application through a series of practical components in the form of mini-projects, book reviews and different HR software used by organizations. 2. To develop applied knowledge of Human Resource functions in any organization.
Learning Outcomes:	1. Gain hands-on-learning experience of different HR functions in organizations. 2. Develop skills to assess training needs and design training programmes in an Organizational setting. 3. Develop insight and competence in diagnostic and intervention processes and skills for initiating and facilitating change in organizations with regard to HR systems.

S. No.	Component	
1.	Practical Component/ Field Based Assignments	
	M-330-TRAINING & DEVELOPMENT	

	Title/Activity	1. To plan, design, deliver, and evaluate an original training program/module for any organization of your choice.
		Process:
		1. Each student will select their own topic for their training program/module.
		2. Students shall conduct a needs assessment for their proposed training program. This should include both a person and a task analysis. Make clear in the write-ups what interview questions, questionnaires, etc. are used.
		3. Based on the needs assessment and any assumptions students may need to make, develop specific training objectives.
		4. Develop a detailed Training Proposal (Project Plan), which should include:
		    a. Title and brief description of the program
		    b. Training objectives
		    c. Training methods to be used, and a rationale (justification) for using them, based on training theory
		    d. Proposed instructors, and the reason for using them
		    e. A tentative training outline/lesson plan

| | | f. | A tentative list and description of training materials needed |
| | | g. | An evaluation plan (including both short- and long-term evaluation, where appropriate) |

M-331-STRATEGIC HUMAN RESOURCE MANAGEMENT	
Title/Activity	1. (A) Assess the approach toward human resource management taken by any organization. What factors might you evaluate in determining whether an organization uses a traditional or strategic approach to managing its human resource? Develop specific questions that need to be answered and administer the questionnaire to the concerned HR authorities.
	(B) Select any local organization and investigate these factors by interviewing selected key decision–makers.
	2. Visit any organization and interview HR and top managers to find out the following with regard to HR outsourcing-
	• Which HR activities have been outsourced by these firms?
	• Why these activities have been outsourced?
	• When these firms began to outsource?
	• Which HR activities have not been outsourced and why?
	• Which activities are likely to be outsourced in the near future?
	• The benefit that the firm has reaped by outsourcing,
	• The employee strength of HR department.
	The report is expected to highlight the trends in HR outsourcing and the rationale for those trends. The students are expected to learn about the importance of HR outsourcing in the current business environment.

M-332-MANPOWER PLANNING	
Title/Activity	1. Visit any two organizations preferably IT or BPOS and examine the employee referral policy as a source of recruitment. Highlight the advantages and disadvantages of the policy.
	2. Identify and analyze the stages of planning human resource requirements in any organization of your choice.

		M-333-COMPENSATION MANAGEMENT	
	Title/Activity	1. Briefly interview an employee in his or her 20s, 30s, 40s, 50s and 60s. Determine what motivates employees from different generations and design compensation plans for each generation that would result in high performance. 2. Analyze the various employee benefits and reward schemes offered at the senior level management in any organization of your choice.	
		M-334-HUMAN RESOURCE DEVELOPMENT	
	Title/Activity	1. Find the HR Climate and Systems used in 6 Indian Companies, analyse and identify the trends that may be observed in terms of HRD practices. 2. Identify any one successful merged company of your choice, collect data from employees regarding changes in HRD strategies pre and post merger.	
2.	**Hands on Practice on any one software**	1. Orange HR 2. Fluida 3. Freshteam 4. Homebase 5. HRLocker	
3.	**Book Review (Any one)**	1. HR from the Outside In: Six Competencies for the Future of Human Resources Dave Ulrich, Jon Younger, Wayne Brockbank, Mike Ulrich 2. HR Disrupted: It's Time for Something Different Lucy Adams 3. Belonging at Work: Everyday Actions You Can Take to Cultivate an Inclusive Organization Rhodes Perry, MPA	

Books Recommended:
1. Noe, R. A., & Kodwani, A. D. (2019). Employee training and development, 7e. McGraw-Hill Education.
2. Mello, J. A. (2014). Strategic human resource management. Cengage Learning.
3. Dessler, G., & Varrkey, B. (2016). Human Resource Management, 15e. Pearson Education India.
4. Milkovich, G. T., Newman, J. M., & Milkovich, C. (2020). Compensation. McGraw-Hill.
5. Pareek, U., & Rao, T. V. (2015). Designing and managing human resource systems. Oxford and IBH publishing.

Course Title
Operations Management (Group D)
Semester III

Course Objectives:	1. To develop a practical outlook among students regarding manufacturing related concepts and tools. 2. To inculcate problem solving acumen among students for addressing problems related to the field of Industrial Production.
Learning Outcomes:	1. Students will be able to assess the requirements of productions related activities. 2. Students will be able to use and apply appropriate techniques to solve the issues related to operations management in Industrial Environment. 3. Students will be able to improve the effectiveness of various techniques by analyzing the outcome.

SN	Component	
1.	Practical Component/ Field Based Assignments	
	M-340 -MATERIALS MANAGEMENT SOFTWARE	
	Title/Activity	1. Study and prepare a chart for Vendor selection procedure for any retail company(like Reliance Fresh) for supply of FMCG items. 2. Prepare formats of different documents used in stores, like bin card, Material issue note, material return note, item inspection report & item warrantee record.
	M-341 - TOTAL QUALITY MANAGEMENT	
	Title/Activity	1. Prepare a documentation and requirement report for ISO 9000 for any retail / manufacturing industry, already having ISO certification. 2. Prepare a report with parameters (for quality assurance in manufacturing process / raw materials) for a company suggesting necessary implementation of TQM approach with procedure indicating practical benefits.
	M-342-MANUFACTURING PLANNING AND CONTROL	
	Title/Activity	1. Prepare a maintenance budget and a report on equipment reliability maintenance procedure for plant production increased productivity. 2. Prepare a report on Flexible manufacturing system indicating the improvement process and benefits for any consumer product manufacturing unit like Refrigerator, washing machine, air conditioner etc.

		M-343-MANAGEMENT OF BPO ORGANIZATION		
	Title/Activity	1. Prepare a report for lost sales of a drinking water bottles manufacturing companyfor its quality improvement by six sigma approach and analyse problems byfishbone diagram. 2. Prepare a report for,how data are transferred and kept in privacy in a BPO firm.
		M-344-EXPORT, IMPORT PROCEDURES AND DOCUMENTATION
	Title/Activity	1. Prepare a report from last 10 years data of India's export and import to determine the key products and areas of opportunity. 2. Prepare report on special precautions to be taken while exporting handicraft items or processed food grade items.
2.	**Hands on Practice on any one software**	Students must be given exposure to some of the following Softwares: 1. Enterprise WMS and Interchange EDI, 2. eBideXchange, 3. 3PL Warehouse Manager by 3PL Central, 4. S C expert, 5. FlexRFP
3.	**Book Review (Any one)**	1. Kiran, D. R. (2019). Production planning and control: A comprehensive approach. Butterworth-heinemann. 2. Everett, E. A., & Ebert, R. J. (2008). Production and Operations Management: concepts, models and behavior. Prentice-Hall of India.

Books Recommended:
1. Buffa, E. S. (2007). Modern production management. Wiley.
2. Arnold, J. T., & Chapman, S. N. (2004). Introduction to materials management. Pearson Education India.
3. Groover, M. P. (2016). Automation, production systems, and computer-integrated manufacturing. Pearson Education India.
4. Besterfield, D. H., Besterfield-Michna, C., Besterfield-Sacre, M., Besterfield, G. H., & Urdhwareshe, H. (2011). Total Quality Management: For Anna University. Pearson Education India.
5. Kulkarni, S. (2008). Business Process Outsourcing. Jaico.

Course Title
Information Technology Management (Group E)
Semester: III

Course Objectives:	1. To Explain and apply the core aspects of information technology principles and tools, and manage their implementation in a business context 2. To integrate complex IT projects and strategies with consideration of the human, financial and environmental factors and an understanding of risk management processes, and operational and policy implications.
Learning Outcomes:	1. Apply practical experience in IT projects for real world clients focusing on technology auditing and recommendations, and system development. 2. Utilize interpersonal skills to negotiate and communicate effectively with both technical and non-technical stakeholders verbally and in writing. 3. Design and document robust, extensible and highly maintainable data-intensive applications using cutting edge technologies tailored to the specific needs of any business scenario.

S.No.	Component	
1.	**Practical Component/ Field Based Assignments**	
	SOFTWARE ENGINEERING	
	Title/Activity	1. Develop a mini project for designing backend using software engineering techniques. Visit the company to understand the problem, study the existing system and present drawbacks of existing system and scope of the proposed system. Identify users of the system. Gather data requirements and functional requirements. Identify Entities and their Attributes and draw Entity Relationship Diagrams. Design the database for the system. 2. Teams play a very important role in developing any software project. Visit a company and find out number and types of teams working on software projects. Create an analytical report of a team that studies the team potential, effectiveness, commitment, function, and performance. Describe the types of projects, type of team for each, and role of each team member, prior performance record of the team, software and hardware used in projects, hierarchy of team management and communication medium, etc.

		E-BUSINESS	
	Title/Activity	1. In this project students are advised to study the internet architecture and infrastructure adopted by organization to sustain its e-Business. The infrastructure would include hardware, software, web-technologies and collaborative technologies. The project report must include a detailed description of the organizational infrastructure to support e-business. The students are also supposed to analyse the Mission and Vision statement of the organization and align it with recent e-Marketing strategies. The project report should also include the impact of e-Marketing over traditional marketing in terms of growth trends, cost benefits, client reach and return on investment. 2. Companies are selling their products and/or services globally. The major challenges that are faced by the organization are whether to standardize their product offerings or services or to customize their product offerings or services. This decision concerns companies commencing to market their products in the country as well as those already operating internationally and considering expanding into further markets. In this project the students are advised to study the contemporary issues faced by the organization for standardization. The project report should include e-Business risk, security concerns and impact of on-demand delivery of products or services during standardization.	
	STRATEGIC MANAGEMENT OF INFORMATION TECHNOLOGY		
	Title/Activity	1. Choose an organization to design a long-term plan of action to achieve particular enterprise goals which are strongly related to environmental changes. Adopt a strategy to make the enterprise respond according to those changes. Explore information technology strategies with forecasting features as well as strategies for reducing uncertainty. Some of the following tools may be used for creating strategies: • Information technologies that support the strategy generation process. • Strategy modelling tools – current and ideal state modelling. • Scenario development and evaluation systems. • Strategy mapping tools. • Strategy visualization tools. • Tools for strategic business modeling. • Strategic forecasting technologies.	

		2. Visit an organization of your area of interest to monitor the environment in the organization and register the recent changes that have taken in the industry/organization and its environment. Develop a strategy according to the industry and environmental changes. Measure and evaluate the effectiveness of the developed strategy and apply strategy re-engineering algorithms if needed. Following systems could be used accordingly: • Business performance measurement systems. • Strategic control systems. • Strategy evaluation and re-engineering systems.
	INFORMATION SECURITY AND CYBER LAW	
	Title/Activity	1. The students should visit corporate houses/BPOs and understand the mechanism of how cyber laws are enforced in India. They should also refer to case studies like that of BPO arm of MPhasiS Ltd who defrauded US customers of Citibank for Rs 1.5 crores for their reference. 2. The radio frequency identification (RFID) tags on credit or debit cards can be read as they are used by computers located at a short distance away and from a car lurking in a parking lot when you use your card at the ATM. This project might involve identifying the kinds of materials that will block an RFID reader and designing a solution to mask your cards' RFIDs. For this the students need to visit places like Amazon warehouse or any other warehouses, banks where RFID tagging is used.
2.	**Hands on Practice on any one software**	1. MS-Excel 2. CASE Tools 3. MS-Visio 4. Wix 5. Eclipse
3.	**Book Review (Any one)**	1. Information Security: Principles and Practice Hardcover – Import, 20 January 2022 2. by Mark Stamp, Publisher: Wiley; 3rd edition (20 January 2022), Hardcover: 448 pages 3. Working Backwards: Insights, Stories, and Secrets from Inside Amazon Paperback – 18 February 2021, by Colin Bryar, Bill Carr, Publisher: Macmillan (18 February 2021); Pan Macmillan UK, Paperback: 304 pages 4. Software Engineering at Google: Lessons Learned from Programming Over Time Paperback – 13 March 2020, by Titus Winters, Hyrum Wright, Tom Manshrek, Publisher: O'Reilly (13 March 2020), Paperback : 500 pages

Books Recommended:

1. Roger S Pressman, Bruce R Maxim, "Software Engineering: A Practitioner"s Approach", 8th Edition, 2019.
2. Dave Chaffey, e-Business & e-Commerce Management: Strategy, Implementation, Practice, Pearson Education, 5th Edition, 2013
3. Hanschke, Inge, "Strategic IT Management: A Toolkit for Enterprise Architecture Management", 1st edition, Springer publication, 2009.
4. William Stallings, "Cryptography and Network Security: Principles and Practice", 8th Edition, Pearson Education, 2018.

Course Title
Business Analytics (Group F)
Semester: III

Course Objectives:	1. Identify, model and solve decision problems in different settings and to critically apply the concepts and methods of business analytics. 2. Explain and apply the core aspects of information technology principles and tools, and manage their implementation in a business context.
Learning Outcomes:	1. Design, document and develop robust, extensible and highly maintainable data-intensive applications using cutting edge technologies tailored to the specific needs of any business scenario. 2. Understand and facilitate the strategic and operational benefits of business models and technology applications. 3. Manage complex IT projects with consideration of the human, financial and environmental factors and an understanding of risk management processes, and operational and policy implications.

S.No.	Component	
1.	**Practical Component/ Field Based Assignments**	
	DATA SCIENCE & ANALYTICS	
	Title/Activity	1. Students will collect data online or offline from an industry of any domain; identify the requirement for making recommendation system for selected domain. Use data mining algorithms for providing recommendations among different available options using clustering algorithms. For example students can try Movie recommendation. 2. Students will collect data from one company/ Industry. Identify the requirement and variables for **Exploratory Data Analysis.** Find potentially interesting, relevant patterns in the data through the creation of different graphs and plots that let you see relationships between different attributes of the dataset. For example, you can use tools histograms, bar graphs, scatter plots and find outlier in the given data.
	DATA WAREHOUSING & MINING	
	Title/Activity	1. In this project, Students may use customer level data of actual customer purchases offline and online to perform classification on data sets load each dataset into Weka and run

		classification algorithm. Study the classifier output. Extract if-then rules from the decision tree generated by the classifier, observe the confusion matrix. Load each dataset into Weka and perform Naïve-bayes classification and k-Nearest Neighbor classification. Interpret the results obtained and compare result.
		2. Students will collect data from a company/ Industry. Identify the requirements and variables to perform clustering of data sets. Load each dataset into Weka and run simple k-means clustering algorithm with different values of k (number of desired clusters). Study the clusters formed. Observe the sum of squared errors and centroids, and derive insights. Explore visualization features of Weka to visualize the clusters. Derive interesting insights and explain and also explore other clustering techniques available in Weka.
	BIG DATA TECHNOLOGIES	
	Title/Activity	1. Visit any retail e-commerce office and collect data about customers' experiences, behavior, demand and operational efficiency between different channels i.e. Coordination between inventory department and the production unit. Analyze its demand prediction, optimize asset utilization using big data tools.
		2. Tourism is a large sector that provides the livelihood for several people and can adversely impact the economy of a country. Collect the data from hotels, tour operators and create a project by analyzing the behavior based on decision making, perception, choice of destination and level of satisfaction using big data tools.
	BLOCKCHAIN TECHNOLOGIES	
	Title/Activity	1. Over a million documents are share over the internet every single hour. In this superfast world there are various ways to share documents easily and securely over the web. Also at the same time there is always a risk of document tampering. To solve these issues the students are supposed to visit corporates which deal in document apostille. This may include sender verification, receiver verification and document validation and then study a smart android based document sharing system over blockchain technology that ensures easy

		document sharing along with authenticity and reliability of a tamper proof system.
		2. Tenders or contracts are generally used by companies to procure goods or services. Wrongful tender management leads to huge losses in case of faulty practices. This includes favouring of contractors, improper record maintenance, lack of transparency, hacking, data modification and other issues. To ensure the complete tender management process is secure and efficient the students are supposed to visit such companies, and then identify how the use of blockchain technology solves tender management issues.
2.	**Hands on Practice on any one software**	1. SPSS 2. R-programming Tools 3. Hadoop 4. MS-Excel 5. Data Melt
3.	**Book Review (Any one)**	1. The Real Business of Blockchain: How Leaders Can Create Value in a New Digital Age Hardcover – 20 November 2019 by David Furlonger (Author), Christophe Uzureau, Publisher: Harvard Business Review Press, 20 November 2019, Hardcover: 272 pages 2. Financial Services Revolution: How Blockchain is Transforming Money, Markets, and Banking (Blockchain Research Institute Enterprise) Hardcover – 5 February 2020, Publisher: Barlow Publishing, 5 February 2020, Hardcover: 408 pages 3. The Art of Statistics: Learning from Data (Pelican Books) Paperback – 27 February 2020 4. by David Spiegelhalter, Publisher: Pelican 27 February 2020, Paperback: 448 pages

Books Recommended:

1. Foster Provost & Tom Fawcett, " Data Science for Business", O' Reilly, 2013
2. Jiawei Han and Micheline Kamber, Data Mining Concepts and Techniques, Third Edition, Elsevier, 2012.
3. Arshdeep Bahga, Vijay Madisetti, "Big Data Analytics: A Hands-On Approach", VPT, 2018
4. Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller and Steven Goldfeder, " Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction", Princeton University Press, 2016.

M-319 - Managerial Skills Development Lab

Course Objectives:	1. To provide exposure to the essential management skills that managers ought to possess to perform their duties efficiently. 2. To enable students to apply management concepts in their daily lives, assess current level of skill competence and knowledge and create corporate readiness.
Learning Outcomes:	1. Understanding the wide range of skills that management should possess to run an organization effectively and efficiently. 2. To make students ready to take on the responsibilities and contribute effectively towards the growth and development of a company. 3. Contribute towards holistic development of students so as to make them industry-ready managers.
Details of Lab Work	
Focusing on Interpersonal Communication	• Communication and the self-Management • Converting Challenges into Opportunities • Interpersonal Influence • Dealing with Resistance • Planning and Scheduling • Presentations
Teamwork Skills: Communicating Effectively in Groups	• Group development and decision making • Group conflict, difference, and diversity • Group communication and technology • Meeting Management
Career Success	• Effective Group Communication • Group Decision-Making • Group Conflicts
Time Management for Personal & Professional Productivity	• Identify Important Time Wasters • Techniques for Time Management • Significance of prioritizing • Work/life balance & Multi-tasking • Avoiding Procrastination of work
Leadership and Negotiation Skills	• Inspiring and Motivating Individuals • Managing Talent and Leading Team • Influence and Persuasion • Negotiation Skills • Negotiation Strategies and Styles

Practical Components/ Field Based Assignments	Select **any three** from the following and prepare a Report:
	1. Watch one interview of any Business Personality of your choice, create a Power Point Presentation on same personality and include following heads:
	   • Life story
	   • Achievements
	   • Challenges Faced

	• Your learnings
	2. Interview ten executive who travel outstation frequently. Ask them to describe what problems they face in communication during these visits and how they deal with such issues? Make checklist of Strategies and tactics that can be used when you travel outstation for business works, to deal with communication issues.
	3. Make a field trip to a rural area and observe how people communicate while conducting business transactions
	4. Spend a day at a public place – Mall/ movie hall/ Heritage site and observe how people communicate through mobile phones? Do you find any difference in the behaviour based on gender, age or socio-economic variable? Which aspect of your observation would you like to change and why?
	5. Your company kitchenmate which manufactures kitchen appliances has been awarded a prestigious quality award for both product design and Service Delivery. You are the CEO of the company you want to communicate this information to all the employees of the company, you would also like to use a personality to motivate the employees to continue with the good work. Write an inter-office memo with a suitable message.
	6. Create a Power Point Presentation after taking the editorial pages of the last five days of any business newspaper. Go through the contents and organise your findings under the following heads:
	    • Nature of subject matter (Current affairs, economics, etc.)
	    • Target audience of the various columns
	    • Presentation and organisation of contents
	    • Gaps in information that need to be addressed

Book Review: **(Any one)**	• Darren Hardy (2021). The Compound Effect, Manjul Publishing House, Macmillan. • Greg McKeown, (2021). Essentialism: The Disciplined Pursuit of Less, Virgin Books. • Scott H. Young (2019).Ultralearning: Accelerate Your Career, Master Hard Skills and Outsmart the Competition, HarperCollins

Books Recommended:
1. Stephen. R. Covey (2015). The 7 Habits of Highly Effective People by Simon and Schuster India; 2011th edition
2. Brain Tracy(2018). Eat That Frog!: 21 Great Ways to Stop Procrastinating and Get More Done in Less Time, Berrett Koehler Publishers
3. Rachel DeAlto (2021). Relatable: How to Connect with Anyone, Anywhere

Evaluation Criteria for Managerial Skill Development Lab

	Components							Marks	Total Marks
Internal Evaluation Criteria	Attendance							05	60
	Class Participation and Interaction							05	
	Written Tests/ In-class Quiz							10	
	External Evaluation: Evaluation Criteria of Report							40	
	SN		Unsatisfactory	Satisfactory	Good	Excellent	Score		
			2	4	6	8			
	1	Understanding of Objectives with topic							
	2	Understanding of Reliance of topic							
	3	Interpretation & Analysis							
	4	Presentation							
	5	Query handling							
External Evaluation Criteria	**External Evaluation: Evaluation Criteria of Report**								40
	SN		Unsatisfactory	Satisfactory	Good	Excellent	Score		
			2	4	6	8			
	1	Understanding of Objectives with topic							
	2	Understanding of Reliance of topic							
	3	Interpretation & Analysis							
	4	Presentation							
	5	Query handling							

Finance (Group A)

S. No.	Subject Code	Subject Title
Semester III		
1.	M-310	Security Analysis & Portfolio Management
2.	M-311	International Financial Management
3.	M-312	Marketing of Financial Services
4.	M-313	Corporate Taxation
5.	M-314	Banking and Finance

M-310-SECURITY ANALYSIS & PORTFOLIO MANAGEMENT

OBJECTIVES
1. To provide an overview of Investment opportunities.
2. To explain the process of calculating Risk and returns of Individual Securities and Portfolio of securities.
3. To explain creation and management of portfolios and applicable theories.

LEARNING OUTCOMES
1. Understand and apply the concepts, principles and theories applicable to securities analysis and portfolio management.
2. Identify and evaluate corporate securities.
3. Analyze and identify opportunities in stock markets.
4. Analyze investment opportunities in fixed income securities

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Concept of Saving and Investment:** Concept and relation between savings and investment at macro level, Investment objectives and avenues, Factors affecting savings & investment in India.	**3**
UNIT II	**Investing in Securities Market**- Overview of primary and secondary market. Stock Market Indices- Nifty and SENSEX (calculation methods used), Concept, types and procedure of Public Issue equity & debentures, criteria to evaluate financial market securities.	**3**
UNIT III	**Risk & Return**: Concept of risk and return, Risk free return and risk premium, Measurement of risk & return in controlled , regulated and market economy.	**2**
UNIT IV	**Portfolio Management and Portfolio Analysis: Concept**, Elements and types of Portfolio Management, measurement of risk and return in stock and financial markets Theories of Portfolio Management- CAPM, Markowitz Theory of Portfolio Selection, Evaluation of portfolio using Sharpe Measure & Treynor Measure. Portfolio Management in India	**4**
UNIT V	**Investment in Fixed Income Securities** –Fundamentals of Bond, Risk factors in fixed Income Securities, Yield v/s return, Types of yield, Significance and understanding of Bond rating in Investment decision making, Overview Bond Portfolio Management Strategies.	**3**
UNIT VI	**Valuation of Equity**: Scope of return in from Equity Investing, Models of Equity Valuation – Comparable Approach, Dividend Discount Models, Discounted Cash Flow Valuation Models	**3**
UNIT VII	**Fundamental Analysis** – Concept, EIC Framework- Economic, Industry and Company. Inferences and Implication from Fundamental Analysis.	**3**

| **UNIT VIII** | **Technical Analysis** -Concept, Types of Charts and formations in charts, Inferences of Charts. Application of Technical Analysis in India. | **3** |

Section B
At least one case study/ problem from each unit. Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
- Computation of risk and return of individual securities and portfolio of securities
- Understanding Major Stock market indices in India
- EIC analysis of any 3 listed companies on Indian Stock Markets and prepare a report of it.
- Understand Technical charts of any two companies each of any 2 sectors of choice using real time data.
- Empirical validation of CAPM and Markowitz theory of any two sectors.

BOOKS RECOMMENDED
1. Prasanna Chandra Investment Analysis And Portfolio Management, Tata McGraw Hill ,2017.
2. Kevin, S., Security Analysis and portfolio Management, PHI Learning, 2015
3. P. Pandian Security analysis and Portfolio Management, Vikas Publishing, House, 2012
4. Fischer and Jordon, Security analysis and Portfolio Management, Pearson ,2018
5. Prasanna Chandra, Behavioural Finance, Tata McGraw Hill , Second Edition
6. Sharpe F William, Alexander J Gordon and Baily V Jeffery, Fundamentals of Investments, PHI Learning Private Ltd, 2017.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Journal of Finance, Wiley Online Library
2. The Review of Financial Studies, Oxford Academic
3. Journal of Financial Economics, Elsevier
4. Journal of financial and Quantitative analysis ,Cambridge University Press

M-311-INTERNATIONAL FINANCIAL MANAGEMENT

OBJECTIVES
1. To introduce international financial environment and its implications.
2. To understand and analyze the recent developments and trends in global financial markets and global foreign exchange mechanism.
3. To understand implications and trends of international finance for developing economy.

LEARNING OUTCOMES
1. Analyze information within the global financial environment of foreign exchange to solve problems and make informed decisions.
2. Recognize and calculate forward exchange rates given spot rates.
3. Demonstrate an integrative understanding of the foreign exchange market and the relationships between interest rates, spot and forward rates and expected inflation rates.
4. Describe how foreign exchange rate markets work and predict exchange rates using alternative methods.

Section- A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction to International Financial Management:** Concept, Institutional framework in IFM. Recent trends and challenges in international Finance, Evolution of International Monetary System.	**2**
UNIT II	**Exchange rate regimes:** Different exchange rate regimes. Exchange rate mechanism. International Payments Gateway, Exchange Risk Management – hedging	**2**
UNIT III	**International investment strategies:** FDI and portfolio investment. International Financing sources and cost of foreign Borrowings. Cross currency management.	**3**
UNIT IV	**Balance of payments:** Concept, items, types of transactions, types of accounts and significance of BOPs: Disequilibrium in BOPs: its types. Remedial measures for correcting disequilibrium in BOPs –**J curve effect.**	**3**
UNIT V	**International financial market instruments**: ADRs, GDRs, Foreign bonds, euro bonds, floating rate notes, Global bonds, convertible bonds, **short- and medium-term instruments** – Euro notes, euro commercial papers, medium term euro notes.	**4**
UNIT VI	**Foreign Exchange Rate:** Meaning, types and determinants of foreign exchange rate, Spot market and Forward Market. The Real Exchange Rate, Real Effective Exchange Rate (REER) Cross Rates.	**4**
UNIT VII	**Exchange Rate Determination:** The Purchasing Power parity (PPP) Theory, The absolute form and the relative form, The Fisher Effect (FE) Theory (open and	**3**

closed proposition), Interest Rate parity Theory. The Balance of Payments Theory.

UNIT VIII	**Global Financial Markets**: Recent developments and Challenges. Global foreign Exchange Markets: characteristics & recent trends, Flow of International Currency and Role of Institutions.	**3**

Section B

At least one case study/problem from each unit. Questions will be case/inferences/application based.

PRACTICAL COMPONENT

- Study practical implication of PPP Theory on exchange rate of any two countries with a time range of 10 years.
- Determine forward rate of Rupee-USD on the basis of spot rate using Interest Rate Parity Theory
- Determine direct and indirect quotes between two currencies.
- Conduct an empirical study of J-Curve effect of any country experiencing a BOP deficit.
- Formulate strategy for hedging currency using forward contracts.

BOOKS RECOMMENDED

1. P.G Apte, International Financial Management, McGraw-Hill Education, 8th edition, 2020.
2. Alan Sharpio, Paul Hanouna, Multinational Financial Management. John Wiley Publication. 11th Edition 2019.
3. Cheol Eun and Bruce Resnick and TuugiChuluun, International Financial Management, McGraw Hill, 9th Edition 2021.
4. S. Kevin, Fundamentals of International Financial Management, PHI, EEE, 2012.
5. Vyuptakesh Sharan, International Financial Management, PHI, EEE, Sixth Edition, 2012.
6. Levi Maurice D., International Finance, Routledge, fifth edition.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. Journal of International Financial Management & Accounting, Wiley.
2. Journal of International Money and Finance, Elsevier.
3. International Review of Financial Analysis, ScienceDirect.
4. International Finance, Wiley Online Library.

M-312 MARKETING OF FINANCIAL SERVICES

OBJECTIVES
1. To understand various financial services in Indian economy.
2. To evaluate marketing of financial services and strategies for suitability and appropriateness in meeting consumer needs.
3. To assess the impact of financial innovation, advances in technology, and changes in regulations on financial services.

LEARNING OUTCOMES
1. Knowledge of current structure of the Indian financial services sector.
2. Creation of financial services brands in competitive market.
3. Learning management techniques and problems including regulatory aspects of Merchant Banking, Factoring, Credit rating agency etc.
4. Evaluate and create strategies to promote financial products and services.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Financial services-** Concepts, Types of financial services ,Regulatory Framework of Financial Services in India.	2
UNIT II	**Banking Services**: Commercial. Development, Investment and International banking – issues, trends and challenges, Marketing of Banking Services and Insurance companies	3
UNIT III	**Marketing of Financial Services:** Marketing Mix of Financial Services, Financial Products development strategies, Analyzing Marketing Strategies adopted by selected Banks & other financial service providers , Ethical Issues in Marketing of Financial Services.	3
UNIT IV	**Branding in Financial Services Sector**: Target Marketing & Customer Retention, Significance of Financial Brands, Targeting and positioning strategies, Impact of Branding on customer perception towards financial service providers, creation of a financial brand.	4
UNIT V	**Merchant Banking**: Overview, Nature, functions, scope and regulation.	2
UNIT VI	**Credit Rating** Meaning, functions and benefits. Credit Rating Agencies in India- CRISIL, ICRA and CARE, Global Credit Rating Agencies- Moody's and Standard & Poor's, Major Factors considered while determining the rating profile of a Security. Credit Rating- Regulatory Framework in India, Credit Rating for Debentures and IPO Grading, Limitations of Rating	3
UNIT VII	**Lease financing:** Industry, Size and scope, evaluation of lease transaction, Factoring and Forfaiting.	3

Securitization: Introduction, Mechanism and process of Securitization, Asset Reconstruction Companies, Participants in securitization and their role.

UNIT VIII   Mutual Funds: Introduction, Types of Mutual Fund   **4**
Schemes- Functional Classification, Portfolio Classification, Investment Classification, Benefits of Mutual Funds, Managing Mutual Funds in India- The Sponsor, The Trustees, The Custodians, Asset Management Company.

Section B
At least one case study/ problem from each unit. Questions will be case/ inferences/ application based

PRACTICAL COMPONENT

- Study of any merchant banker in appraisal of projects, designing capital structure and instruments.
- Study of financial evaluation of any mutual fund.
- Prepare a Financial Plan for a Person / Manager / Entrepreneur / Director / CEO of a Company / Bank / Insurance Agent, considering his / her current expense level, future needs of family, retirement age and contingency funds.
- Students can study the procedure for opening a Savings account and a Current Account.
- Students can study the Credit card and debit card procedure and account statements.

BOOKS RECOMMENDED

1. Khan M.Y., Financial Services, Tata McGraw Hill, 10th Edition
2. Avadhani, V. K., 2018. Marketing of Financial Services, 3rd Ed., Pearson Education, India, ISBN: 978935142261-7
3. Siddaiah, Financial Services, Pearson Education India, 1st Edition
4. Avadhani V.A. Marketing of Financial Services, Himalaya Publishing House, 2013
5. Pathak V. Bharati., Indian Financial System, Pearson Education, 5th Edition.
6. Padmalatha& Justin Paul, Management of Banking and financial services, Pearson Education, 4th Edition
7. Anthony Saunders & Marcia Millon Cornett, Financial Markets and Institutions, McGraw Hill, 6th Edition.
8. Rajesh Kothari , Financial Services in India- Concept and Application, Sage Publications, 2010

LIST OF JOURNALS/ PERIODICALS/ MAGAZINES/ NEWSPAPERS
1. Journal of Financial Services Research, Springer.
2. Journal of Financial Services Marketing, Palgrave, Macmillan.
3. Journal of Banking & Finance, Elsevier.
4. International Journal of Financial Services Management, Inderscience Publishers.

M-313-CORPORATE TAXATION

OBJECTIVES
1. To understand the various direct and indirect taxes and their implications
2. To equip students with the ability to apply corporate tax provisions and financial planning tools to corporate world.
3. To enable students to plan and compute the direct and indirect taxes.

LEARNING OUTCOMES
1. Analyzing tax provisions, financial planning & tax management in India
2. Providing necessary inputs to the students for handling real life business problems efficiently using appropriate concepts of taxation laws.
3. Assessing the recent developments in tax structure in India.
4. Understanding the compliance requirements related to GST, wealth tax, capital gains & taxation.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction to Taxation:** Meaning, Types, Principles of Direct and Indirect Taxation; Constitutional provisions related to Distribution of taxation powers between States and the Central Government Basic Concepts – Assesses, Assessment, Person, Assessment Year, Previous Year, Heads of Income, Exemption, Deductions, Rebate and Relief, Gross Total Income and Total Income.	3
UNIT II	**Computation of Tax**: Residential Status of Individual, HUF, Firm and Association of Persons, Company; Relationship between residential status and incidence of tax; 'Receipt of income' and 'Accrual of income'	2
UNIT III	**Tax Planning:** Tax Planning, Tax Evasion, Tax Avoidance and Tax management. Need and Importance of Corporate Tax Planning. Filing of Returns and Assessments, Advance Tax, TDS, TCS, Advance Rulings, Avoidance of Double Taxation	3
UNIT IV	**Tax planning with reference to Financial Management decisions:** Capital Structure of a company, Dividend policy and Bonus shares issue, specific Managerial decisions. Tax planning for Depreciation and Business Expenditure	3
UNIT V	**Capital Gain & Taxation:** Basis of charge, Capital asset and Transfer of capital asset, Cost of acquisition, Cost of improvement, Indexation, Simple Problems on Computation of Capital Gains in certain special cases	4

UNIT VI	**Treatment of Losses and Unabsorbed items:** Set Off and Carry Forward of Losses. Tax planning in the context of Merger, Amalgamation, Demerger and Employees Remuneration. Penalties and Prosecution, Appeals and Revisions	**4**
UNIT VII	**Wealth Tax:** Charge and scope, Assets – Deemed Assets and Exempted Assets; Valuation of Assets, Computation of Net Wealth.	**2**
UNIT VIII	**GST**: General framework of different Acts related to GST, Basic Concepts, Levy and Collection. Supply – Characteristics, Nature and Place of Supply; Time of Supply, Value of Supply Input Tax Credit, Reverse Charge Mechanism, Composition Scheme, Anti-profiteering Measures. Trends in Tax Management: Faceless, Use of Artificial Intelligence in Tax Management, Retrospective tax.	**3**

Section - B
At least one case study/ problem from each unit. Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
- Presentation should be assigned in the class to the students on any of the topic given in the syllabus.
- Students should conduct an interview with Tax Practioner or Chartered Accountant for gathering information over the challenges faced in filing tax returns and same should be presented in the class.
- Students should be asked to visit the website of Income Tax Department and an assignment should be prepared on information disclosed on the website and its practical application.
- Students should collect data by administering a questionnaire on 'Tax Planning Tools' availed by individual tax payers in India.
- Students should do - Computation of total income and tax for individual (Salary only), - Computation of service tax, Exercise duty and VAT, - Tax planning for individual & Corporate houses

BOOKS RECOMMENDED
1. Datey. V.S,Indirect-Taxes-Law-and-Practice, 42nd-Edition
2. Dr. Vinod K Singhania & Dr Monica Singhania, Corporate Tax Planning and Business tax Procedures, Taxmann Publication, Latest Edition
3. Girish Ahuja & Ravi Gupta, Direct Tax Laws & Practices, Bharat Law House, Latest Edition
4. Dr. Vinod K. Singhania &Dr. Monica Singhania, Corporate Tax Planning & Business Tax Procedures with Case Studies, 20th Edition.
5. Paolo M Panteghini, Corporate Taxation in a dynamic world, Springer, Latest Edition
6. Lakhotia, R. N., Corporate Tax Planning.

LIST OF JOURNALS/ PERIODICALS/ MAGAZINES/ NEWSPAPERS
1. Journal of International Accounting, Auditing and Taxation, Elsevier.

2. Journal of Taxation, Thomson Reuters.
3. Journal of Indian Taxation, Journal Press, India.
4. Journal of Accounting and Taxation, Academic Journals.

M-314 BANKING AND FINANCE

OBJECTIVES
1. Understanding fundamental concepts of banking.
2. Understanding the concept of Microfinance.
3. To know about changing trends in the banking sector.

LEARNING OUTCOMES
1. Apply concepts of basic banking in daily banking operations.
2. Using knowledge of banking securities and other products in building a strong customer base.
3. Apply knowledge of documentation procedure of banking in real working environment.
4. Using the concepts of microfinance to increase the base of financial inclusion.

Section- A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction**: meaning, evolution and types of banks. Role and functions of Banks: Regulatory provisions / enactments governing banks; Securities for Bank Advances: Different forms of securities and precautions taken by Banks in accepting these securities.	3
UNIT II	**Banker-Customer Relations-** KYC guidelines - Different deposit products - Mandate and Power of Attorney, Banker's Lien, right of set off - garnishee order, attachment order etc. Payment of collection of cheque - duties and responsibilities of paying and collecting banker - protection available to them under NI Act - Endorsements, forged instruments -bouncing of cheques and their implications.	4
UNIT III	**Documentation procedure in banking system**: Stamping of documents; Securities: different modes of charging, types of collaterals and their characteristics; Priority sector lending: targets, issues, problems; New products and services, Credit cards / Home loans /personal loans / consumer loans - Ancillary Services - Remittances, Safe Deposit Lockers.	4
UNIT IV	**Banking and Non-banking institutions** – Scheduled commercial banks, NBFCs, regional rural banks, reforms in the banking sector, priority sector lending, Cooperative banking – Urban cooperative banks, Rural cooperative banks, Central cooperative banks, Primary Agriculture Credit Societies	4
UNIT V	**Management of Non-performing Assets by Banks –** Introduction, Tools of managing NPAs, Risk management in Indian banks.	2
UNIT VI	**Microfinance –** Concept, Micro financial institutions, small finance banks, Micro credit, self-help groups,	3

	Rural credit and finance, financial inclusion, small finance banks.	
UNIT VII	**Guarantees**: Contract of Guarantee and contract of indemnity, Guarantee as Banker's Security. Banker Customer Relationship; Contemporary Issues in Banking: NPA and Capital Adequacy in Indian Banks.	**2**
UNIT VIII	**E-Banking-** Core Banking, Electronic products, electronic payment system, Online Banking, Electronic fund transfer system: RTGS, NEFT & SWIFT etc; Information Technology: Current trends and global developments- Crypto Currency, Fintech, Financial Literacy, Alternate Financial Channels, Online Payment gateways.	**2**

Section B
At least one case study/problem from each unit. Questions will be case/inferences/application based.
PRACTICAL COMPONENT
- Study any bank's stamping process and document it.
- Study online banking portals of a private bank and a public sector bank and compare online services and features offered. Prepare a comparison report.
- Conduct a survey of 50 respondents of underprivileged class to assess impact of financial inclusion in their lives.
- Prepare a report on management of NPAs by public sector bank for past five years.
- Study and document risk management by a private sector bank and a public sector bank.

BOOKS RECOMMENDED
1. Principles & Practices of Banking - By Indian Institute of Banking & Finance - Macmillan Publication,2020.
2. Bharti V. Pathak, The Indian Financial System, Third Edition, Pearson, 2011.
3. K.P.M. Sundharam, PN Varshney, Banking Theory Law & Practice, Sultan Chand & Sons, New Delhi,2018.
4. Nigam, B.M.L., Banking Law and Practice, Konark Publishers, Delhi, 2019.
5. S.V. Vasudevan, Theory of Banking - S.Chand & Company Ltd., New Delhi, 2018.
6. M.Y. Khan, Indian Financial System, Tata McGraw Hill Education, 7th Edition, 2012.
7. Vasant C. Joshi, Managing Indian Banks- The Challenges Ahead, Sage Publications, 2009

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Journal of Banking and Finance, Elsevier.
2. Journal of Banking and Financial Technology, Springer.
3. Annals of Finance, Springer.
4. International Journal of Banking, Accounting and Finance, Inderscience Publishers.

Marketing (Group B)

S.No.	Subject Code	Subject Title
Semester III		
1.	M-320	Integrated Marketing Communication
2.	M-321	Retail Management
3.	M-322	Sales Distribution and Logistics Management
4.	M-323	Product & Brand Management
5.	M-324	Industrial Marketing

M-320-INTEGRATED MARKETING COMMUNICATION

OBJECTIVES
1. To acquaint students with essential concepts and techniques for developing and designing an effective Integrated Marketing Communication programme.
2. To understand how the communication process fits into and works with consumer behaviour, emphasising the consumer decision-making process.
3. To equip the students with various communication tools and their effectiveness to foster creative ideas for the development of effective marketing communication programme.

LEARNING OUTCOMES
1. Evaluating marketing research and applying these findings to develop competitive strategies and select the target audience(s) for the I.M.C. campaign plan.
2. Develop an integrated cross-media and creative message strategy and concept to reach the target audience and deliver the brand promise through an I.M.C. campaign.
3. Structure an integrated marketing communications campaign plan based on the application of marketing concepts, principles and practices within an organisation.
4. Measure and critically evaluate the communications effects and results of an I.M.C. campaign to determine its success.

Section-A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction:** Overview of marketing communication, Role of I.M.C. in marketing process, Factors affecting the marketing communication mix, Integrated Marketing Communication tools, Models of consumer responses.	**2**
UNIT II	**Advertising:** Objectives of Advertising, Role of Advertising in the Marketing Process, Types of Advertising, Advertising Planning, Source, Message and selection of advertising channel, factors, Communication response hierarchy-A.I.D.A. model, Hierarchy of effect model, Innovation adoption model, Information Processing Model.	**2**
UNIT III	**Advertising Budgeting and Advertising agency:** Advertising budgeting methods, Advertising Agency, functions and types, Departmentalization and remuneration, Criteria for selecting the agencies, client-agency relationship, DAGMAR approach for setting ad objectives.	**2**
UNIT IV	**Creative Strategy:** Creativity in advertising, Creative Process, Creative Strategy-Appeals and execution Styles, Advertising Copywriting, copy principles for print advertising and broadcast copy, Advertising art-Layout-Functions and Types.	**3**

UNIT V	**Media planning & Scheduling:** Overview of Media Planning, Establishing Media objectives, Evaluation of Media mix -print, Broadcast (T.V. & Radio), Cinema, Outdoor, Direct Mail and Social Media, Developing and Implementing Media strategies, Media Scheduling.	3
UNIT VI	**Sales-Promotion, Direct Marketing, Personal Selling:** Sales-promotion objectives, Consumer-oriented sales promotion tools, Trade-oriented sales promotion tools, Designing the sales promotion program. Direct Marketing objectives, benefits and elements. Personal Selling objectives, strategy and process.	3
UNIT VII	**Event Marketing & Public Relations**: Public Relations, Interactive Marketing, Key elements of Event and Sponsorships, Promotion and Pricing, Concepts of promotion and pricing in events. Public relations meaning, objectives, tools of public relations. Interactive Marketing and Social media Marketing -Meaning, Components.	4
UNIT VIII	**Monitoring, Evaluation and control**: Measuring the effectiveness of the Promotional Program Evaluating the social, ethical and economic aspects of advertising and promotion.	5

Section B

At Least one Case Study from each Unit. Questions will be case/inferences/application based.
PRACTICAL COMPONENT

- Visit a retail chain and make a note of the sales promotion schemes used by the marketer. Then, explore retail outlets of other chains and find out the different sales promotion schemes used by other companies. Make a comparative analysis of the various common sales promotion schemes used and the differences between the same. Also, try to find out the broad sales promotion plans for various categories of products on offer in these retail chains.
- Visit an Advertising Agency in your location and study its major functions and departments. Also study any two of their recent advertising campaigns.
- Create a poster twitter advertisement for encouraging people to Quit smoking.
- Assume that you are the marketing communications manager for a brand of paper towels. Discuss how the low-involvement hierarchy could be of value in developing an advertising and promotion strategy for this brand.
- Watch at least five T.V.C.s pertaining to different products, aired on different channels and covering different days. Answer the following questions for each of them:
    - What was the central message? What is the benefit of using the product?
    - Was the opening shot grabbing? Why?
    - Was there enough attention given to the product, or did the story take over? Was the product visible enough in terms of time or proximity to

the camera?
- o Was the closing shot concluding? Did it show the product?
- o Did the product leave an impact on you? Why? Justify your answer.

BOOKS RECOMMENDED
1. Belch, G. E., & Belch, M. A. (2021). An integrated marketing communications perspective. Advertising and Promotion, 12th Edition, Tata McGraw Hill.
2. Juska, J. M. (2021). Integrated marketing communication: advertising and promotion in a digital world. Routledge, 2nd edition.
3. Kumar, S. R. & Krishnamurthy (2020). Advertising, Brands and Consumer Behaviour: The Indian Context, Sage Publications Pvt. Ltd.
4. Clow, K. E. (2018). Integrated advertising, promotion, and marketing communications. Pearson Education India.
5. Shah, K., & D'Souza, A. (2016). Advertising & Promotions an I.M.C. Perspective. Tata McGraw Hill.
6. Jain, S. & Jethwaney, J (2012). Advertising Management, Oxford University Press India; 2nd edition.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Journal of Advertising Research, The Advertising Research Foundation
2. Journal of Advertising, Taylor & Francis.
3. Journal of Marketing Communications, Taylor & Francis.
4. Journal of Advertising, American Academy of Advertising.

M-321- RETAIL MANAGEMENT

OBJECTIVES
1. To familiarise students with the different approaches to the retail marketplace, learn a set of retail marketing principles, and feel more confident about the practical uses of retail marketing.
2. To provide an understanding of specific retail marketing concepts like store design, visual merchandising, retail location strategies, management of private labels.
3. To develop transferrable skills among the students for managing retail operations efficiently so that they could be ready to join the retail industry.

LEARNING OUTCOMES
1. To evaluate the contribution of retailers to the product value chain; consumer motivations, shopping behaviours, and decision processes for evaluating retail offering and purchasing merchandise and services.
2. The analyse the key components of retail strategy.
3. Analyze Retail Market and Financial Strategy including product pricing
4. Understand key drivers of retail supply chain and how to select a retail store operation, design and mangement.

Section-A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Overview of Retailing:** Evolution of Indian Retail Industry, Importance of Retailing,–Retail Organisation and Retail Formats.	2
UNIT II	**Research in Retailing and Retail Customer:** Retail Research – importance and scope, Shopping Behavior of retail customers. Retail Buying Process.	3
UNIT III	**Store Location and Merchandise Management:** Retail Store Location Strategies, Store Design and Layout, Visual Merchandising and Atmospherics, Types of Layouts, Visual Merchandising - Role of Visual Merchandise, Visual Merchandising, Techniques- idea-oriented presentation, style presentation, colour presentation, price lining, vertical merchandising, tonnage merchandising, fixtures. Exteriors, Interiors.	4
UNIT IV	**Marketing Strategies for Retailing:** Retail market Strategies, Retail Marketing-Mix Strategies, Retail Pricing strategies, Retail Promotion Mix.	3
UNIT V	**Managing Retail Business**: Customer relationship management, Overview of Human Resource Management in Retail Organisation and Retail.	4
UNIT VI	**Store Management:** Responsibilities of Store Manager, Problem at Retail Centers, Store Record and Accounting System – E.D.I. and barcoding, Material Handling in Stores.	3

UNIT VII	**Emergence of Organized Retailing**: Organized Retailing and Online Retailing in India, Retailing in rural India, FDI in retailing, Role of I.T. in retailing.	**3**
UNIT VIII	**Franchising:** Franchising in India, Types of Franchising Agreements, Strengths and Weaknesses of Franchising, Key Franchising Agreements in India.	**2**

Section B

At Least one Case Study from each Unit. Questions will be case/inferences/application based.

PRACTICAL COMPONENT

- Interview a retail salesperson and write a brief report about what they like and dislike about their jobs, salary, store management, sales quotas, why they chose a sales career, and what it takes to succeed in the sales profession.
- Visit a Kirana store and a supermarket and compare the following: a) store arrangement b) Number of brands carried c) pricing policies (discount policy) d) service quality e) retail sales personnel behaviour.
- Visit any modern retail format (Department store, hypermarket, mall, etc.) and study operational dimensions of retailing, location strategies, pricing policy, visual merchandising and other facilities.
- Take a trip to a supermarket. Observe the number of private labels and assess the categories in which you think private labels might be successful and why?
- Study any one franchisee model in India like Domino's, McDonald's, Pizza hut, K.F.C. etc. and make a presentation in the class.

BOOKS RECOMMENDED

1. Pradhan, S. (2020). Retailing Management, Mc Graw Hill India publication.
2. Berman, B., Evans, B. , Chatterjee, P.(2018). Retail Management, Pearson Publication.
3. Gibson (2017). Retail Management, Pearson publication.
4. Seshanna, S. (2017). Retail Management, Mc Graw Hill India publication.
5. Chetan Bajaj, C., Tuli, R. & Srivastava,N. (2016). Retail Management, Oxford University Press.
6. Chaudhary , P. (2016). Retail Marketing in the Modern Age, Sage Publications Pvt. Ltd.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. Journal of Retailing, Elsevier
2. Journal of Marketing American Marketing Association
3. International Journal of Retail & Distribution Management, Emerald Publishing
4. Journal of Business & Retail Management Research, Scimago Journals

M-322- SALES DISTRIBUTION AND LOGISTICS MANAGEMENT

OBJECTIVES
1. To familiarise students with the importance of gaining market access and coverage as well as providing customer services through proper design and management of sales force, marketing channels, physical distribution systems in the context of the Indian marketing environment.
2. To acquaint the student with the concepts of developing a sound sales and distribution policy and in organising and managing sales force and marketing channels.
3. To make the students aware of the key principles in designing, managing, evaluating, and modifying marketing channels and physical distribution system in the context of changing Indian marketing environment.

LEARNING OUTCOMES
1. Demonstrate an understanding of Sales & Distribution function and examine its role as an integral part of marketing function.
2. Ability to understand & appreciate the diverse variables affecting the sales & distribution function.
3. Interpretation of the tools and strategies necessary for designing, motivating and evaluating sales & distribution management systems.
4. Collaborate amongst the sales team and improve the Leadership, Teamwork and team's performance to maximise sales.

Section-A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction**: Sales Management, Process, Role of Sales Manager and Salesmanship, Process of Personal Selling. Buyer Seller Dyad.	**2**
UNIT-II	**Goal Setting**: Goal Setting Process in Sales Management, Analysing Market Demand and Sales Potential, Preparation of Sales Budget.	**4**
UNIT-III	**Sales Strategies**: Formulating Selling Strategies, Designing Sales Territories and Sales Quota.	**4**
UNIT IV	**Sales Force Staffing:** Designing the Structure and Size of Sales Force, Recruitment, Selection and Training of Sales Force.	**3**
UNIT V	**Compensation & Evaluation of Sales Force:** Motivating the Sales Force, Training, Compensating the Sales Force and Evaluating the sales force performance.	**3**
UNIT VI	**Distribution Management**: Concept of Distribution Channel, Importance of a Channel, Types of Distribution channels.	**2**
UNIT VII	**Distribution Channel Management:** Channel Design and Planning, Managing Marketing Channels, Evaluation of Channel Performance.	**2**

| UNIT VIII | **Physical Distribution Management:** Components of Physical Distribution-Transportation, Warehousing and Inventory Control System, Logistics Management and I.T. Applications. | 4 |

Section B

At Least one Case Study from each Unit. Questions will be case/inferences/application based.

PRACTICAL COMPONENT

- Interview a salesperson and write a brief report about what they like and dislike about their jobs, salary, travelling allowances and sales quotas.
- Identify any FMCG product and study how the Sales & Distribution activity operates in the market. To do this assignment, the groups will visit the local wholesale & retail markets where that product is sold; chart the complete flow backwards and forward as relevant for geographical area; study all elements affecting distribution.
- Identify a consumer durable company and map the company's sales structure and the sales force deployed to cover the markets, including details of their territorial alignment, beat plan, and reporting norms.
- Ask your friends if they would buy certain goods like groceries, vegetables, socks, mobile, pens etc., from the roadside vendor as against a regular shop. Group the products into low risk and high-risk ones. Does this buying behaviour also depend on the personality of the individual doing the buying? Or the one doing the selling?
- Students can make a presentation on any product or the services of their choice, covering selling strategies and one-day work exposure of merchandising in any big retail outlet of respective places where institute is operating.

BOOKS RECOMMENDED

1. Panda, T.K. & Sahadev, S. (2019). Sales and Distribution Management, Oxford University Press.
2. Malik, R. & Deshwal, R. (2019). Sales And Distribution Management, J.S.R. Publishing House.
3. Richard, R.S. & Cundiff, E.W. (2017). Sales and Distribution Management, Pearson India.
4. Havaldar K.K. & Cavale, V.M. (2017). Sales and Distribution Management, Mc Graw Hill Publication.
5. Mathur U. C, (2012). Sales And Distribution Management, New Age International (P) Ltd Publishers.
6. Venugopal, P. (2008). Sales and Distribution Management: An Indian Perspective, Sage Publications Pvt. Ltd.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. International Journal of Retail & Distribution Management, Emerald Publishing
2. Journal of Marketing, Sage Journals
3. Journal of Personal Selling and Sales Management, Scimago Journals
4. Journal of Purchasing and Supply Management, Elsevier.

M-323-PRODUCT & BRAND MANAGEMENT

OBJECTIVES
1. To equip the students with the various dimensions of product management such as new product development, product life cycle and product-line decisions.
2. To explore the various issues related to Brand Management and enhance the understanding and appreciation of this important intangible strategic asset.
3. To enhance understanding on decisions involved in building & managing brands and brand equity so that they are profitable to the company and satisfactorily address target customers' needs and wants.

LEARNING OUTCOMES
1. Develop the ability to apply concepts and theories to real-life product management.
2. Use the brand positioning framework to build a brand, keep it relevant, expand a brand internationally, and reposition a brand.
3. Use tools and models to identify, define, and measure brand equity.
4. Implement profitable brand strategies by building, measuring and managing brand equity.

Section-A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Setting Product Strategy:** Marketing Mix and Product Strategy – Integrated Approach, Levels of a Product, Product Characteristics and Classifications, Product-Mix Decisions, Product-Line Analysis, Product-Mix Pricing, Packaging and Labeling Decisions.	4
UNIT II	**Introducing New Market Offerings and Managing Product Life Cycle:** Product Manager's role in organisation, Managing Product Life-Cycle- Concept and Marketing Strategies, Types of New Products, Management of New Product Development Process, The Consumer-Adoption Process.	3
UNIT III	**Brand Management:** Concept of a brand, Selecting Brand Elements, Advantages and disadvantages of Branding, Strategic Brand Management Process.	2
UNIT IV	**Brand Resonance and Brand Positioning:** Concept of Brand Positioning, Identifying Points-of-Difference and Points-of-Parity, Straddle Positioning, Brand Positioning Strategies, Defining and Designing Brand Mantras, Steps in building a strong Brand, The Brand Value Chain.	2
UNIT V	**Brand Identity, Image and Personality:** Brand Identity-concept and essence, designing brand identity - Kapferer's Brand Identity Prism, Aaker Brand Identity Framework, Brand Image Definition, Factors building Brand Image, Concept of Brand Personality, Dimensions of Brand Personality, Building Brand Personality.	3

UNIT VI	**Understanding Brand Equity and Brand Valuation:** Brand Equity – Definition and Significance, Sources of Brand Equity, Behaviour-based Brand Valuation Models-(Aaker's Brand Valuation Model, Keller's Model of Brand Valuation) Customer-Based Brand Equity, Young and Rubicam's Model of Brand Valuation, Composite Brand Valuation Models-Interbrand Valuation Model, Measuring brand equity-Cost Based Method, Price Based Method, Customer-based Method.	**3**
UNIT VII	**Managing Brands Over Time and over Geographic Boundaries:** Brand Extension- Meaning, Types, Need, Advantages & Disadvantages, Reinforcing and revitalising brands- Concept and strategies, Advantages and disadvantages of Global Marketing Programs, Global Brand Strategy.	**3**
UNIT VIII	**Emerging Trends in Brand Management:** Managing Brand Experience- Experiential Branding, Web Branding, Challenges for managing Digital Brands, Success Factors for Digital Branding.	**4**

Section B

At Least one Case Study from each Unit. Questions will be case/inferences/application based.

PRACTICAL COMPONENT
- Make a list of ten of your favourite brands and evaluate reasons that have positively contributed towards their likeability.
- Visit a supermarket and assess the brand elements in various brands of soaps, chocolates, tea, biscuits and other products.
- Study your favourite brand and evaluate its brand revitalization strategies.
- Pick a multiproduct company and as completely as possible analyse its brand portfolio and brand extensions.
- Pick an FMCG brand, a consumer durable and a service brand and attempt to identify its sources of brand equity. Assess their level of brand awareness and the strength, favorability and uniqueness of their associations.
- Consider some FMCG and Consumer Durable companies like P&G, H.U.L., Dabur, Tata Motors, Samsung, etc. and analyse their brand-building strategies in Indian context.

BOOKS RECOMMENDED
1. Keller, K.L., Swaminathan, V., (2020). Strategic Brand Management. Building, Measuring and Managing Brand Equity, 5th Global Edition, Pearson Education.
2. Minsky, L., Geva, I., (2019). Global Brand Management: A Guide to Developing, Building & Managing an International Brand First Edition, Kogan Page.
3. Miller, D. (2018). Building a Story Brand: Clarify Your Message So Customers Will Listen, Harper Collins.

4. Lehmann, D., Russell W. (2017). Product Management, Fourth Edition, Mc Graw Hill Education.
5. Panda, T.K. (2016). Product and Brand Management, Oxford University Press, First Edition.
6. Dutta, K. (2012). Brand Management- Principles and Practices, First Edition, Oxford University Press.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Journal of Product & Brand Management, Emerald Publishing.
2. Journal of Product Innovation Management, Wiley-Blackwell Publishing
3. Journal of Marketing, SAGE Publications.
4. Journal of Brand Management, Palgrave Macmillan

M-324- INDUSTRIAL MARKETING

OBJECTIVES
1. To bring out the distinctive aspects of Industrial Marketing and the need for a B2B paradigm.
2. To explain how business firms are to be understood as customers and the significant differences in segmentation bases between the business market and consumer market.
3. To give exposure to the various tools, techniques, and procedures appropriate for Industrial Marketing.

LEARNING OUTCOMES
1. Understand the differences between B2C and B2B marketing.
2. Critically approach marketing problems from an inter-organisational perspective and learn about decision making at buying centers.
3. Evaluate different purchasing strategies and be familiar with different methods of evaluation of suppliers and tenders.
4. Develop skills to understand the unique needs of business customers and succeed in marketing and management roles within B2B businesses.

Section-A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Dimensions of Industrial Marketing:** Meaning and Scope of Industrial Marketing, Characteristics of Industrial Marketing, Comparison between Business and Consumer Marketing, Economics of Industrial Marketing demand – The Resellers Market – The Industrial Marketing Concept, Types of Industrial Markets, Classifying Industrial Products, Organizational Procurement System Characteristics.	3
UNIT II	**Industrial Buying and Buying Behaviour:** Factors affecting industrial buying decisions, Industrial Buying Behavior, Buying centre Process and factors, roles in buying process, structural dimensions, individual factors, Buying objectives, Business Buying process.	3
UNIT III	**Market Segmentation, Targeting and Positioning:** Market Segmentation, requirements for effective segmentation, benefits of market segmentation, segmentation variables, Market Targeting, Differentiation, Positioning Strategies.	2
UNIT IV	**Formulating Product & Service Strategy:** Developing Product Strategy, Analysing Industrial Product Life Cycle, New Product Development, Business Service Marketing: Characteristics, Service Marketing mix, Service marketing strategy.	2
UNIT V	**Formulating Channel Strategy:** Industrial Distributor, Types of Distribution, Channel Systems, factors influencing Channel design, Channel Logistics-Components of	4

	Logistics, Significance of Logistics, B2B logistical services, Supply Chain Management.	
UNIT VI	**Pricing Strategies:** Characteristics of industrial prices, factors affecting Pricing Decisions, pricing objectives, methods, Pricing Strategies, Competitive Bidding, Leasing.	**3**
UNIT VII	**Industrial Marketing Communication:** Communication Mix, Major decisions in Industrial Marketing Communication, Advertising in Industrial Markets, Message Formulation, policies, media, budgetary support, evaluation of advertising, sales Promotion in Industrial Markets, trade shows and exhibitions, Managing the Industrial Sales Force, Personal Selling Process.	**4**
UNIT VIII	**Recent trends in Industrial Marketing:** Partnering/ Relationship Marketing**,** Account-based Marketing, A.I. Powered Marketing, Digital Marketing.	**3**

Section B

At Least one Case Study from each Unit. Questions will be case/inferences/application based.

PRACTICAL COMPONENT

- Conduct one week of Industry survey in the context of Industrial marketing by visiting minimum four companies. The data collected can be analysed using appropriate statistical software and report the findings.
- Choose two B2B firms and carefully study their Product Development Strategies and prepare a Power-point Presentation on the same.
- Select one B2B and one B2C firm and carefully compare their Supply Chain Strategy.
- Write a Five-page hand-written assignment on 'Industrial Marketing Performance Measurement'.
- Students may discuss the business needs to develop a marketing strategy, formulate a marketing plan and identify and discuss the elements of a business strategy.
- Visit any business unit and understand the various philosophies which influence buyers purchase decision actions. Then, discuss these purchase philosophies and how each affects the types of relationships in which a company can engage.

BOOKS RECOMMENDED

1. Taylor, H. (2017). B2B Marketing Strategy: Differentiate, Develop and Deliver Lasting Customer Engagement, First Edition, Kogan Page.
2. Brennan, R., Canning , L. E. & McDowell, R. (2017). Business-to-Business Marketing, 3e, Sage Publications Pvt. Ltd.
3. Sharma, D., Hutt M.D. & Thomas W.S. (2014). B2B Marketing: A South-Asian Perspective, Eleventh Edition, Cengage Publishing.

4. Vitale, R. Pfoertsch, W. Joseph Giglierano, J. (2011). Business to Business Marketing, 1st edition, Pearson.
5. Brennan, R., Canning, L., McDowell, R. (2011). Business-to-Business Marketing, Sage Publications.
6. Zimmerman, A. Blythe, J. (2013). Business to Business Marketing Management: A Global Perspective, Second Edition, Routledge.

7. Reeder,R.R., Brierty,E.G. Reeder, B.H. (2004). Industrial Marketing Analysis, Planning & Control, Prentice Hall of India.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Journal of Business-to-Business Marketing, Routledge Publications.
2. International Journal of Industrial Organization, Elsevier Publication.
3. Journal of Business & Industrial Marketing, Emerald Publishing.
4. Industrial Marketing Management, Elsevier Publication

Human Resource Management Group C

S.No.	Subject Code	Subject Title
Semester III - Electives		
1	M-330	Training & Development
2	M-331	Strategic Human Resource Management
3	M-332	Manpower Planning
4	M-333	Compensation Management
5	M-334	Human Resource Development

M-330: TRAINING & DEVELOPMENT

Objectives
1. To facilitate understanding of the role, importance and place of training in organizations as well as the approach to adult learning.
2. To assist students in understanding the processes of change in organizations and implement various behavioural science principles and practices.
3. To make students learn to apply OD interventions leading towards the goal of effective organization development.

Learning Outcomes
1. Students will develop understanding regarding training programs and processes in different organizations and analyze their effectiveness.
2. Students will learn to design a training program for a specific job role.
3. Students will be able to conduct a mock training session including need identification.
4. Students will learn to evaluate the effectiveness of the training Session.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction to Employee Learning and Development in Organizations:** Learning - the forces influencing working & learning, classification of learned capabilities, learning theories, the basic principles of learning, the learning process, mental & physical processes, the learning cycle, age influences on learning.	3
UNIT II	**Training:** Introduction, concept, meaning, designing effective training, training practices, strategic training, training needs assessment. Transfer of Training: implementation of the training programme.	2
UNIT III	**Training Methods:** Traditional training methods: presentation methods, hands-on methods, group building methods. Choosing training methods, E-learning & use of technology in training, developing effective online learning, blended learning, simulations, mobile technology & training methods, systems for training delivery.	4
UNIT IV	**Evaluation of Training & Employee development:** Reasons for evaluating training, overview of the evaluation process, evaluation practices, evaluation designs, threats to validity, considerations in choosing evaluation designs, determining ROI, determining costs, measuring human capital & training activity. **Employee Development**: Introduction, approaches to employee development, the development planning process, company strategies for providing development, special issues in training & employee development.	5

UNIT V	**Introduction to OD:** Definition, Introduction & Foundations of Organizational Development, Characteristics of OD, Participation & Empowerment, Teams & Teamwork, Parallel learning structures.	2
UNIT VI	**OD Components:** Components of OD process-Diagnosis-Diagnosing the system, its subunits & processes, Programme Management Component, Third Wave Consulting: The Action component: nature of OD intervention, analysing discrepancies.	3
UNIT VII	**OD Interventions:** Definition, factors to be considered, choosing & sequencing intervention activities, classification of interventions: individual (coaching, counseling, training, behavioral modeling & mentoring), group (conflict management, group facilitation, group learning, self-directed work teams, team building & virtual teams).	3
UNIT VIII	**Future Trends in OD:** Restructuring organizations, OD in global settings, future direction in OD.	2

Section B
At Least one Case Study from each UNIT. Questions will be case/inferences/application based.

PRACTICAL COMPONENT
- Prepare skill matrix for few selected jobs and identify the types of training needed to impart those skills.
- Case studies/role plays to understand how these methodologies can be effectively used for training.
- Conduct a mock training session including need identification on a set of students to evaluate the effectiveness of the same.
- Administer training need analysis case and ask the students to find out the training needs.
- Organize a training program.
- Make a Presentation on-the-job training techniques adopted by any organization.

BOOKS RECOMMENDED
1. Raymond A Noe, Amitabh Deo Kodwani, Employee Training and Development, McGraw Hill, 7e, 2019.
2. Jean Barbazette – Training Needs Assessment: Methods, Tools, and Techniques-Wiley, 2014.
3. Rolf Lynton, Uday Pareek, Training for Development, Sage, 2012.
4. P. Nick Blanchard, James W. Thacker, A. Anand Ram, Effective Training, 4e, Pearson, 2012.
5. Holbeche Linda, Judge-Cheung Yam-Mee, Organizational Development: A Practioner's Guide for OD and HR, Kogan Page, 2011
6. Steve W.J. Kozlowski, Eduardo Salas, Learning, Training, and Development in Organizations, Routledge, 2010.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. International Journal of Training and Development, Wiley-Blackwell Publishing Ltd.
2. European Journal of Training and Development, Emerald Group Publishing Ltd.
3. Training and Development Journal, Indianjournals.com

4. International Journal of Human Resource Development and Management, Inderscience Publishers

M-331: STRATEGIC HUMAN RESOURCE MANAGEMENT

OBJECTIVES
1. To develop a thorough understanding of the perspective of strategic human resource management.
2. Develop an understanding of aligning HR systems with business strategy and the concept of strategy formulation.
3. Develop an insight into the strategies for performance and development with knowledge of global economy factors.

LEARNING OUTCOMES
1. Distinguish the strategic approach to human resources from the traditional functional approach.
2. Understand the relationship of HR strategy with overall corporate strategy.
3. Understand the strategic role of specific HR systems.
4. Appreciate SHRM in the context of changing forms of organization.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
Unit I	**Understanding Strategic HRM:** HR as Assets, The VRIO Framework, Factors determining the Investment Perspective of an Organization, Strategic HR vs Traditional HR, Ulrich Framework, Leepak and Snell Employment Models.	3
Unit II	**Link between HR strategy and Business Strategy:** Strategic Fit: A conceptual Framework, Best Fit Approach, Configurationally Approach, Best Practice Approach.	3
Unit III	**Workforce Utilization and Employment Practices:** Efficient utilization of human resource – cross training and flexible work assignment -work teams – non unionization, Dealing with employee shortages, Selection of Employees, Dealing with employee surpluses.	4
Unit IV	**Human Resource Evaluation:** Definition, Overview- Scope, Strategic Impact, Level of Analysis, Criteria, Level of Constituents, Ethical Dimensions.	4
Unit V	**Approaches to Evaluation:** Audit Approach, Analytical Approach, Quantitative and Qualitative Measures, Outcome and Process Criteria, Balanced Scorecard, HR Scorecard, Benchmarking.	3
Unit VI	**HRM and Firm performance:** Evolving role of HRM and its Measurement, Measures of HRM performance.	3
Unit VII	**Strategies for performance and development:** Typology of performance types - marginal performers -under achievers-stars-solid citizens, recruitment and selection strategy typology,	2

Business strategy and compensation.

Unit VIII   **The Future of SHRM:** SHRM practice in the future.   **2**
Barriers to Strategic HR, Restructuring and SHRM, Competencies of HR Professional in a SHRM Scenario.

Section B
At Least one Case Study from each UNIT. Questions will be case/inferences/ application based.

PRACTICAL COMPONENT
- Identify and enact the key roles assumed by HR in the context of a strategic human resource management approach.
- Demonstrate the interventions needed to generate commitment among key stakeholders and business partners for a strategic HR agenda.
- Role plays on HR taking a seat on strategic table.
- Role plays on handling under achievers.
- Strategic approach to use Golden Handshake with live company experiences
- Strategic approach to handle retrenchment with live company experiences

BOOKS RECOMMENDED
1. Rees, G., & Smith, P. (Eds.). (2021). *Strategic human resource management: An international perspective*. Sage.
2. Jeffrey A Mello, Strategic Human Resource Management, Cengage Learning India Pvt. Ltd. 2019
3. Tanuja Agarwala, Strategic Human Resource Management, 6th Edition, 2009, Oxford University Press.
4. Bohlander, Snell & Sherman, Managing Human Resources, 2012
5. Pearce & Robinson, Strategic Management: Formulation, Implementation & Control, 12th Edition, 2010, Mc Graw Hill
6. Noe, Hollenbeck, Gerhart, Wright-IRWIN, Human Resources Management Gaining a competitive advantage, 6th Edition, 2007

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Journal of Strategic Human Resource Management (JSHRM), Publishing India Group
2. The International Journal of Human Resource Management, Taylor & Francis (Routledge)
3. Academy of Management Journal, Academy of Management (United States)
4. Asian Journal of Management Cases, Sage Publications

M-332: MANPOWER PLANNING

OBJECTIVES
1. To understand the purpose, process and applications of human resource planning in the context of different organizational strategies.
2. To create practical awareness about the current trends in human resource planning in global companies.
3. To understand and explore the operational issues involved in recruitment and selection.

LEARNING OUTCOMES
1. Develop ability to apply knowledge of human resource planning and implement techniques of job design.
2. Develop competency to recruit, train, and appraise the performance of employees and handle employee issues.
3. Demonstrate ability to create a critical appreciation and knowledge of understanding the determinants of human resource requirements and the means for meeting those requirements.
4. Demonstrate ability to undertake full and fair recruitment and selection systematically.

Section-A

UNIT	Course Description	SESSIONS
UNIT I	**Introduction:** Definition and concept of HRP, Macro Level Manpower Planning and Labor Market Analysis - Organizational Human Resource Planning.	**2**
UNIT II	**Strategic Staffing:** HR planning as a strategic process-employees as resources for goal attainment, linking HR process to strategy, involvement in strategic planning process, strategic HR Planning model.	**2**
UNIT III	**HR Planning:** HR planning process-Job analysis: meaning and definition, job analysis process, techniques of job analysis, methods and practice of job analysis, competency based approach.	**4**
UNIT IV	**Competency Mapping:** Competency mapping- procedures and steps, methods of data collection for mapping, developing competency models from raw data.	**2**
UNIT V	**Recruitment & Recruitment Techniques:** Nature of hiring: regular, temporary, Internal Hiring: meaning & definition of internal recruitment. Sources of internal recruitment: circulars, intranet, employee referrals. Appointment or promotion. External hiring: meaning & definition of external recruitment, sources of external recruitment. Scouting, re-recruitment, event recruitment, online recruitment, social recruitment & mobile phone recruitment; recruitment process outsourcing, head hunting, Job advertisement: drafting, size & contents.	**4**
UNIT VI	**Employment Tests and Interviewing:** Concepts of Testing, Types of tests, use of psychological tests, Interviewing: planning the interview, interview process: preparation,	**4**

components, types, interviewing behavior & skills, structuring of interview, using the interview checklist.

UNIT VII	**Selection:** Meaning and Significance of Selection, Selection process. Evaluation of Selection System, Errors in selection. Employer branding.	**3**
UNIT VIII	**Career Planning & Succession Planning:** Introduction, Roles, Managing Career Planning, Elements of a Career Planning Programme, Career Development and Succession Planning – Concept & Process.	**3**

Section B

At least one Case study from each UNIT. Questions will be case/ inferences/ application based.

PRACTICAL COMPONENT

- Students should identify various sources of recruitment used by Indian organizations for lower, middle level and top level management jobs.
- Mock interviews should be conducted by students.
- Identify three to four jobs generally known to most of the students and ask them to collect the data and prepare job description and job specification for the said jobs.
- Students are expected to draft job advertisements.
- Obtain online access to the resume database of job portals for a week and give at least four job descriptions and specifications to each student, to search and download from the data base at least five resumes for each position.

BOOKS RECOMMENDED

1. Picardi, C. A. (2019). *Recruitment and Selection: Strategies for Workforce Planning & Assessment*. SAGE Publications.
2. Dessler Gary; Varkkey Biju, (2016). Human Resource Management, 14th edition, Pearson India Education Services Pvt. Ltd.
3. Sekhri Arun, (2016). Human Resource Planning And Audit, Himalaya Publishing House.
4. Picardi, C. A. (2019). *Recruitment and Selection: Strategies for Workforce Planning & Assessment*. SAGE Publications.
5. Laroche Lionel, Rutherford Don, (2013). Recruiting, Retaining and Promoting Culturally Different Employees, Elsevier, USA.
6. Meara O' Bernard, Petzall Stanely, (2013). The Handbook of Strategic Recruitment & Selection, Emrald, UK.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. The International Journal of Human Resource Management, Taylor & Francis (Routledge)
2. Human Capital, People Trends Pvt. Ltd.
3. HRM Review, Elsevier Ltd.
4. Journal of Business and Management (IOSRJBM), International Organization of Scientific Research (IOSR)
5. Human Resource Management Journal, Wiley Online Library

M-333: COMPENSATION MANAGEMENT

OBJECTIVES

1. To impart knowledge in the design, implementation and administration of compensation and benefits in the organizations, taking into account the legal provisions.
2. To leverage compensation in creating a high performing organization.
3. Facilitate the student in performing the role of a contemporary compensation manager by gaining insights into current practices of compensation in Indian organizations.

LEARNING OUTCOMES

1. Recognize how pay decisions help the organization achieve a competitive advantage.
2. Analyze, integrate, and apply the knowledge to solve compensation related problems in organizations.
3. Demonstrate comprehension by constructing a compensation system encompassing: 1) internal consistency, 2) external competitiveness 3) employee contributions, 4) organizational benefit systems and administration issues.
4. Design rational and contemporary compensation systems in modern organizations.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Compensation management:** An Introduction: Compensation Management, Compensation and Non-compensation Dimensions, 3-P Concept in Compensation Management, Compensation as Retention Strategy, Compensation for Special Groups, Significant Compensation Issues.	3
UNIT II	**Job Evaluation, Grading and Compensation Structure:** Concept of Salary Structure, Salary Progression, Methods of Payment, Limitations of Job Related Compensation, Competency based Compensation (Broad pay bands and 360 degree feedback).	2
UNIT III	**Wages and Salary Administration at Macro (National) Level:** Wage Concept, Wage Policy, Institutional Mechanisms for Wage Determination, Pay Commission, Wage Boards, Public Sector Pay Revision, ILO and Collective Bargaining, Union Role in Wage and Salary Administration.	4
UNIT IV	**Job Evaluation:** Compensation Strategy at Micro Level, Concept of Equity, Job Evaluation - Methods of job evaluation and System of job evaluation, Process of Job Evaluation, Problems Involved in Job Evaluation.	2
UNIT V	**Incentive Schemes:** Types of Incentive Schemes, Wage Incentive Plans, Pre-requisites of Effective Incentive	3

	Schemes, Merits and Demerits of Incentives, Pay for Performance Plans.	
UNIT VI	**Benefits and Services:** Concept and Nature of Benefits, Classification of Employee Benefits, Employee Benefit Programs, Long term Incentive Plans, Strategic Perspectives on Benefits, Factors Influencing Choice of Benefit Program, Administration of Benefits and Services, Employee Services – Designing a Benefit Package.	4
UNIT VII	**Managerial Remuneration:** Managerial Remuneration – Concept and Elements, Executive Compensation: Methodology, CEO-to-worker pay ratio, Performance Linked Compensation; Balancing of Internal and External Equity.	2
UNIT VIII	**Rewards & Recognition:** Concept of Reward Management, Developing Reward Policies, Reward Strategy, Developing Total Reward Approach, Reward Management in Service Sector, Total Reward Framework of Service Industry in India, Factors affecting Reward Management Policies in Service Sector, Process of Designing a Successful Reward Strategy.	4

Section B

At Least one Case Study from each UNIT. Questions will be case/ inferences/ application based.

PRACTICAL COMPONENT

- Students have to prepare questionnaire for conducting wage survey and carry out wage survey for any selected sector and prepare a report for the same
- Students are expected to conduct a survey regarding the effective utilization of resources within the campus and find out the flaws in the existing compensation system.
- Give a wage determination case and ask the students to suggest solution.
- Give a cost to company case and ask the students to role play for negotiating with a prospective job applicant to distribute the CTC under various components.
- Give a case to identify and prepare the notices to be displayed, returns to be submitted and the registers to be maintained as per the above legislations.

BOOKS RECOMMENDED

1. Newman, Jerry M., Gerhart Barry, Milkovich, George T. (2020). Compensation, McGraw Hill.
2. Sharma, R. C., Sharma Sulabh, (2019). Compensation Management, Sage Publications Inc.
3. Singh, B. D. (2012). Compensation and Reward Management. India: Excel Books.
4. Compensation Management, Bhattacharya (2009). India: Excel Books.
5. Macky, K. A., Wilson, M. G. (2013). Rewards, Remuneration and Performance: A Strategic Approach. New Zealand: CCH New Zealand Limited.
6. Murlis, H., Armstrong, M. (2007). Reward Management: A Handbook of Remuneration Strategy and Practice. United Kingdom: Kogan Page.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. Journal of Compensation and Benefits, Sage Publications
2. Journal of Economic Perspectives, American Economic Association (United States)
3. The Journal of Total Rewards, WorldatWork
4. Compensation & Benefits Review, Sage Publishing

M-334: HUMAN RESOURCE DEVELOPMENT

OBJECTIVES
1. This course is designed to help students in understanding various concepts of HRD, HRD systems and processes.
2. It will enable students in developing HRD facilitator's skills.
3. This course will help students to develop and design HRD programmes and implement and control them in various organizational setups.

LEARNING OUTCOMES
1. Ability to describe the role of Human Resource Development Function in an Organization.
2. Ability to enumerate the emerging trends and practices in HRD.
3. Demonstrate the use of different tools and techniques of HRD in an Organization.
4. Evaluate the developing role of human resources in the global arena.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**HRD- Macro Perspective:** Introduction to Human Resource Development- Concept, Relationship between human resource management and human resource development, HRD mechanisms, processes and outcomes.	3
UNIT II	**HRD- Micro Perspective:** HRD matrix, HRD interventions, Roles and Competencies of HRD professionals, Challenges in HRD.	2
UNIT III	**HRD Process:** Assessing need for HRD, Designing and developing effective HRD programs, Implementing HRD programs, Evaluating effectiveness of HRD Programs, HRD audit, HRD culture and climate.	3
UNIT IV	**Introduction to HRD Tools:** Need, scope and design of the HRD tools, Foundations of HRD Tools- Organizational Psychology concepts-Individual, Group and Organizational processes affecting performance.	3
UNIT V	**HRD Activities:** Employee development activities- Approaches to employee development, leadership development, action learning, assessment and development centres, Intellectual capital and HRD, HRD mechanisms for workers, Role of trade unions, Industrial relations and HRD, Influence of motivation on development activities.	3
UNIT VI	**Evaluating HRD Programs:** Purpose of HRD Evaluation, Models and frameworks of evaluation, Assessing impact of HRD Programs, Ethical issues concerning Evaluation.	2
UNIT VII	**HRD Applications and Trends:** Coaching and mentoring, Career management and development, Employee counselling, Competency mapping, PCMM, Balanced Score	4

Card, Appreciative inquiry, Integrating HRD with technology, Employer branding and other emerging trends.

UNIT VIII **HRD in Organisations:** Selected cases covering HRD practices in government organisations, manufacturing and service industries and MNCs, International experiences of human resource development.   **4**

Section B
At Least one Case Study from each UNIT. Questions will be case/inferences/ application based.

PRACTICAL COMPONENT
- Designing HRD Programmes for employees of different sectors.
- Case Study and role play on selecting training methods for the employees of different sectors and departments
- Diagnose and analyze the HR process of organizations and its aims.
- Formalize, design and evaluate various recruitment and placement policies.
- Develop ways in which human resource management might formulate a business strategy and then facilitate the internal change necessary to accomplish the strategy.

BOOKS RECOMMENDED
1. Udai Pareekh & T.V.Rao, Designing and managing Human Resource Systems, Oxford, 2015.
2. John Werner and Randy Desimone, Human Resources Development, Cengage, 2011.
3. Haldar, U. K., Human resource development, Oxford University Press India, 2009.
4. Rao, T.V., HRD Score Card 2500: Based on HRD audit, Response Books, SAGE Publications, 2008.
5. Noe, Raymond.A, Employee Training & Development, McGraw-Hill, 2018.
6. Mathur, Sumit Kishore & Mathur, Jyoti, HRD Climate: A Review, 2020.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Human Resource Development Review, Sage Publications
2. The International Journal of HRD Practice, Policy & Research, Inderscience Publishers
3. International Journal of Human Resource Development and Management, Inderscience Publishers
4. Human Resource Development Quarterly, Wiley-Blackwell

Operations & Supply Chain Management Group D

S. No.	Subject Code	Subject Title
III Semester		
1	M-340	Materials Management
2	M-341	Total Quality Management
3	M-342	Manufacturing Planning And Control
4	M-343	Management of Business Process Outsourcing
5	M-344	Export, Import Procedures and Documentation

M-340 MATERIALS MANAGEMENT

OBJECTIVES
1. Illustrate scope, role of materials management in any organization.
2. Explain the key characteristics of purchasing system and purchasing procedure.
3. To discuss the policies of Inventory Management and how to generate overall materials plan
4. To give exposure to various aspects of warehouse management.

LEARNING OUTCOMES
1. Understand importance of materials management and its various issues in manufacturing industry.
2. Determine suitable purchase procedure for procurement and evaluate purchase department.
3. Develop integrated overall materials requirement plan.
4. Apply various inventory control techniques into practice including spare parts planning.
5. Understand the importance of warehouse management.
6. Decide on selection of supplier and evolve procedure for vendor evaluation.

Section-A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction to Materials Management (MM):** Scope of materials management, functions, Materials cycle, Objectives of MM, Organizing for MM and role of Materials manager, Issues in materials management.	**2**
UNIT II	**Purchase System and Procedure:** Purchasing objectives, purchase cycle, inputs to purchasing, restraints, and factors, concept of Lead time, purchasing decisions: ordering systems, Price determination and negotiation, sourcing of supply: source location and supplier selection, purchasing organization, procedures, forms, and reports, evaluation of department procedures, Legal aspects of procurement: Purchase order, bid evaluation criteria, term of purchase , INCO terms, contracting and types of contracting, Make-Buy decisions.	**4**
UNIT III	**Inventory Management:** Objectives of inventory, functions & classification, factors affecting inventory, inventory modelling, deterministic inventory models: single item, and multi-item inventory models. Inventory models with probabilistic demand: single period models. Inventory control systems: Fixed order quantity & periodic review system.	**4**
UNIT IV	**Materials requirement planning (MRP):** Principles of MRP, Objectives of MRP system, System inputs and outputs, factors affecting the computation of requirements, processing logic, lot sizing techniques, the use of system outputs. MRP I and MRP II	**3**
UNIT V	**Spare Parts Management:** Issues, features of spares, categorization, cost reduction approach to spares. Selective inventory control: ABC, VED, SDE, HML, GOLF, SOS, FSN and XYZ	**3**

analysis. MUSIC 3D approach. Stocking Policy for spares. Simulation for spares planning.

UNIT VI	**SAP/ ERP System for Materials management:** SAP/ ERP Introduction, various functional modules of SAP, SAP MM enterprise structure –defined (Client, company code, plant, location, Template for SAP login menu) Template for materials management, Template for materials master configuration, Template for vendor master, Template for purchasing requisition, Various transaction codes for purchasing menu.	**3**
UNIT VII	Material Classification, Codification, Standardization and Variety Reduction. **Warehouse Management:** Reasons for warehousing, definition types, Details of factory warehouse, Warehouse layout, Terms used in warehouse (Zones, Location, equipment & stations) Role of warehouse manager, Details of functions, Industry Warehouse design considerations	**3**
UNIT VIII	**Vendor Development:** Need for vendor development, levels of vendor assessment, vendor evaluation and selection process, Key supplier evaluation criteria, vendor rating methods, managing supplier relationship, vendor managed inventories.	**2**

Section B
At least one case study/ problem from each unit. Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
- Study and analysis of purchasing and contracting procedure and its documents of any chemical company.
- Study and preparing of piping or any Bulk materials "Bill of materials" for any infrastructure company or any project.
- Study of Spare parts interchangeability record   with use of VED analysis for any chemical company Study and prepare –a chart for Vendor selection procedure for any retail company(like Rel fresh) for supply of FMCG items.
- Study and analysis for procurement strategy by use of HML Techniques for any power plant / automobile manufacturing company.
- Study and analysis for cost reduction techniques for warehouse management, especially for waste reduction in the yarn industry.
- Prepare formats of different documents used in stores, like bin card, Material issue note, material return note, Item inspection report & item warrantee record
- Study and prepare a report for Terms and concept of SAP MM Module used by any company.

BOOKS RECOMMENDED
1. J.R.Tony Arnold, Stephen N. Chapman, Lloyd M. Clive, Materials Management, Pearson, 2012.
2. Gupta & Chitle, Materials Management, Text & Cases, PHI, 2012.
3. P GopalaKrishnan, Materials Management – Text & cases by Prentice- Hall of India,2015
4. S. Sadagopan, ERP-A Managerial Perspective, Tata McGraw Hill, 2018 Edition

5. F. Robert Jacobs and D. Clay Whybark, Why ERP? A primer on SAP Implementation, McGraw-Hill Higher Education, 2016 Edition
6. Operations Now - Byron J. Finch, 3/e, Tata Mc-GrawHill, 2008.
7. Operations Management: Along the supply chain - Russel and Taylor, 6/e, Wiley India, 2009
8. Gopalakrishna and Sundaresan, "Materials Management", TMH, 2017
9. K. Datta, "Materials Management: Procedures, Text and Cases", Pearson, 2011

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. MATERIALS MANAGEMENT - European Scientific Journal,
2. International Journal of Manufacturing,
3. Materials, and Mechanical Engineering (IJMMME),
4. International Journal of Physical Distribution & Logistics Management,

M-341 TOTAL QUALITY MANAGEMENT

OBJECTIVES
1. To introduce the students to the basic concepts of total quality management its relevance in today's context.
2. To develop understanding in the implementation of a total quality management system in an organization.
3. To develop competency in assessment of Cost of Poor Quality.
4. To introduce the system approach to quality management
5. To develop competencies in performance measurement
6. To enhance knowledge in business excellence frameworks and models

LEARNING OUTCOMES
1. Evaluate the principles of quality management and to explain how these principles can be applied within quality management systems.
2. Apply the continuous quality improvement tools and techniques for process improvement.
3. Plan for implementation of QMS.
4. Develop plans for Benchmarking and assessment as per various excellence models.
5. Explain the concept of Six Sigma its DMAIC process.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction:** Quality Characteristics, Quality Control and Quality Assurance, Total Quality System, Quality Improvement, Management of Quality, Quality and Productivity, Total Quality Management: Basic approach, TQM Axioms, TQM framework, Benefits of TQM	**3**
UNIT II	**Philosophy of Quality Leaders and its impact:** Characteristics of Quality leaders, Philosophy of Quality Guru's: Deming's PDSA Cycle, Crosby's four absolutes of quality Management, Juran's quality trilogy, Taguchi: Quality loss function, Imai's Kaizen.	**3**
UNIT III	**Customer Driven Quality:** Customer satisfaction model, customer perception of quality, Translating customer needs into requirements (Kano Model). **Quality costs:** categories, analysis, Optimum quality cost concept.	**3**
UNIT IV	**Continuous Improvement tools:** Brainstorming, Affinity diagram, Matrix diagram, Force field diagram, Check sheet, Flow chart, cause and effect diagram, Bar chart, Run charts, histogram, Pareto chart, Scatter Diagram, Criteria rating form, Process decision program chart. **Process Quality Improvement:** Statistical Process Control, Process Capability and Acceptance sampling, Pre-Control Taguchi's Quality Engineering: Introduction to Orthogonal Arrays, Signal-to-Noise Ratio and Parameter Design.	**5**

UNIT V	**Benchmarking:** Concept, Process of benchmarking, Types of Benchmarking, Issues in Benchmarking. **Six Sigma Technique**: statistical aspect, six sigma management process, DMAIC, ultimate six sigma.	**3**
UNIT VI	**Quality Management Systems:** Definition, elements of QMS, ISO 9000 & ISO 14000 series standards.	**2**
UNIT VII	**TQM awards:** Deming Prize, Malcolm Baldridge National Quality Award, European Foundation for Quality Management's EFQM Excellence Model, Golden peacock national quality award (GPNQA).	**2**
UNIT VIII	**TQM in manufacturing sector:** Implementation, Quality in design, Quality in procurement. **TQM in service sector:** Implementation, Quality in after sales service.	**3**

Section B
At least one case study/ problem from each unit. Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
Industrial cases / Examples
- Study and prepare analysis report of quality dept. procedure and tests conducted for product of any manufacturing industry.
- Prepare a documentation and requirement report for ISO 9000 for any retail/manufacturing industry, already having ISO certification.
- Study and benchmarking of customer satisfaction for any four life insurance industry/ Banking.
- Study and prepare a report on Six Sigma applicable in the industry.
- Prepare a report suggesting an zero defect program by use of quality tools for any industry.
- Prepare a report on 5S programme for better retrieval & documentation system for any retail warehouse.
- Prepare a report with parameters study (for quality assurance in manufacturing process / raw materials) for a company suggesting necessary implementation of TQM approach with procedure indicating practical benefits.
- Study and prepare a report for a company using quality award techniques for rating their quality parameters as whole of the organization.

BOOKS RECOMMENDED
1. Dale H.Besterfield et al, Total Quality Management, Third edition, Pearson Education (First Indian Reprints 2004).
2. R. Kesavan, Total Quality management, Publiser Wiley- India, 2014 edition.
3. Evans and Lindsay, An Introduction to Six Sigma & process improvement, Cengage, 2nd Edition, 2016
4. Douglas C. Montgomory, Introduction to Statistical Quality Control, Wiley Student Edition, 7th Edition, Wiley India Pvt Limited, 2012.
5. James R. Evans and William M. Lindsay, The Management and Control of Quality, Sixth Edition, Thomson, 2010.
6. Indian standard – quality management systems – Guidelines for performance

Improvement (Fifth Revision), Bureau of Indian standards, New Delhi.

7. James W. Fairfield-Sonn, Corporate Culture and the Quality Organization Quorum Books, 2001
8. John Beckford, Quality, Routledge, 2002 (2nd edition)

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. Quality Policies of Corporate
2. International Journal of Quality Control
3. The TQM Journal
4. International Journal of Quality and Reliability Management

M-342 MANUFACTURING PLANNING AND CONTROL

OBJECTIVES
1. To provide knowledge for understanding demand management system.
2. To help understand the Sales and Operations Planning for an organization.
3. To gain understanding of construction of effective Master Production Schedule.
4. To discuss the Materials Requirement Planning as a basic tool for performing the detailed material planning function
5. To provide understanding in determining the capacity requirements and to match capacity with plans
6. To discuss effective Production Activity Control system.

LEARNING OUTCOMES
1. Understand and perform demand forecasting.
2. Determine the optimum production levels to meet defined demand within specified capacity limits and prepare production plan.
3. Perform the master scheduling process.
4. Understand and manage material requirements planning.
5. Prepare a capacity plan using capacity requirement planning procedures.
6. Develop an effective Production Activity Control System

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Manufacturing Planning and Control (MPC):** The context of MPC, definition of MPC system, framework of MPC system, matching the MPC system with needs of firm, Evolution of MPC system	2
UNIT II	**Demand Management:** Demand management in MPC systems, Demand Management and the MPC Environment: Make-to-Stock (MTS), Assemble-to-Order (ATO), Make (Engineer)-to-Order (MTO), Communicating with Other MPC Modules and Customers, Information use in Demand Management, Providing Appropriate Forecast Information: Forecasting Framework, Forecasting for Strategic Business Planning, Sales Operations Planning, Master Production Scheduling and Control. Producing and Evaluating Detailed Forecasts: Moving Average, Exponential Smoothing. Evaluating and using Forecasts, Considerations for Aggregating Forecast, Pyramid Forecasting, Organizing for Demand Management	3
UNIT III	**Sales and Operations Planning (SOP):** SOP in the Firm, SOP Process: Monthly SOP, SOP displays, strategies for SOP, chase strategy, pure and mixed strategies, basic trade-offs and evaluating alternatives. Management Obligations for SOP: Functional Roles, integrated strategic planning, Controlling the Operations Plan, Organizational aspects of SOP.	3
UNIT IV	**Master Production Scheduling(MPS):** MPS activity, Techniques of MPS, Bill of materials structuring for MPS, Assembly schedule, Master production scheduler and examples, MPS stability.	2

UNIT V	**Material Requirements Planning(MRP):** MRP in manufacturing planning and control system, Record Processing: Basic MRP record, product structure tree, Bill of materials, gross to net explosion, lead time offsetting, linking MRP records, Technical Issues: Processing frequency, bucketless systems, lot sizing, safety stock and safety lead time, low-level coding, pegging, firm planned orders, service parts, planning horizon, scheduled receipts, planned order release. Using the MRP System and system dynamics.	2
UNIT VI	**Just-in-Time (JIT) in MPC:** Major elements of JIT, JIT's impact on MPC, JIT Building blocks, Applications: Kanban, Toyota Production System (TPS). Nonrepetitive JIT, JIT software and managerial implications. JIT manufacturing framework.	3
UNIT VII	**Capacity Planning and Utilization:** The Role of Capacity Planning in MPC Systems, Hierarchy of Capacity Planning Decisions, Links to Other MPC System Modules, Capacity Planning and Control Techniques, Capacity Planning Using Overall Factors (CPOF), Capacity Bills, Resource Profiles. Capacity Requirements Planning (CRP), Scheduling Capacity and Materials Simultaneously, Finite Capacity Scheduling, Finite Scheduling with Product Structure, Using APS Systems, Management and capacity planning/utilization: input/output control, managing bottleneck capacity, choosing the measure of capacity.	3
UNIT VIII	**Production Activity Control (PAC):** Framework for PAC, MPC System Linkages, Linkages between MRP and PMC, Just-in-Time Effect on PAC. Production Activity Control Techniques: Basic Shop-Floor Control Concepts 374 Lead-Time Management, Gantt Charts, Priority Sequencing Rules, Theory of Constraints (TOC) Systems, Vendor Scheduling and Follow-up.	3
UNIT VIII	**Enterprise Resource Planning (ERP):** Definition, software imperatives, scope of ERP applications, MPC fit with ERP, Performance metrices to evaluate integrated system effectiveness. Advanced Concepts in MPC: Introduction to Disaggregation. concept of linking firms MPC system with corporate strategy: MPC design options, integrating MRP and JIT. Introduction to Flexible manufacturing system.	3

Section B
At least one case study/ problem from each unit. Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
Case study and Examples: Manufacturing industry:
- Study and prepare a production schedule of a multiproduct manufacturing unit, based on previous year schedule (tyre& paint industry or others)
- Study and report preparation on furcating of a four vehicle segment industry.
- Study and analysis of safe working practice in a chemical and petro-chemical plant

and their procedure

- A report on Flexible manufacturing system indicating the improvement process and benefits for any consumer product manufacturing unit, like frig, washing machine, air conditioner etc.
- A report on multilevel bill of materials and prepare a MRP requirement for a specific period (retail sector or others).

BOOKS RECOMMENDED

1. Seetharama, Peter J., Dennis W, Production planning & inventory control, PHI Publication,2015.
2. Stephen N. Chapman, The fundamentals of production planning and control, Pub., Pearson, Prentice hall, 2006.
3. Production and operation management- S N Chary- Tata McGraw hill, 2017.
4. Aswathappa & Bhat, Production and operation management- HimaLaya Publication House. 2016
5. Buffa, Modern Production & Operation Management –Wiley India, 2012.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. International journal of Production Planning & Control,
2. International Journal of Production and Inventory Management,
3. Journal of Production and Operations Management,
4. European Journal of Operations Management,

M-343 MANAGEMENT OF BUSINESS PROCESS OUTSOURCING

OBJECTIVES
1. To introduce the students to the basic concepts of outsourcing.
2. To study the scenario of Outsourcing in India and the Global scenario.
3. To discuss related issues such as knowledge transfer, culture change.

LEARNING OUTCOMES
1. Learning the Factors to Consider for Selecting BPO/ KPO Partner.
2. Learn the important concepts, tools, and uses of Business Process Outsourcing.
3. Learn about the benefits of implementing Business Process Outsourcing processes in your work place.
4. Learn about the importance of communication skills in Business Process Outsourcing.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction to BPO/KPO& Business Process Management:** Introduction to Outsourcing., Business Process Outsourcing and Knowledge Process Outsourcing, Outsourcing Objectives, Types of BPO/KPO, Emerging BPO domains. Global scenario in Outsourcing. BPO / KPO in India - Historical overview and Current trends, BPO vendor selection, Managing Buyer vendor relationship, Execution of an outsourcing project. Outsourcing contracts.	3
UNIT II	**Data Protection and Security:** Introduction to Data protection and security, definition of Data types of data-principals and code of practices, Data Protection Act 1998, Role of data protection authority, Data Security standards and measures.	3
UNIT III	**Back Office Operations:** Emergence and Concepts of Back office operations Functions, tools and techniques of back office operations. Use of technology on back office operations Transformation processes - Back office and front office operations.	3
UNIT IV	**Voice and Accent Training:** Communication : Process of communication, Conversational skills, Language and its function, Ways to handle customer and different types of customers, Telephone Ethics: Basic telephone rules, Making a call (During and after), Gathering Information by telephone (Before and After), Answering the telephone (before and during), Listening Skills: What is Listening, Types of Listening, Ten Aids to good listening, Communication Games, Voice:Vocal Qualities, Mechanics of speech, Vocal Modulation, Practice of Pitch, Volume, Diction, Speed & Tone, Diphthongs, Accent:MTI removal (s, sh, zh, z), How to use convincing accent, Vowel and consonant sound, Pronunciation Drills, Drills on tongue twisters, Learn the International phonetics AlphabetsLearn to make the American/British sounds.	6

UNIT V	**Customer Relationship Management:** Introduction to E-CRM, Evolution of CRM, Concepts and relevance of E-CRM in Indian Outsourcing industry.E-CRM and Conventional CRM, Benefits of E-CRM Implementation of E-CRM in Business.	**3**
UNIT VI	**Six Sigma Quality in Outsourcing:** Concepts, theories and emergence of Total Quality Management and six-sigma. Six sigma tools and techniques –DAMIC.	**2**
UNIT VII	**Infrastructure Considerations and Challenges:** Infrasturcture- Variety of infrasture, critical considerations in infrastructure, software and hardware infrastructure.	**2**
UNIT VIII	**Outsourcing in Human Resource Function:** Introduction,New role of HRoutsourcing,benefits of HR outsourcing, in house HR administration and V/s oursourcing,measuring the outsourcing HR function.	**2**

Section B
At least one case study/ problem from each unit. Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
Case Study on each module:
- Prepare a report for lost sales of a drinking water bottles manufacturing company for its quality improvement by six sigma approach and analysis of problems by fishbone diagram
- Study and prepare a report on communication system at BPO indicating learnings.
- Study and analysis of ECRM process of any company
- Study and report preparation for back office operations of an education industry.
- Prepare a report for ,how data are transfer and kept privacy of data in KPO firms.

BOOKS RECOMMENDED
1. SarikaKulkami , Business Process Outsourcing, 2012
2. J Brian Heywood, The Outsourcing Dilema.2015
3. Rick L Click and Thomas N. D., business process outsourcing, Pub Wiley, 2015
4. K ShridharaBhat, Business process outsourcing, Pub Himalaya, 2018
5. MadhaviGarikaparthi , E-CRM- Concepts and Cases. ICFAI Publication,2017
6. David Salomon, Data privacy and security, 2018
7. BalaBhaskaran P, KPO: A Shifting Paradigm Book Description, 2018
8. Hammonds, Data protection by Click &Duneining , 2016
9. Business Process Outsourcing-The Competitive Advantage. 2013

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Journal of Business Law
2. Journal of Business Research
3. Journal of International Business Studies
4. European Journal of Outsourcing.

M-344: EXPORT AND IMPORT PROCEDURES AND DOCUMENTATION

OBJECTIVES
1. Make understand the critical documentation and their specification
2. To know the steps for obtaining import –export licencing procedure and requirement
3. Understand Indian government initiatives and policies for exports promotion

LEARNING OUTCOMES
1. Develop an understanding of the importance of import and exports procedures
2. Develop qualities to become an entrepreneur or consultant for export and import procedures
3. Carry out certification course at later stage for becoming government associate in shipping industries
4. Develop an in-depth understanding of export packaging and logistics management at shipment process

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Preliminaries for Export:** Meaning of export & import, classification of import and exports, Categories of Exporters, Identifying foreign market, methods of entering international markets, Constraints in entering foreign markets.	2
UNIT II	**Evolution & Environment and organizations in International trade:** Classical theory of international trade, different aspect of demographic, social, cultural economic, political competitive environment , Introduction and features of GATT and WTO.	2
UNIT III	**Framework for India's Foreign Trade:** Introduction of Laws governing India's export – Import trade, A snapshot and major features of foreign trade policy (latest), Brief role and main function of institutions of foreign trade, (DGFT, EPC, IIFT, CB, FEIO, NCIT and STC).	2
UNIT IV	**Export Procedure and Method of Payment :** Stepped features and details in obtaining export licence Introduction, brief registration procedure, obtaining IEC number and RCMC , role of custom house agent (CHA), pre-shipment, shipment and post shipment features and requirements, procedure for shipping and custom clearance, procedure for marine insurance policy and procedure of filing insurance claim, Method of Payments and policy assistance, Letter of credit and operation through bankers, Types of letter of credit their features and risk involvedProcedure for opening letter of credit, advantages of LC, Role of commercial, EXIM banks.	4
UNIT V	**INCO TERM- 2010 and 2020:** Introduction of incoterms, their rules and categories (E,F, C and D) and added features in Incoterm 2020 v/s 2010, Specific features and destination in export and import for Air way- Ex works (EXW),Free	4

carrier (FCA), Carriage paid to (CPT),Carriage and insurance paid to (CIP), delivery at place (DAP), Delivery at place unloaded,(DPU)Delivery duty paid (DDP)

Water Way (sea worthy)- EXW, FCA,(same) Free alongside ship(FAS), Free on Board (FOB), cost and freight (CFR), Cost insurance and freight(CIF) and D terms same as air way.

UNIT VI	**International Trade documents :**Specific features of aligned document system, categorization of documents as Master document- I and Master document-II (only name and description of documents), International trade documents, their features, specific purpose and standard format, Performa and commercial invoice, packing list, shipping bill, certificate of origin, Consular invoice, Mate receipt, Bill of lading, Guaranteed Remittance (GR) form, bill of exchange, Airway bill, Bill of Entry, Certificate of inspection, Certificate of measurement.	**4**
UNIT VII	**Incentives and Assistance for Exporters:** Duty drawback and Procedure for its calming , Major features of Export promotion capital goods scheme (EPCG), deemed exports, EOU's, EHTP, STP,SEZ, Agri export zones, Assistance to states for developing Export infrastructure and allied activities (ASIDE).	**2**
UNIT VIII	**Import procedure - brief notes and features:** Introduction, categories of import, import licence, import contract, pre import procedure, legal dimensions of import procedures, custom clearance and warehousing of imported goods, Exchange control provisions for import, Import risk and import duty, valuation of Custom duties, Import incentives under special schemes.	**4**

Section B

At least one case study/ problem from each unit. Questions will be case/ inferences/ application based

PRACTICAL COMPONENT

- Prepare a chart for international supply indicating the logistical destination and scope of seller and buyer (column) along with related Incoterms 2010/2020 (rowwise).
- Prepare the documentation for 20 tons of steel supply from SAIL , Mumbai to Shanghai, Chaina, Seaworthy.
- Calculate the price of total transection for seller based at NY, USA and Buyer at Tokyo, Japan. Supply of 2500 pair shoe with unit price $ 15.0, Custom duty (CIF) 12% of CIF price, Insurance 1% of FOB price, Ocean fright $ 2000, USA Inland fright $0.50 per pair, Japan inland freight $ 1000 per shipment, loading and unloading charges are inclusive (Tokyo). Calculate ExW at NY, FOB Los Angelis, CIFyokohama, DDU Tokyo and DDP Tokyo.
- Write examples of items covered in each category of import .
- Explain the prerequizte of SEZ park acquization and licencing for bulk item.

- Ten nos laptop are being procured from Yokoham, Japan to Mumbai India Explain the steps of airworty procurement at final primices destination Andheri west, building no 4, bandraKurla complex, Mumbai.
- Prepare a path and paste display box for obtaining export licence for petroleum product from seaworthy.
- Explain the types of letter of credit and their features. Which letter of credit will be most suitable for supplying marble from Jaipur, India to Jakarta, Indonesia through seaworthy and considering destination for minimum risk consideration to supplier
- What is specific use of mate recipt, shipping bill, bill of ladding, certificate of origin. Which is the most important document to make a claim from marine cum insurance policy due to mishap of shipment.

BOOKS RECOMMENDED

1. Khushpat S Jain, and Apexa V Jain, Foreign Trade- Theory, procedures, practices and documentation, Himalaya Publishing, 8th Edition,2019
2. C. Rama Gopal, Export import procedure, documentation and Logistics, New age International pub., 2008, ISBN (13) : 978-81-224-2326-6
3. Belay,Seyoum, Export import theory, practices, procedures, Routledge, T & F group, NY,3nd Edition.-2009.
4. Donna L Bade, Export Import procedure and documentation – American Management association , 2009
5. (AMA, V edition, 2015) , www.amanet.org, ISBN-978-0-8144-3475-8(hardcover:alk.paper)
6. Thomas E Jhonson, Export Import procedure and documentation- American Management association (AMA, IV edition,), ISBN 0-8144-0734-X (hardbound)

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. International Journal of Export Marketing
2. The Journal of International Trade & Economic Development
3. The International Trade Journal
4. Asian journal of Import and export

Management Group E

S. No.	Subject Code	Subject Title
III Semester		
1	M-350	Software Engineering
2	M-351	E-Business
3	M-352	Strategic Management of Information Technology
4	M-353	Information Security and Cyber Law

M-350: SOFTWARE ENGINEERING

OBJECTIVES
1. To learn and understand the concepts of Software Engineering.
2. To apply the project management and analysis principles to software project development.
3. To apply the design & testing principles to software project development.

LEARNING OUTCOMES
1. Understand software specifications to classify different types of software models.
2. Understand Software Design Process and different Software Testing techniques.
3. Analyze cost of software projects using cost estimation models.
4. Able to explain the software engineering principles and techniques that are used in developing quality software products.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Software Engineering Fundamentals:** Software Engineering - A layered Technology, The importance of software, Software Characteristics, Software myths, Software Engineering Paradigms, Software Components, Role of management in software development.	**2**
UNIT II	**Software Process Models:** Linear Sequential Model, Prototyping Model, RAD Model, Evolutionary Software Process Models: Incremental Model, Spiral Model, Component Assembly Model, Formal Methods, Fourth-Generation Techniques.	**3**
UNIT III	**Software Requirement Engineering :** Requirements Engineering, System and software requirements, Types of software requirements: Functional and non-functional requirements, Domain Requirements, User Requirements, Feasibility Study, Requirements Elicitation: Overview of techniques ,Viewpoints, Interviewing , Scenarios, Use-cases	**3**
UNIT IV	**Software Requirement Specification:** Requirement Analysis: Entity Relationship Diagram, Data Dictionary, Requirement Validation, Requirement Documentation, Requirement Management, Requirement Specification: Software requirement Specification (SRS), Structure and contents, SRS format.	**3**
UNIT V	**Software Project Planning:** Software Project Planning, Size Estimation, Cost Estimation, Models, Static, single variable models, Static, Multivariable Models, COCOMO, Risk Identification and Projection: RMMM, Project scheduling and Tracking.	**4**
UNIT VI	**Software Design Process:** Design concepts: Abstraction, Architecture, Patterns, Modularity, Cohesion, Coupling, Information hiding, Functional independence, Refinement,	**3**

	Design of input and Control, User Interface Design: Elements of good design, Design issues, Features of GUI.	
UNIT VII	**S/W Testing Fundamentals:** Verification and validation, Techniques of testing: Black-box and White-box testing, Inspections, Levels of Testing: Unit Testing, Integration Testing, Interface Testing, System Testing, Alpha and beta Testing, Regression Testing, Design of test cases.	**3**
UNIT VIII	**Software Maintenance & Quality Assurance:** Maintainability – maintenance Tasks, Characteristics of a good quality software. Quality management activities, Product and process quality Standards: ISO9000, Capability Maturity Model (CMM).	**3**

Section B

At least one Case Study from each UNIT Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
1. Preparing Software Requirements Specifications.
2. Identifying Domain Classes from the Problem Statements.
3. Creating document after completion of software design phase.
4. Modeling UML Use Case Diagrams.
5. Designing Object Oriented Metrics
6. Designing Test Cases.

BOOKS RECOMMENDED
1. Roger S Pressman, Bruce R Maxim, "Software Engineering: A Practitioner"s Approach", 8th Edition, 2019.
2. Ian Sommerville," Software engineering", Addison Wesley Longman, 9th Edition, 2017.
3. Ali Behforooz, Hudson, "Software Engineering Fundamentals", Oxford, 2009.
4. Hans Van Vliet ," Software Engineering Principles and Practice",3rd Edition,Wiley, 2010
5. Ali Behforooz, Hudson, "Software Engineering Fundamentals", Oxford, 2009.
6. K.K. Aggarwal, Yogesh Singh, "Software Engineering", 3rd Edition, 2008

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. IEEE Transactions on Software Engineering, IEEE
2. Journal of Systems and Software, Elsevier
3. Journal of Software: Evolution and Process, Wiley
4. ACM Transactions on Software Engineering and Methodology, ACM

M-351: E-BUSINESS

OBJECTIVES
1. To understand terminology and concepts of e-Business and the impact of e-Business on society and market commerce.
2. To become aware of the global nature of e-Business and how traditional means of doing business will need to change in the electronic age.
3. To identify organizational processes and relationships that may have value added, through the application of an e-Business strategy.

LEARNING OUTCOMES
1. Understand the E- business infrastructure and trends and Integrate theoretical frameworks with business strategies
2. Analyze different types of technologies and methodologies used for developing e-Business.
3. Analyze real business cases regarding their e-business strategies and transformation processes and choices.
4. Understand the knowledge hierarchy to e-Business and related business processes and marketing techniques.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Overview:** Definitions Of Electronic Commerce/ Electronic Business, Characteristics, Elements of e-Business, Categories Of e-Business (B2B, B2C, B2A etc.), Role of e-Business, Difference between E-Business and E-commerce, Evolution of e-Business	2
UNIT II	**Building Blocks of e-Business:** e-Business infrastructure components, Managing e–business infrastructure–Hardware and Software, Technical e-Business challenges, Internet Technology, Web Technologies & Applications, Collaborative Technologies–EDI, Workflow systems, Building e-presence– need of a website	3
UNIT III	**Electronic Markets:** Definition and use of Electronic Markets, Advantages , Disadvantages, Electronic Market vs Traditional Market, Functions and Working of e-Markets, Electronic Market Success factors, Online Market Place Analysis, Location of Trading in Market Place	3
UNIT IV	**e-Business Strategies:** Introduction, Levels of e-Business Strategy, The changing competitive agenda–Business & Technology drivers, e-Business Models, Strategic Analysis, Theory of competitive strategy, Success factors for implementation of e-Business Strategies	3
UNIT V	**e-Business Applications: e-**Procurement, e-Payment Systems, ERP, e-SCM, e-CRM, e-Governance, e-Marketing, e-Advertising, e-Sales, e-Products, Internet Shopping and the e-Shop	4
UNIT VI	**The Impact of e-Business on Different Fields and Industries:** e-Tourism, Employment and Job Market Online, Online Real Estate, Online Publishing and e-Books, Banking and	3

| UNIT VII | **Contemporary Issues in e-Business:** Reliability for e–Business, Quality requirements, Trust, e – Business Risk, e–Business security mechanism, Designing for Security – Assessing the security needs for the firm, Establishing a good policy, Fulfilling web security needs, Structuring the security environment, Monitoring the system | 3 |

Personal Finance Online, On-Demand Delivery Systems and E-Grocers, E-Learning and Online Education

| UNIT VIII | **Impact Of e-Business On Society:** Issues Related To The Job Market, Current Global Situation, Work Patterns, Skills Required And Continuous Learning, How Local Becomes Global, Positivity Of IS/IT, What Needs To Be Done In Order to cater for the future e-Business/Information Society? | 3 |

Section B

At least one Case Study from each UNIT Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
1. Study of marketing strategies of any two companies.
2. Analyzing Mission and Vision statements of any five companies and comparing them.
3. Learning the concept of Michael Porter's five forces model through its application to any one industry (Retail, Telecom, Infrastructure, FMCG, Insurance, Banking etc.)
4. Analyzing the change in the internet architecture in order to measure and sustain relevant e-Business criteria.
5. Study on the impact of e-Business on Industry and Society with 2 Real Life examples
6. Comparing the growth trends of any 2 retail outlets with the e-Business applications and without e-business applications.

BOOKS RECOMMENDED
1. J Deitel, Deitel & Nieto, Internet and World Web- How to Program, Paperback – Import, December 1999
2. J Deitel, Deitel & Nieto, e-Business and e-Commerce How to Program, Pearson, 2001
3. Dave Chaffey, e-Business & e-Commerce Management: Strategy, Implementation, Practice, Pearson Education, 5th Edition, 2013
4. Michael P. Papazoglou, Pieter Ribbers, e-Business: Organizational and Technical Foundations, Wiley India (P) Ltd, January 2006
5. Colin Combe, Introduction to E- Business: Management and Strategy, Elsevier Ltd., February 2006
6. Jelassi, Tawfik, Martínez-López, Francisco J, Strategies for e-Business, ISBN 978-3-030-48950-2, 2020

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. International Journal of Electronic Business, Inderscience Publications
2. International Journal of e-Business Research (IJEBR), IGI Global
3. International Journal of Electronic Business Management, Inderscience Publications
4. e-Business - Global Journals

M-352: STRATEGIC MANAGEMENT OF INFORMATION TECHNOLOGY

OBJECTIVES
1. To develop an understanding of use of Information Technology as a Strategic Tool for Business Management.
2. To enable the development of Information Technology Leadership and identification of IT strategies to support the firm's global business goals and operation.
3. To help learners to determine IT planning methods that support strategic development within an organization and make an effective contribution to the IT planning process.

LEARNING OUTCOMES
1. Understanding of IT strategic decisions that organizations make and have an ability to engage in strategic planning.
2. Knowledge of the basic concepts, principles and practices associated with strategy formulation and implementation.
3. Ability to integrate and apply knowledge gained in basic concepts to the formulation and implementation of strategy from holistic and multi-functional perspectives.
4. Acquisition of skills to analyze and evaluate critically real life company situations and develop creative solutions, using a strategic management perspective.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction:** Key Issues in Information system & Management, the Role of CEO. Sustaining Competitive Advantage of use of IT & Management. I.T. & Intensive Strategic Growth, Introduction to Strategic Management-Concept importance of strategic Management, Role of IT in strategic management, strategic management issues, Strategy management for IT services, Stages of IT Strategic Management	3
UNIT II	**Strategic Planning of IT:** Introduction of an IT strategic plan, Components of IT Plan, IT strategic Plan model, phases in development of IT strategic Plan, challenges in implementing an IT Strategy Plan	3
UNIT III	**Enterprise Architecture:** Enterprise IT design, Enterprise integration, Enterprise ecosystem adaptation, Architecture of an enterprise, enterprise architecture development	2
UNIT IV	**IT Landscape Management:** Importance of IT Landscape, Landscape Architecture, Business Model Innovation for Sustainable Landscape	2
UNIT V	**Analyzing Business Environment:** Creative Learning, Organizational Learning and Role of Information technology in Business Transformation, Analytical Framework for Strategic IT Initiatives.	3
UNIT VI	**Competitive Strategy And Competitive Advantage In IT:** Industry and competitive analysis, strategy and	4

	competitive advantage, Strategic Growth of Information Technology , Impact of Competitive Strategy and Information Technology	
UNIT VII	**Recent Trends In Strategic Management In IT Sector:** Introduction, Strategic Thinking, Organizational Culture and its Significance, Organizational Development and Change, Strategic leadership, Models of Leadership Styles and its Roles, Creating effective Organizational designs. Managing innovation and fostering corporate entrepreneurship.	4
UNIT VIII	**Technical Standardization:** Information Partnerships, Managing in the Market space- National Information Infrastructure and IT Policy at the National Level. Planning for strategic IT Resource. Managing the IT Function. Outsourcing IT Function.	3

Section B

At least one Case Study from each UNIT Questions will be case/ inferences/ application based

PRACTICAL COMPONENT

1. Implement the transformation of corporate goals into IT goals.
2. Case study on developing a five year plan using IT strategies for growing the business beyond its current operations.
3. Case study to develop a function to reduce risks & costs through efficient use of IT resources, quality services.
4. Case study on IT contribution to develop a new business model.
5. Case study of an efficient IT strategy for a business scenario.
6. Case study to show the importance of IT in strategic business decisions.

BOOKS RECOMMENDED

1. Hitt, M., Ireland, R. and Hoskisson, R. "Strategic Management: Competitiveness and Globalization – Concepts", 9th edition, Cincinnati, OH: Southwestern College Publishing, 2010.
2. Hanschke, Inge, "Strategic IT Management: A Toolkit for Enterprise Architecture Management", 1st edition, Springer publication, 2009.
3. Anand Thakur, "Strategic Management", 1st edition, Excel Books Private Limited, 2018.
4. Pilorget, Lionel, Schell, Thomas, "IT Management", 1st edition, Springer Vieweg, Wiesbaden, 2018.
5. Fred R. David ,"Strategic Management: Concepts and Cases", 16th edition ,Pearson publication, 2017.
6. Ewa, Ziemba, "Information Technology for Management",1st edition, Springer publication, 2015.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. The International Journal of Information Systems Theories and Applications, Elsevier
2. International Journal of Information Technology and Management, Inderscience publications
3. Strategic Management Journal, Wiley Online library
4. Journal of Information Technology, Palgrave Macmillan Ltd.

M-353: INFORMATION SECURITY AND CYBER LAW

OBJECTIVES
1. To enable to understand the fundamental principles of Information Security and the importance of security in daily lives in the IT field.
2. To provide understanding of Infrastructure and Information Security
3. Elementary understanding of the authorities under IT Act and help comprehend Penalties and offences under IT Act.

LEARNING OUTCOMES
1. Gain fundamental Information Security and business knowledge.
2. Acquire knowledge regarding IT Act, 2000.
3. Design countermeasures against common Information Security Attacks.
4. Implement Information Security in a Network Environment.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction:** Security threats, Sources of security threats, Motives, Target Assets and vulnerabilities – Consequences of threats, E-mail threats, Web threats, Intruders and Hackers, Insider threats, Cyber-crimes. Network Threats: Active/ Passive – Interference, Interception, Impersonation, Worms, Virus, Spams, Ad ware, Spy ware, Trojans and covert channels, Backdoors, Bots, IP, Spoofing, ARP spoofing, Session Hijacking, Sabotage, Internal treats Environmental threats, Threats to Server security.	3
UNIT II	**Internet and Web security**: Web Servers and Browsers, HTTP, Cookies, Caching, Plug-in, ActiveX, Java, JavaScript, Secure Socket Layer (SSL), Secure Electronic Transaction (SET). E-mail Risks, Spam, E-mail Protocols, Simple Mail Transfer Protocol (SMTP), Post Office Protocol (POP), Internet Access Message protocol (ICMP). **Secured Mail**: Pretty Good Privacy (PGP), S/MIME(Secure/Multipurpose Internet Mail Extensions)	4
UNIT III	**Electronic Business and Legal Issues:** Evolution and development in Ecommerce, paper vs paper less contracts, E-Commerce models Security. Application area: Business, Taxation, Electronic Payments, Supply Chain, EDI, E-markets, Emerging Trends.	2
UNIT IV	**Authentication**: Definitions, Types of authentication, Password Authentication, Password Vulnerabilities & Attacks: Brute Force & Dictionary Attacks. Password Policy & Discipline, Single Sign-on – Kerberos, Alternate Approaches, Biometrics: Types of **Biometric Techniques**: False Rejection, False Acceptance, Cross over Error Rates.	3
UNIT V	**Infrastructure and Information Security;** Risk Management, Basics of Cybercrime: Digital Evidence and Computer Forensics, Interception, Search and Seizure, and Surveillance	3
UNIT VI	**Cyber Forensic Basics-** Introduction to Cyber Forensics, Cell Phone / Mobile Forensics, Computer Ethics and Application	3

	Programs, Storage Fundamentals, File System Concepts, Data Recovery	
UNIT VII	**Cyber Crimes and Cyber Laws-** Introduction to IT laws & Cyber Crimes – Internet, Hacking, Cracking, Viruses, Virus Attacks, Pornography, Software Piracy, Intellectual property, Legal System of Information Technology, Social Engineering, Mail Bombs, Bug Exploits, and Cyber Security	3
UNIT VIII	**IT acts and Cyber Laws IT Act:** Salient Feature of IT Act 2000, Legal Provisions under the Information Technology Act, Recent amendments by the IT (Amendment Act) 2008, Act Section 66(A, B, C, D, E, F), IT Act Section 67 (A,B,C)	3

Section B
At least one Case Study from each UNIT Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
1. Antivirus installation, Biometric techniques.
2. Setting up Email Encryption
3. Setting up browser security and Digital signature.
4. Investigation of malicious applications
5. Password management

BOOKS RECOMMENDED
1. K.Kumar, "Cyber Laws: Intellectual property & E Commerce, Security",1st Edition, Dominant Publisher, 2011.
2. Vakul Sharma, "Information Technology Law and Practice- Cyber Laws and Laws Relating to Ecommerce" Paperback Edition, Universal Law Publishing, 2016
3. Pawan Duggal, "Cyber Law ", 2nd Edition, Lexis Nexis, Universal Law Publishing, 2018
4. William Stallings, "Cryptography and Network Security: Principles and Practice", 8th Edition, Pearson Education, 2018.
5. Jack Balkin, James Grimmelmann, Eddan Katz, Nimrod Kozlovski, Shlomit Wagman, Tal Zarsky, "CYBERCRIME: Digital Cops in a Networked Environment ", NYU Press, 2007.
6. William Stallings and Lawrie Brown, "Computer Security: Principles and Practice", Prentice Hall, 2008.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. National Journal of Cyber Security Law, STM Journals.
2. The Computer Law and Security Review, Elsevier.
3. International Journal of Information Security and Cybercrime, Romanian Association for Information Security Assurance (RAISA).
4. Info security Magazine, Info security Group.
5. CISO MAG, Information Security Magazine.

Business Analytics Group F

S. No.	Subject Code	Subject Title
III Semester		
1	**M-360**	Data Science & Analytics
2	**M-361**	Data Warehousing & Data Mining
3	**M-362**	Big Data Technologies
4	**M-363**	BlockChain Technologies

M-360: DATA SCIENCE & ANALYTICS

OBJECTIVES
1. Develop in depth understanding of the key technologies in data science.
2. Apply principles of data science to the analysis of business problems.
3. Understand and integrate data science and analytics capabilities into the formation of situation analysis.

LEARNING OUTCOMES
1. Apply mathematical principles to the analysis of data.
2. Analyze very large data sets in the context of real world problems.
3. Demonstrate knowledge of statistical data analysis techniques utilized in business decision making.
4. Formulate and use appropriate models of data analysis to solve hidden solutions to business related challenges.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction to Data Science:** Evolution of Data Science, Data Scientist vs. Data Engineer vs. Business Analyst, Data Scientists Roles and Responsibility, Career in Business Analytics, Stages in a Data Science Project, Applications of Data Science in various fields, Data Security Issues. Data Science Project Life Cycle: Business Requirement, Data Acquisition, Data Preparation, Hypothesis and Modeling, Evaluation and Interpretation, Deployment, Operations, Optimization.	3
UNIT II	**Introduction to Big Data:** What is big data, why big data, convergence of key trends, unstructured data, industry examples of big data, web analytics, big data and marketing, fraud and big data, risk and big data, credit risk management, big data and algorithmic trading, big data and healthcare, big data in medicine, advertising and big data, big data technologies, introduction to Hadoop.	2
UNIT III	**Introduction Evolution of Cloud Computing**: Essential Characteristics of cloud computing – Operational models such as private, dedicated, virtual private, community, hybrid and public cloud, Service models such as IaaS, PaaS and SaaS – Example cloud vendors – Google cloud platform, Amazon AWS, Microsoft Azure	2
UNIT IV	**Machine Learning Foundations**: Overview, Design of a Learning System, Types of Machine Learning, Supervised Learning and Unsupervised Learning, Mathematical Foundations of Machine Learning, Applications of Machine Learning.	3
UNIT V	Application of Business Analysis: Retail Analytics, Marketing Analytics, Financial Analytics, Healthcare Analytics, Supply Chain Analytics.	4
UNIT VI	**Statistical Analysis:** Introduction to statistics, Meaning and scope, Limitation of Statistics, Data, Types of data, Methods of	4

	data collection, Presentation of data, Tabulation, Frequency Distribution , Graphical Representation	
UNIT VII	**Introduction to data analytics:** Types of data analytics, Applications of data analytics, Big Data versus Analytics; Analytics trends and the industry trend of leveraging analytics.	2
UNIT VIII	**Descriptive Analytics:** Analytics, Sampling distributions, resampling, statistical inference, prediction error. Regression modeling, Predictive analytics, Demand Forecasting, Prescriptive analytics, Making impact with analytics: Understand the 4Ps (Problem, Product, People & Process); Communicating Analytics.	4

Section B
At least one Case Study from each UNIT Questions will be case/ inferences/ application based PRACTICAL COMPONENT

PRACTICAL COMPONENT
1. Perform Case Studies on Data Science projects
2. Explore machine learning tool "WEKA"
3. Perform data preprocessing tasks and Demonstrate performing on Statistical data
4. Load dataset into Weka and perform Machine learning algorithms
5. Perform Regression using Excel
6. Explore other Statistical methods and visualization techniques in Excel

BOOKS RECOMMENDED
1. Foster Provost & Tom Fawcett, " Data Science for Business", O' Reilly, 2013
2. James Warren and Nathan Marz, "Big Data: Principles and Best Practices of Scalable Realtime Data Systems", Manning Publications, 2015
3. Anil Maheshwari, " Data Analytics", McGrawHill Publications, 2017
4. Ramesh Sharda, Dursun Delen & Efraim Turban, "Business Intelligence, Analytics, and Data Science: A Managerial Perspective", Pearson, 4th Edition, 2017
5. Toby Velte, Anthony Velte & Robert Elsenpeter, "Cloud Computing, A Practical Approach", McGraw Hill Education, 2017
6. Hans Weber, "Big Data and Artificial Intelligence: Complete Guide to Data Science, AI, Big Data and Machine Learning", Editorial Alex Pubished, Vendedor Draft2Digital, LLC 2020

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Data Science, Methods, Infrastructure, and Applications, IOS Press.
2. Data Science Journal, CODATA, Paris, France
3. International Journal of Data Science, Inderscience Publishers.
4. International Journal of Data Analytics (IJDA), IGI Global.

M-361: DATA WAREHOUSING & DATA MINING

OBJECTIVES
1. To teach principles, concepts and applications of data warehousing
2. To introduce the task of data mining as an important phase of knowledge discovery process
3. To inculcate Conceptual, Logical, and Physical design of Data Warehouses, OLAP applications and OLAP deployment

LEARNING OUTCOMES
1. Perform the data preparation tasks and understand the implications Apply, analyze various Data warehouse models
2. Develop an understanding of the strengths and limitations of popular data mining techniques and to be able to identify promising business applications of data mining.
3. Acquire the knowledge of managing, economics for conventional, modern and future Data warehousing and Data Mining.
4. Understanding of the alternative knowledge representations such as rules and various Mining Techniques

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction to Databases and Transactions:** Classification of Data, Introduction to database system, purpose of database system, Types of database management system, relational databases, database architecture, transaction management	3
UNIT II	**Data Warehousing:** Introduction, Definition, Difference between Data Mining and Data Warehouse, Multidimensional data transformation, OLAP operations, Data Warehouse schema, Data Warehouse Server	3
UNIT III	**Data Pre-processing:** Introduction, Data Cleaning, Descriptive Data Summarization , Data Integration and Transformation, Data Reduction, Data Discretization.	3
UNIT IV	**Data Mining:** Introduction, Definition, KDD vs. DM, DBMS vs. DM, DM Techniques, Issues and Challenges in DM, DM Applications.	3
UNIT V	**Association Rules:** Generalized association rule, Basic Algorithms, Concepts of Lift, Confidence and Support Parameters, Measuring the Quality of Rules, Market Basket Analysis	3
UNIT VI	**Classification:** Parametric and Non-parametric technology, Introduction to classification, Types of classification **Artificial Neural Networks The Neuron:** Activation Function, Gradient Descent – Stochastic Gradient Descent, Back Propagation – Business Problem	3
UNIT VII	**Clustering:** Introduction to Cluster Analysis, Hierarchical and Non-hierarchical Techniques, Similarity and Distance Measures	3
UNIT VIII	**Applications and Trends in Data Mining:** Data Mining applications , Introduction to Data mining System Products and Tools , Introduction to Web Mining and Text Mining	3

Section B

At least one Case Study from each UNIT Questions will be case/ inferences/ application based

PRACTICAL COMPONENT

1. Perform Case Studies on Data Warehouse models.
2. Compare OLAP vs. OLTP
3. Apply different discretization filters on numerical attributes on association rule algorithm. Study the rules generated. Derive interesting insights and observe the effect of discretization in the rule generation process.
4. Exercise the data mining techniques with varied input values for different parameters.
5. Compare classification results of different algorithms.
6. Compare clustering results of different algorithms.

BOOKS RECOMMENDED

1. Jiawei Han and Micheline Kamber, Data Mining Concepts and Techniques, Third Edition, Elsevier, 2012.
2. Alex Berson and Stephen J.Smith, Data Warehousing, Data Mining and OLAP, Tata McGraw – Hill Edition, 35th Reprint 2016.
3. K.P. Soman, Shyam Diwakar and V. Ajay, Insight into Data Mining Theory and Practice, Eastern Economy Edition, Prentice Hall of India, 2006.
4. Ian H.Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques, Elsevier, Second Edition.
5. G. K. Gupta "Introduction to Data Mining with Case Studies", Easter Economy Edition, Prentice Hall of India, 2006.
6. Daniel T. Larose, "Data Mining Methods & Models", Wiley-India, 2007.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. International Journal of Data Warehousing and Mining (IJDWM), IGI Publication
2. International Journal of Data Warehousing (IJDW), Serial Publication
3. Code Magazine, Articles on Data warehousing and Data Mining, EPS Software Corporation
4. Journal of Data Mining in Genomics & Proteomics Open Access, Hindawi Publication

<h1 style="text-align:center">M-362: BIG DATA TECHNOLOGIES</h1>

OBJECTIVES
1. To define the basic concepts of big data.
2. To introduce the tools required to manage and analyze big data.
3. Develop skills to solve complex real world problems.

LEARNING OUTCOMES
1. Understanding of the concepts of Big Data.
2. Illustrate how to use tools to manage big data
3. Compare different tools used in big data analytics.
4. Apply MapReduce to solve problems.

<h2 style="text-align:center">Section A</h2>

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Understanding Big Data:** Introduction, Need, Importance of Big data, Classification of Digital Data, Four Vs, Drivers for Big data, Big data Terminology, Industry examples and Top Challenges Facing Big Data, Responsibilities of data scientists, Technology Challenges for Big data, Convergence of key trends, Big data Architecture.	3
UNIT II	**Web analytics:** big data and marketing, fraud and big data, risk and big data, credit risk management, big data and algorithmic trading, Open source technologies, cloud and big data, Crowd Sourcing Analytics, inter and trans firewall analytics.	3
UNIT III	**Introduction to Hadoop & Hadoop Ecosystem-I:** Introduction to Hadoop, Features of Hadoop, Hadoop Versions, Hadoop Architecture, Hadoop Ecosystem: Introduction to Hadoop Ecosystem, Introduction to Data Management and Data Access tools: Data Management using Flume, Oozie, Zookeeper; Hive, Pig, Avro, SQOOP for data access.	3
UNIT IV	**The Hadoop Ecosystem-II:** Introduction to Data Processing and Data Storage tools: MapReduce, YARN, HDFS, HBase.	3
UNIT V	**HDFS:** Intoduction to HDFS, HDFS concepts, NameNode, Secondary NameNode and DataNode, Hadoop MapReduce paradigm, Map and Reduce tasks, Job, Design and working of Hadoop distributed file system (HDFS).	3
UNIT VI	**MapReduce:** Introduction, MapReduce workflows, Split, map, combine, scheduling, shuffle and sort.Problems & examples in MapReduce.	3
UNIT VII	**NO SQL Data Management:** Problem with Relational Database Systems. Introduction to NOSQL, Advantages of NOSQL, SQL versus NOSQL. Aggregate data models, key-value and document data models, relationships, graph databases, schemaless databases.	3
UNIT VIII	**Big data Applications:** Healthcare, Finance, Advertising, Marketing, Transportation, Education, Government, Cyber Security etc.	3

Section B
At least one Case Study from each UNIT Questions will be case/ inferences/ application based

PRACTICAL COMPONENT
1. Applying concepts of Web analytics, crowd sourcing analytics to solve real world problems.
2. Tracing the data flow through Hadoop Tools for tasks at hand.
3. Representation of HDFS ecosystem.
4. Solving problems using MapReduce.
5. How NOSQL solves the database problems for Big Data.
6. Exploring Big data applications in diverse domains.

BOOKS RECOMMENDED
1. Michele Chambers, Michael Minelli, Ambiga Dhiraj, "Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses", Wiley, 2013
2. Anil Maheshwari, " Big Data", McGraw-Hill; Second edition, 2019
3. Subhashini Chellappan Seema Acharya, "Big Data and Analytics", Wiley, 2019
4. Arshdeep Bahga, Vijay Madisetti, "Big Data Analytics: A Hands-On Approach", VPT, 2018
5. Nandhini Abirami R, Seifedine Kadry, Amir H. Gandomi, Balamurugan Balusamy, "Big Data: Concepts, Technology, and Architecture", Wiley, 1st edition 2021
6. EMC Education Services, " Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data", 2015

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS
1. Journal of Big Data, Springer
2. Big Data & Society, SAGE Journals
3. International Journal of Big Data Intelligence, Inderscience Publishers.
4. Big Data Research, ScienceDirect

M-363: BLOCKCHAIN TECHNOLOGIES

OBJECTIVES
1. Discuss and describe the history, technology, and applications of Blockchain.
2. Understand Blockchain and its main application Cryptocurrency.
3. Learn how this system works and how can it be utilized.

LEARNING OUTCOMES
1. Assess Blockchain applications in a structured manner.
2. Present Blockchain concepts clearly and persuasively.
3. Able to use cryptocurrency exchanges and wallets safely.
4. Gain familiarity with investing in Blockchain startups.

Section A

UNIT	COURSE DESCRIPTION	SESSIONS
UNIT I	**Introduction:** Need of Decentralized Ledger System, Advantage and Disadvantage of Centralized Trusted System, Security, Integrity and Privacy Issues of a Decentralized System, Main Barriers to Blockchain Adoption, Use of Blockchain technology.	3
UNIT II	**Technological and Cryptographic Elements in Blockchain:** Public Key & Private Key, Digital Signature & Hash Value, Real-life Scenario Challenges, Key Questions for Blockchain, Transactions, Modify Transactions, Maintain Transactions.	4
UNIT III	**Classification of Blockchain Platforms**: Trustlessness and Immutability of Blockchain Technology, Proof of Work and Proof of Stake, Token, Tokenizing Shares and Fund Raising, Hyperledger.	3
UNIT IV	**Risks and Limitations of Blockchain**: The Evil Sides of Blockchains: Ransomware, Money Laundering, Cyber Currencies.	3
UNIT V	**Cryptocurrency:** History, Distributed Ledger, Bitcoin protocols - Mining strategy and rewards, Ethereum - Construction, DAO, Smart Contract, GHOST, Vulnerability, Attacks, Side chain, Name coin	3
UNIT VI	**Cryptocurrency Regulation:** Stakeholders, Roots of Bit coin, Legal Aspects-Crypto currency Exchange, Black Market and Global Economy.	3
UNIT VII	**Selection Criteria for Blockchain Applications**: Blockchain for Supply Chain Financing, Blockchains for Trade Finance, Permissioned Blockchains used in Enterprise Network.	3
UNIT VIII	**Blockchain Applications:** Internet of Things, Medical Record Management System, Domain Name Service and future of Blockchain	2

Section B

At least one Case Study from each UNIT Questions will be case/ inferences/ application based

PRACTICAL COMPONENT

1. Mining puzzles.
2. Hashcash implementation.
3. Go-ethereum.
4. Smart Contract Construction.
5. Toy application using Blockchain.

BOOKS RECOMMENDED

1. Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller and Steven Goldfeder, " Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction", Princeton University Press, 2016.
2. Andreas M. Antonopoulos, "Mastering Bitcoin: Unlocking Digital Cryptocurrencies", O'Reilly Media, Inc, 2014.
3. Gavin Wood, "ETHEREUM: A Secure Decentralized Transaction Ledger", Yellow paper Press, 2014
4. Paul Vigna & Michael J. Casey, " The age of cryptocurrency: How Bitcoin and the Blockchain Are Challenging the Global Economic Order", Picador, 2015 .
5. Don Tapscott, Alex Tapscott, "Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World", Notion Press, 2016.
6. David Lee Kuo Chuen, "The Handbook of Digital Currency", Academic Press, 2015.

LIST OF JOURNALS/PERIODICALS/MAGAZINES/NEWSPAPERS

1. Special Issue on Blockchain, Springer Open.
2. Making Smart Contracts Smarter, ACM.
3. International Journal of Blockchains and Cryptocurrencies, IJBC .
4. Advances in Blockchain Technology and Applications, MDPI.
5. Blockchain: Research and Applications , Elsevier.