REVISED SYLLLABUS OF MBA (TECHNOLOGY MANAGEMENT)DAY AND EVENING AS PER CBCS AND AICTE GUIDELINES 2023-24

FACULTY OF MANAGEMENT
DEPARTMENT OF BUSINESS MANAGEMENT
OSMANIA UNIVERSITY
HYDERABAD – 500007

University with potential for Excellence
(Accredited by NAAC A+ Grade)

MBA (TM) COURSE ACADEMIC REGULATIONS, STRUCTURE AND SYLLABUS AS PER CBCS AND AICTE GUIDELINES WITH EFFECT FROM 2023 - 2024

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RULES AND REGULATIONS OF M.B.A.(TM) PROGRAM-2023-24

The Master of Business Administration (MBA-TM) is a Post-Graduate course offered as:

I. Two-year i.e., four semester Full Time Day Program

II. Two -year i.e., four semester Full Time Evening Program

1. Eligibility Conditions

M.B.A. (Technology Management) - Day

Candidate seeking admission into Full Time M.B.A. (Day) program must be:

1. Bachelor degree holder of Osmania University or a degree recognized by the university as equivalent thereto and /(or) as per the rules laid down by the University.
2. The candidate seeking admission must qualify in the Entrance Examination conducted by the appropriate authority in the year of admission as per the norms prescribed by the University.
3. The admission of Non-resident Indians and candidates admitted in lieu of them will be as per the University Rules in force on the date of the admission.
4. Foreign candidates' admission is based on the Screening Process of the University currently in vogue.

M.B.A. (Technology Management) - Evening

Candidate seeking admission into Part Time M.B.A. (Evening) program must be:

1. Bachelor degree holder of Osmania University or a degree recognized by the university as equivalent thereto and /(or) as per the rules laid down by the University
2. The candidate seeking admission must qualify in the Entrance Examination, conducted by the appropriate authority in the year of admission as per the norms prescribed by the University.

a. Must have at least Two years experience in Executive / Managerial /Administrative/ Supervisory position in any organization after obtaining the Bachelor Degree.

Or

b. Officers / Executives / Engineers working with any Government / Quasi govt. /Autonomous bodies / Local authorities/ teachers working in academic institutions with post-bachelor's experience of 2 years.

Or

c. Officers of the Defence Forces / Establishments holding Administrative/ Executive post with not less than 2 years experience after obtaining Bachelor degree.

3. The candidate should submit Service certificate and No Objection Certificate from the present employer.

Note: The Work experience of Two years should be completed as on the Date of Admission into MBA-TM program.

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2. Instruction Schedule:

Instruction will be provided as per the workload indicated in the structure, Rules and regulations of M.B.A. Program for all Theory, Practical and Project Work course requirements. The almanac will be as follows for all semesters.

Duration of Instruction: 14 Weeks
Preparation Holidays: 7-10 Days
Total No of Hours (Theory + Tutorial + Practicals)
Per Semester: **420 Hours**

Rules of Attendance

Students must attend 75% of the total classes conducted for all the courses put together in a semester. Relaxation of 10% of attendance might be given to a student on medical grounds on the basis of a valid medical certificate and payment of condonation fee prescribed by the university.

3. Promotion Rules:

A student will be promoted subject to the following rules:

a. I Semester to II Semester:

A student should put in a minimum of 75% of attendance in aggregate in all the courses put together of the Term (65% in the case of medical exemption) and should be registered for the University exam for the I semester.

b. II Semester to III Semester

A student should put in a minimum of 75% of attendance in aggregate in all the courses put together of the Term (65% in the case of medical exemption) and should have passed at least 50% of Theory courses of I & II Semesters put together. (Viva Voce and Lab courses not considered for this purpose).

c. III Semester to IV Semester:

A student should put in a minimum of 75% of attendance in aggregate in all the courses put together of the Term (65% in the case of medical exemption) and having registered for the University Examination.

Candidates who have not passed in at least 50% of the courses of the previous semesters are not promoted to the next year.

4. Cancellation of Admission:

The admission of a candidate admitted to the MBA-TM Course stands cancelled if:He / She does not put in at least 40% of attendance in Semester-I.

Or

He / She puts in at least 40% of attendance in Semester – I, but failed to register for1st Semester Examinations

Or

He /She fails to fulfill all the requirements for the award of the degree as specified, within 4 academic years from the time of admission in case of full time 2 year MBA-TM program

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5. Project Work:

The students should undertake the Project internship during the summer vacation (For 6 weeks of duration) intervening between II & III Semesters of MBA TM Program. Project Report Work should be carried out in the Final Year of MBA-TM Program i.e., III & IV Semesters for TM Program.

The students are required to do project work in any area of Management under the active guidance of Internal Faculty Member assigned to the student.

The Project work usually consists of selecting a Topic / Problem / Theme in any area of management, gather relevant data, analyze and interpret the same in a systematic and scientific manner.

The Project Work should be undertaken under the supervision of the Faculty Member assigned for the purpose. The Project Report should be submitted to the University 30 days (one month) before commencement of Final Semester Examinations.

6. Scheme of Evaluation is a combination of Continuous and Comprehensive Evaluation and End Semester Examination

Rules & Regulations:

The CCE Model incorporates three (3) key components for assessing the specified programs:

I. Continuous Assessment (CA): Students engage in ongoing evaluation, where a total of 30 marks are distributed across three Internal Assessment tests. Each assessment carries a specific weightage of 10 marks, contributing to the overall assessment

II. Attendance: A portion of the assessment, accounting for 10 marks, is dedicated to tracking students' attendance. This aspect serves as an incentive for active engagement in the learning and teaching process.

III. End Semester Examination (ESE): The comprehensive evaluation includes a final examination, contributing 60 marks to the overall assessment.

1st Internal Assessment (10 Marks)	**2nd Internal Assessment (10 Marks)**	**3rd Internal Assessment (10 Marks)**	**4th Internal Assessment (10 Marks)**
1. 10 Multiple choice questions each ½ mark (10x½) = 5 marks 2. 10 Fill in the blank questions each ½ mark (10x½) = 5 marks	1. 5 Questions on assertion &reason each1 mark (5x1) = 5 marks 2. 10 Match the following questions each ½ mark (10x½) = 5 marks	1. Questions on syllogism each ½ mark (10 x ½) = 5 marks 2. Management quiz (written) each ½ mark (10x½) = 5 marks	Attendance = 10 marks

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Weightage for Attendance:

Attendance Percentage	Marks
95% - 100%	10 Marks
86% - 94%	08 Marks
81% - 85%	06 Marks
75% - 80%	05 Marks
65% - 74%	04 Marks*

*Applicable only to those who provide a valid reason with condonation

End Semester Examination for 60 Marks divisible as Part 'A', 'B' and 'C'

- Part A - 10 Marks (5 Questions each carrying 2 marks) without choice.
- Part B - 40 Marks (5 Questions each carrying 8 Marks) with internal choice.
- Part C - 10 Marks Case Study (Analysis)

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Model Question paper End Semester Examination (ESE)

Part –A

Attend all Questions (5x2) =10 Marks

1) Question No. 1 – 2 Marks
2) Question No. 2 – 2 Marks
3) Question No.3 – 2 Marks
4) Question No. 4 – 2 Marks
5) Question No. 5 – 2 Marks

Part –B

Attend all Questions (5x8) =40 Marks
(Internal Choice)

6) Question No.6
   a. Question-1 – 8 Marks a OR b
   b. Question-2 – 8 Marks
7) Question No.7
   a. Question-1 – 8 Marks a OR b
   b. Question-2 – 8 Marks
8) Question No.8
   a. Question-1 – 8 Marks a OR b
   b. Question-2 – 8 Marks
9) Question No.9
   a. Question-1 – 8 Marks a OR b
   b. Question-2 – 8 Marks
10) Question No. 10
   a. Question-1 – 8 Marks a OR b
   b. Question-2 – 8 Marks

Part – C

Case Study (Analysis) - 10 Marks

Students are required to analyze the case presented in the section

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6.1 Measurement of Credits Hours:

The following formula may be used for the credit calculation in general education component of the course:

i. General Education credit refers to a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching [lecture or tutorial] or two hours of practical work/field work per week. Accordingly, one Credit would mean equivalent of 14-15 hrs of theory or 28- 30 hrs of workshop/ lab work.

ii. One Credit is equivalent to 14-15 periods of 60 minutes each, for theory, or 28-30 periods of 60 minutes for workshop/labs and tutorials.

iii. For internship/field work, the credit weightage for equivalent hours is 50% of that for lectures/tutorials.

iv. For self-learning, based on e-content or otherwise, the credit weightage for equivalent hours of study is 50% or less of that for lectures/tutorial

6.2 Continuous Improvement and Evaluation Process:

- □ Students will review their graded assessments within a specified timeframe.
- □ Feedback sessions will be scheduled to discuss assessment results and clarify grading rationale.
- □ Students are encouraged to assess their own work against provided criteria after receiving graded assessments.
- □ Students will confirm receipt of graded assessments, acknowledging that they have reviewed the feedback.
- □ A formal re-grading request process will be established for students to request re-evaluation or re-grading.
- □ Transparent rubrics will be communicated before assessments, providing clarity on expectations.
- □ Clear procedures will be in place for students to express concerns or appeal grades.

6.3 Assessment for Practical Courses:

- The assessment for practical courses can take one of two modes: continuous or a combination of continuous and comprehensive evaluation.

- In courses utilizing both continuous and comprehensive assessment, the End Semester Examination (ESE) will adhere to the minimum required percentage of attendance as outlined earlier. This emphasizes the importance of regular attendance in courses where assessment is both continuous and comprehensive.

- For courses featuring independent practicals or projects, the assessment pattern may vary. This variation is based on the specific requirements and goals of each program, as designed and approved by the Board of Studies committee. The flexibility in assessment aims to align with the unique nature of practical components in different programs and ensures a tailored approach to evaluating students' practical skills and knowledge.

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7. Award of Grades for Seminars, Project Report and Viva Voce Examinations:

IV Semester Project:

Project Assessment for 150 Marks

Marks distributed for Project Assessment shall be as follows:

Internal Assessment		
Research Design Seminar (III Semester)	1 Credit	25 Marks
Progress Seminar (III Semester)	1 Credit	25 Marks
IV Semester Project Assessment		
Dissertation	1 Credit	25 Marks
Final Presentation	2 Credits	50 Marks
Viva Voce during Final Presentation	1 Credit	25 Marks

8. Instructional Work Load for Theory, Practical Courses and Mentoring & Project Work:

Each of the Theory Courses of the MBA-TM Program shall have instructional workload of 4 periods of 60 Minutes duration per week in addition to mentoring and project work as specified in the course curriculum. The Instructional workload for each of the Practical and Lab Courses shall be 1 Period of 60 Minutes duration respectively per week. Tutorial for each subject shall be for one hour per week. All subjects must have one period of Tutorial each per week.

9. Tutorial:

Individual and Group assignments, Case Studies, Presentations, Quizzes, Book Reviews, Article Reviews, Management Games etc.

10. Evaluation System:

a. All courses of MBA-TM Program will carry a Maximum of 100 Marks each.
b. Duration of the university examination for all the courses is 2½ hours each.
c. All the courses will have 60 marks for university end semester examination and 40 marks for internal examination (CCE).

The Guidelines, Rules and Regulations framed by the University in this regard will be applicable to the MBA (TM) Program

11. Conduct of Examinations:

Examination will be conducted based on the existing rules of examination Branch that are applicable to other PG Courses

12.Award of Degree and Division:

Candidates will be awarded MBA-TM Degree on successful completion of all Theory Courses, Practical Courses, Viva Voce and Project Report. The Division / Class will be awarded as per the University norms

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Eligibility for admission to the ESE: A student must have at least 75% attendance in aggregate at the end of the semester. If any student fails to meet the 75% attendance requirement but has more than 65% attendance, in such a case, the student must pay a condonation fee with a proper reason for the shortfall in attendance.

a. The End Semester Examination (ESE) for theory courses will be conducted for 60 marks. The duration of an ESE is generally 2½ hours.
b. Possession of a hall ticket during the examination, along with the timetable and room allotment,is compulsory for the ESE. Hall tickets can be downloaded from the Student Login.
c. The registration number of the students is bar-coded, and it is pasted on the facing sheet of the answer booklet at the beginning of the examination

13. Readmission for Pursuing Additional Elective Courses:

A student can be given readmission for pursuing additional electives after completion of MBA program subject to payment of requisite fee prescribed by the college / Department. Such candidates have to satisfy all the rules including attendance rule in vogue on par with regular students.

a. The additional elective must be pursued in the same college in which the studentstudied and completed the MBA Program.
b. The admission must be done within four weeks of the commencement of the IIISemester.

14. Total number of credits to be completed to be eligible for the award of MBA-TM degree:

Total number of credits at the end of fourth semester (MBA-TM) = 26 + 26+26+26 = 104

15. Awarding Cumulative Grade Point Average (CGPA) and Semester Grade Point Average (SGPA):

15.1 Subject wise Grading

Grades shall be awarded to indicate the performance of students in each of subjects studied. Based on thepercentage of marks obtained in both Continuous and Comprehensive Evaluation and End Semester Examination, a corresponding letter grade shall be given as shown in Table 1.

15. 2. Grading System:

The Semester Grade Point Average (SGPA) is calculated by dividing the sum of credit points (ΣCP) securedfrom all subjects/courses registered in a Semester, by the total number of credits registered during that Semester. SGPA is rounded to two decimal places and is computed as

SGPA = For each Semester, ΣCP/Total no. of credits

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Hyderabad-500 007, T.S., India.

Grades are awarded based on a relative grading system and University follows a 8 point grading system on a 10 point scale

Grading Scheme:

Table 1

Percentage	Grade	Grade point (10 pointscale)	
80-100	O	10	Outstanding
70-79	A+	9	Excellent
60-69	A	8	Very Good
55-59	B+	7	Good
50-54	B	6	Above Average
45-49	C	5	Average
40-44	P	4	Pass
<40	F	3	Fail
Absent	Absent	0	Ab

The pass criteria for the successful completion of programmes, shall be as follows

a. Minimum of 40% aggregate marks in the CCE of a course
b. Minimum of 40% in the ESE of a course.
c. Minimum 40% aggregate in each Semester

A student who has obtained an 'F' grade in any subject shall be deemed to have 'failed' and is required to reappear as a 'supplementary student' in the End Semester Examination, as and when offered. In such cases, internal marks in those subjects shall remain the same as those obtained earlier.

To a student who has not appeared for an examination in any subject, 'Ab' grade shall be allocated in that subject, and he/she is deemed to have 'failed'. A student shall be required to reappear as a 'supplementary student' in the End Semester Examination, as and when a student earns grade point (GP) in each subject/course, on the basis of the letter grade secured in that subject/course. The corresponding 'credit points' (CP) are computed by multiplying the grade point with credits for that particular subject/course as shown below.

Credit points (CP) = grade point (GP) x credits

For a subject/course a student passes the subject/course only when GP ≥ 4 ('P' grade or above)

15.3 Cumulative Grade Point Average (CGPA)

The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a studentin all semesters considered for registration. The CGPA is the ratio of the total credit points secured by a studentin all registered courses in all semesters, and the total number of credits registered in all the semesters. CGPA is rounded off to two decimal places. CGPA is thus computed from the I year II semester onwards at the end ofeach semester.

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OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

Computation of SGPA and CGPA are done using the procedure listed above. For Final % of Marks equivalentto the computed final CGPA, as:

% of Marks = (final CGPA – 0.5) x 10.

As a measure of the performance of a student, a 10 point absolute grading system using the letter grades (as per UGC/AICTE guidelines) and corresponding percentage of marks shall be followed.

16. Evaluation and Results:

a. The evaluation process for answer scripts in the End Semester Examination (ESE) is centralized and conducted impartially. This means that the assessment is carried out in a centralized manner, ensuring objectivity and fairness. Evaluators, without knowledge of the students' identities, review the answer scripts, maintaining a blind-folded approach to eliminate biases. This approach is designed to uphold fairness and consistency in the grading process across all students participating in the ESE.

b. In the Postgraduate (PG) program courses, a single examiner conducts the evaluation process, assigning marks to candidates. If a student raises discrepancies in the assigned marks, the system initiates a second evaluation to ensure accuracy and fairness.

c. After completing the examinations, the system promptly announces semester results within 30 days from the date of the last examination. This timely disclosure furnishes students with feedback on their academic performance.

d. It's noteworthy that a minimum pass mark of 40% is set for each course, considering the combined performance in Continuous Assessment (CA) and the End Semester Examination (ESE). This standard ensures a comprehensive evaluation and establishes a benchmark for the successful completion of the courses.

17. Backlog Examinations:

a. If a student fails in any one or more courses of the End Semester Examination (ESE) in any semester, they are permitted to appear for the backlog examinations in the subsequent semester.

b. A repeating student has a maximum of three chances, including the first chance, with the same syllabus/curriculum. If the student fails to clear the course in three chances, subsequent attempts will be based on the syllabus applicable to the course for the relevant academic year

c. The maximum duration to complete a program is two years beyond the prescribed minimum duration.

d. To apply for a repeat examination, a student must submit their application through their concerned Principal by the specified deadline.

e. All notifications regarding backlog examinations will be announced on the University website at least 15 days before the commencement of the examinations.

18. Repeating CCE for improvement:

a. Students who have completed all the semesters of their program but failed to graduate due to a low score in CCE in a specific course can apply for CCE repeat, as notified on the University website.

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b. Final-semester students who failed in any course in previous semesters due to low scores in CCE can apply for CCE repeat, as per the notification on the University website.
c. Applicants should submit the filled form through the Head of the Department to the Principal of the college in person.
d. After document verification and fee payment by the applicant, the application will be forwarded to the office of the Controller of Examinations for further processing.
e. The maximum number of courses allowed for CCE repeat at a time is two.
f. If a course has been revised or replaced in the changed syllabus, the student must complete the syllabus applicable to them.
g. In CCE repeat, the applicant must complete all four components of the CA under the supervision of a teacher assigned by the department.

19. Re-evaluation/ Re-totalling:

a. Re-evaluation/Re-totalling of answer scripts is permissible for PG students covered under CCE. This option extends to both regular and backlog examinations.
b. Students intending to pursue Re-evaluation/Re-totalling must submit their applications through the Principal to the Controller of Examinations within the designated time frame.
c. If there is any alteration in marks as a result of Re-evaluation/Re-totalling, the student will be accorded the benefit of the higher marks, whether awarded before or after the re-totalling process.
d. In the context of Re-evaluation/Re-totalling, the recalculated marks will be deemed final.

The outcome of the re-totalling process will typically be disclosed within one month from the concluding date for applications.

20. Make-up / Instant Exams

Make-up / Instant examinations will be conducted for IV semester outgoing students within one month from the date of declaration of results

21. General Clause:

It may be noted that beside the above specified rules and regulations all the other rules and regulations in force and applicable to semester system in Post-Graduate courses in Osmania University will be applicable as amended from time to time by the University. The students shall abide by all such Rules and Regulations. This includes Plagiarism rules notified by the University

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

I YEAR
SEMESTER–I

Course Code	Course Title	Nature	Credits	HPW (Th+Tu+P)	Max Marks (CCE+ESE)
MTM101	Technology Management, Creativity & Innovation	Core	4	4Th + 1 Tu	40+60
MTM102	Management & Organization Behaviour	Core	4	4Th + 1 Tu	40+60
MTM103	Accounting for Management	Core	4	4Th + 1 Tu	40+60
MTM104	Marketing Management	Core	4	4Th + 1 Tu	40+60
MTM105	Statistics for Management	Core	4	4Th + 1 Tu	40+60
MTM106	Economics for Managers	Core	4	4Th + 1 Tu	40+60
MTM107	Advanced Excel	Core	2	4P	50
Total credits at the end of I Semester			**26**		**650**

HPW – Hours Per Week
CCE – Continuous and Comprehensive Evaluation
ESE – End Semester Exam
Th- Theory
Tu – Tutorial
P – Practical

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Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

I YEAR
SEMESTER–II

Course Code	Course Title	Nature	Credits	HPW (Th+Tu+P)	Max Marks (CCE+ESE)
MTM201	Technology Forecasting & Transfer Management	Core	4	4Th + 1 Tu	40+60
MTM202	Human Resource Management	Core	4	4Th + 1 Tu	40+60
MTM203	Business Intelligence	Core	4	3Th + 2P	40+40+20P*
MTM204	Business Research Methods	Core	4	4Th + 1 Tu	40+60
MTM205	Financial Management	Core	4	4Th + 1 Tu	40+60
MTM206	Operations Research	Core	4	4Th + 1 Tu	40+60
MTM207	Seminar Presentation *	Core	2		Grade
Semester Credits			**26**		**600**
Total Credits at the end of II Semester			**52**		**1250**

HPW – Hours Per Week
CCE – Continuous and Comprehensive Evaluation
ESE – End Semester Exam
Th- Theory
Tu – Tutorial
P - Practical

*** Seminar should be evaluated for 50 marks and then converted to Grade.**
*** Student Seminars will be done by students on Semester I and II subjects**

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

I - SEMESTER

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

Paper Code: MTM 101

Course: TECHNOLOGY MANAGEMENT, CREATIVITY ANDINNOVATION

Course Objectives:

1. Provide an understanding of issues connected with management oftechnology in organizations.
2. Gain exposure to technology related issues
3. Study creativity as a source of technologicalinnovation.
4. Understand invention and its logical linkages with thinking process
5. Evaluate the challenges and opportunities of technology transfer
6. Analyze international technology transfer policies and practices

Course Outcomes:

1 . Define the foundations of technology management.

2. Demonstrate the models of innovation.

3. Analyze theories and process of creativity.

4. Extract lessons from historical technology transfer examples and to apply to current scenarios

5. Develop negotiations skills for agreement related to technology transfers, licensing and collaborations

6. Monitor and evaluate the progress of technology transfer projects

Unit – I: Introduction

Definitions, Role and importance, Technology developments, implications of Technology Management, Technology change, TLC, Diffusion and Growth of Technologies-Technological Transformation alternatives, Technology Policy and Planning, Technology development-Options & Strategies, Socio-Economic planning, production functions & Technological Change, Macro effects of Technology change.

Unit – II: Technology Development and Acquisition

Forecasting and Technology Innovation chain, Role of Technology Forecasting approaches and methodologies; Technology Strategy, Generation, and Development. Technology Transfer - Models, Modes, Technology search strategy, Dimensions of Technology Transfer, Features & Routes of Technology Transfer, Technology absorption capabilities, Pricing of Technology Transfer agreements, Code of conduct for Technology transfer, Government initiative, Technology transfer and absorption process at unit level.

Unit – III: Technology absorption and diffusion

Technology - package and Technology dependence, concepts, constraints of Technology absorption, Technology import in India, Government initiatives, Benefits of Technology absorption. Technology Assessment (TA) Organization and Management of Technology Assessment, Technology Evaluation. Diffusion - Major diffusion activities, Diffusion Strategy

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Unit – IV: Creativity:

The Process of ideation, creativity and the evolution of artificial forms. The nature of Technological Knowledge, Technologist as a creative being, Identification of Problem and analysis. Coping with blocks to creative problem solving, Theories of Creativity, Identification of problem. Morphological analysis and related techniques, Brainstorming and its variants, Lateral thinking, Synectics and related approaches. Evaluation of ideas; Implementation of Ideas, Computer assisted creativity.

Unit – V: Technology Innovation:

Evolutionary thinking - Evolutionary Models for Technological change, Models in Technological evolution, Selectionism and Complexity, Models of innovation - Sources and Transfer of innovation, Theory of Tech-innovation; Technology cycles, innovation streams, Managing through cycles of technological change. Planned innovation, planned innovation systems, Market driven innovation.

Suggested Readings:

1. Sharif Nawaz: Management of Technology Transfer & Development, APCFT, Bangalore.
2. Rohtagi P K, Rohtagi K and Bowonder B: Technological Forecasting, Tata McGraw Hill, New Delhi.
3. Betz Fredrick: Managing Technology, Prentice Hall, New Jersey.
4. Gaynor: Handbook of Technology Management, McGraw Hill.
5. Tarek Khalil: Management of Technology, McGraw Hill International.
6. Dasgupta. S: Technology and Creativity & Creativity, Oxford University Press, New York.
7. Proctor. T: The Essence of Management Creativity, Prentice - Hall, New Delhi.
8. Richards. T: Creativity and Problem Solving Network, Gower, Hampshire.
9. Ceserani. J & Greatwood. P: Innovation & Creativity, Kogan Page, London.
10. Ziman. J: Technological Innovation as an Evolutionary Process, Cambridge University Press, Cambridge.
11. Garud. R, Nayyar. P.R & Shapira. Z.B: Technological Innovation: Oversights and Insights, Cambridge University Press.
12. Afufah. A: Innovation Management: Strategies, Implementation, and Profits, Oxford University Press, New York.
13. Katz: Human side of Managing Technological Innovation, Oxford University Press, New York.
14. Bacon. F. Jr & Butler: Achieving Planned Innovation, the Free Press, New York.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

Paper Code: MTM 102

Course: MANAGEMENT AND ORGANIZATIONALBEHAVIOUR

Course Objectives:

1. Introduce the concepts and theories of management
2. Analyze human perceptions and behavior at work place.
3. Offer insights in contemporary situations for organizational settings.
4. Evaluate effective leadership strategies and functions
5. Enhance managerial and team work skills
6. Design workforce and build HR driven strategies

Course Outcomes:

1. Comprehensive understanding ofmanagement principles
2. Understanding of organizational functions in their respective settings
3. Gain insights into individual, inter-personal and group actions in organizations.
4. Demonstrate improved decision making skills
5. Develop and sustain winning organizations
6. Help deal effectively with people resourcing and talent

Unit-I: Management Philosophy and Approaches:

Management Principles, Process, Functions and Typology, 3D Model of Managerial Approach, Management thought-Classical, Human Relations, Systems and Contingency Approaches, Hawthorne's Experiments, Contributions of Henry Fayol, F. W. Taylor and Peter Drucker.

Unit-II: Organizational Design, Structure and Decision Making:

Basic and advanced Models of Organizational Designs, Main Approaches to Organization Structure - Decision making under Bounded Rationality, Certainty, Uncertainty, Risk, Conflict, Open and Closed Decision making models, QWL, Quality Circle, Emerging Organizational Architectures.

Unit-III: Organizational Behavior:

Personality Traits, Big 5 personality traits, MBTI, the Process of Perception and Attribution, Kelly's personal construct Theory, Cognitive Dissonance, Classical, Operant and Reinforcement Conditioning, Transactional Analysis, Johari Window, Attitudinal Genesis in Mentoring, Motivation - Content and Process Theories.

Unit -IV: Group Dynamics and Leadership:

Group Dynamics & Team Building, Kurt Lewin contribution, Conflict Resolution models,. Work life balance. Trait and Behavioral Approaches to Leadership, Managerial Grid, Path - Goal Theory, Vroom's Decision Tree Approach to Leadership, Hersey and Blanchard Model.

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Unit-V: Emerging aspects of OB:

Organization culture and Organization climate. Stress Management and Counseling, Management of change and Organization development. Communication Process, Organizational Citizenship Behaviour. Organizational Behaviour Modification. Behavioural Entropy in Learning Organization, Behavioural Metrics in Effective Organization.

Suggested Readings:

1. Harold Koontz and Heinz Weihrich, Essentials of Management, TMH.
2. Prasad LM, Principles and Practice of Management, Sultan Chand & Sons, New Delhi.
3. Stephen P. Robbins, "Organizational Behaviour", Prentice Hall.
4. Fred Luthans, "Organizational Behaviour", McGraw Hill International Edition.
5. Udai Pareek, Understanding Organizational Behaviour, Oxford University Press
6. P.C. Tripathi, P.N. Reddy, Principles of Management, Tata McGraw-Hill Publishing Company Limited, New Delhi.
7. Robbins & Judge, Organizational Behaviour, Prentice Hall of India.
8. Lauriel J Mullins, Management and Organizational Behaviour, Pearson
9. Ashwathappa, Organizational Behaviour, HPH, Hyderabad
10. L M Prasad, Management Principles and Practices, S. Chand Publications, New Delhi.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE – MTM 103
Course: ACCOUNTING FOR MANAGEMENT

Course Objectives:

1. To gain knowledge of the process, principles and conventions of accounting
2. To develop skill for preparation of final accounts
3. To gain understanding of breakeven analysis and its use in management
4. To evaluate financial statements and their applications
5. To examine changes in financial position and operating cycle
6. To identify the accounting process based on current practices

Course Outcomes:

1. To compute Journal, Ledger, Trial Balance and Final Accounts
2. Analyze performance of companies using Ratio Analysis
3. Analyze Cash Flow position of companies and its applications
4. Make use of funds in assessing long range financial decisions
5. Choose optimum inventory valuation method as per requirements
6. Apply accounting principles to practical scenarios and study their implications

Unit - I: Introduction to Financial Accounting:

Meaning, Definition and Scope of Financial Accounting; Accounting concepts and conventions, their implications on accounting system –Double Entry Accounting System – Accounting Process – Types of Accounts – Primary and Secondary Record – Preparation of Journal, Ledger Posting Balancing and Preparation of Trial Balance (Including Numerical Problems) - Accounting Equation – Static and Dynamic view - Accounting standards – their rationale and growing importance in global accounting environment, International Financial Reporting Standards (IFRS).

Unit – II: Preparation of Final Statements:

Distinction between capital and revenue expenditure; Depreciation concept and methods. Preparation andpresentation of financial statements – Trading, Profit and loss account, Balance Sheet with adjustments for closing stock, outstanding expenses, accrued income, prepaid expenses, advance income, depreciation, loss/profit on sale, bad debts and provision for bad debts (Including Numerical Problems); provisions of the Indian Companies Act regarding preparation and presentation of financial statements; external auditor's report, the report of the Board of Directors, and voluntary disclosures

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Unit – III: Financial Statement Analysis:

Financial Statement analysis – Ratio analysis – Rationale and utility of ratio analysis – classification of ratios -calculation and interpretation of ratios-liquidity ratios, activity/turn over ratios, Profitability ratios, leverage and structural ratios (Including Numerical Problems)- Advantages and disadvantages; common size statement analysis.

Unit – IV: Cash Flow Statement:

Cash Flow Statement – Advantages and Utility of Cash flow statement – Preparation of Cash flow statement (Including Numerical problems) - Tax planning – Tax Avoidance – Tax evasion; Cost concepts – Classification of Costs- – preparation of cost sheet (no numericals)

Unit – V: CVP Analysis:

CVP analysis – Break-even Point, concept of contribution and P/V Ratio, Margin of Safety (Including Numerical problems) - Managerial uses of Break-even concept – product mix, make or buy decision, capacity utilization, plant shut down decision, Standard Costing – Variance Analysis – Material Variances – Labour Variances (Simple Problems Related to Material and Labour Variances Only)

Suggested Readings:

1. Shashi K. Gupta & R.K Sharma, Management Accounting Principals
2. Ramchandran, Ramkumar Kakani, Financial Accounting for Management, Tata Mc Graw Hill Publishing, Pvt,Ltd.
3. Shah Paresh, Basic Financial Accounting for Business Managers, Oxford University, Press
4. Bhattacharyya Asish K, Financial Accounting for Business Managers, PHI
5. Ambarish Gupta, Financial Accounting for Management - An Analytical Perspective,Pearson education
6. Earl K. Stice and James .D. Stice, Financial Accounting – Reporting and Analysis, SouthWestern, Cengage Learning.
7. Jawaharlal and Seema Srivastava, “Financial Accounting: Principles and Practice,”, S.Chand
8. S.P. Jain and K. L. Narang, “Cost Accounting, Principles and Methods”, Kalyani Publishers, Ludhiana
9. Maheshwari, Basic Accounting, S. Chand Publication, New Delhi.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE – MTM104

Course: MARKETING MANAGEMENT

Course Objectives:

1. To impart the basic tools of marketing and selling
2. To analyze factors affecting business environment and Buyer buying behavior.
3. To analyze markets and competitive structures
4. To assess the value of culture in marketing decisions and make students be aware of Global changes.
5. To conduct market research and analysis to identify consumer needs
6. To interpret metrics and analytics to measure market performance

Course Outcomes:

1. Equip students with marketing and selling skills of modern environment.
2. Understand that Buyer behavior and perceptions are key for success of businesses
3. To conclude if channel dynamics involved in marketing can be assessed for better control
4. Develop an understanding of core concepts and theories of marketing
5. Use various tools and techniques to gather and interpret data
6. To analyze and summarize market entry strategies

Unit – I: Origin of Marketing:

Origin of Marketing, Barter systems, Markets, Marketing Management, Tasks, Company orientations towards market place, Marketing Mix – expanded, Marketing Mix, Marketing Program and Marketing Strategy, Managing marketing effort, Designing Global marketing, Marketing Environment – Company's Micro and Macro Environment – Interface with other functional areas.

Unit – II: Market Segmentation:

Segmentation process, Levels and Bases for Segmentation, Segmenting Consumer Markets, Business Markets, International Markets, Market Targeting – Evaluation of Market Segments, Selecting Market Segments, VALS Segmentation System – Differentiation Strategies, Product Positioning, Positioning Strategies, Building customer Value, Demand Measurement and Sales Forecasting Methods, Estimating Current and Future Demand, Competitive Strategies.

Unit – III: Designing Marketing Program:

Decisions involved in Product, Branding, Packaging, Product Line and Product Mix Decisions, New Product Development, Product Life Cycle, Pricing, Strategies, Distribution Channels, Channel Management Decisions, Network Marketing, Promotion Mix – Advertising, Social Media and Advertising, Sales Promotion, Public Relations, Personal Selling, Online Marketing.

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Unit – IV: Consumer &Industrial Markets:

Classification of Products, Consumer Behaviour, Seven O's Structure, Factors affecting Consumer Behaviour, Model of Buyer Behaviour, Adoption Process, AIDA Model, Industrial Markets – Characteristics, Industrial Buyer Behaviour, Services Markets – Characteristics and Strategies, Emergence of Online Services. Use of I C T in Services Marketing.

Unit – V: Marketing Control & Consumerism:

Types of Marketing Organization Structures and Factors affecting Global marketing Organization, Changing practices of Marketing, Marketing Control, Annual Plan Control, Efficiency Control, Profitability Control and Strategic, Marketing Audit, Consumerism, Consumer rights and Consumer forums.

Suggested Readings:

1. Philip Kotler, "Marketing Management", Pearson Education Prentice Hall of India.
2. Philip Kotler, Kevin Lane Keller, "Marketing Management" Pearson Education.
3. William J. Stanton, "Fundamentals of Marketing", McGraw Hill Publications.
4. Tapan K Panda, "Marketing Management", Excel Books.
5. Ramaswamy V.S. Namakumari S, "Marketing Management", The Global perspective Indian Context Macmillan India Ltd.
6. Rajan Saxena, "Marketing Management", Tata McGraw Hill.
7. Ashwatappa , Principles of Marketing" Himalaya Publishing House, New Delhi
8. Paul Baines, Chris fill, Kelly Page, "Marketing Management", Oxford University Press.
9. Roger J. best, "Market-Based Management", PHI Learning Pvt. Ltd.
10. Kurtz & Boone, "Principles of Marketing", Cengage Publications.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE – MTM 105

Subject: STATISTICS FOR MANAGEMENT

Course Objectives:

1. To introduce descriptive statistics to gain knowledge of business
2. Understand sampling theory for small and large samples
3. Study concepts related to Correlation and Regression
4. Analyze advanced statistical concepts and their utility
5. To discuss various data collection methods in statistics
6. Examine statistical methods to formulate and test hypotheses

Course Outcomes:

1. Gain a clear understanding of fundamental statistical concepts
2. Apply various statistical techniques to analyze data sets
3. Equip learners with quantitative tools and techniques
4. Enable learners to calculate and interpret descriptive statistics
5. Understand the significance of correlation and regression tools
6. Provide a clear idea of sampling theory

Unit – I: Introduction to Statistics

i.) Introduction to Statistics – Overview, origin and development and Managerial Applications ofstatistics, Measures of Central Tendency, Dispersion, Skewness and Kurtosis.

ii.) Introduction to probability – Concepts and Definitions of Probability – Classical, Relative, frequency,subjective and axiomatic, Addition and Multiplication theorems, Statistical independence, Marginal, Conditional and Joint Probabilities.

iii.) Bayes' theorem and its applications.

Unit – II: Probability Distribution

i.) Probability Distribution-Random Variable (RV), Expectation and Variance of a RV, Probabilitydistribution, function, properties, Continuous and Discrete Probability distribution functions.

ii.) Discrete Probability distributions: Binomial Distribution, Properties and applications; Poisson distribution, properties and applications.

iii.) Continuous Probability Distributions – Normal Distribution, Standard Normal Distribution properties, applications and importance of Normal Distribution

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Unit – III: Sampling

i.) Sampling Theory- The basics of sampling-Sampling procedures-Random and Non- Random methods-Sample size determination-Sampling distribution, Standard Error, Central Limit Theorem.

ii.) Hypothesis Testing-Statistical Estimation, Point and Interval Estimation, Properties of a GoodEstimator, confidential interval.

iii.) Large Sample tests-Test for one and two proportions, Test for one and two means, Test for two S.D's.

Unit - IV: Tests of Hypothesis

i.) Small Sample Tests- t- Distribution –properties and applications, testing for one and two means, paired t- tests

ii.) Analysis of Variance-One Way and Two ANOVA (with and without Interaction).

iii.) Chi-Square distribution: Test for a specified Population variance, Test for Goodness of fit, Test forIndependence of Attributes.

Unit - V: Correlation and Regression

i.) Correlation Analysis-Scatter diagram, Positive and negative correlation, limits for coefficient of correlation, Karl Pearson's coefficient of correlation, Spearman's Rank correlation, concept of multiple and partial Correlation.

ii.) Regression Analysis-Concept, least square fit of a linear regression, two lines of regression, propertiesof regression coefficients.

iii.) Time Series Analysis-Components, Models of Time Series-Additive, Multiplicative and Mixed models; Trend analysis-Free hand curve, Semi averages, moving averages, Least Square methods.

Suggested Readings:

1. Levin R.I., Rubin S. David, "Statistics for Management", Pearson.
2. Gupta S.C, "Fundamentals of Statistics", HPH.
3. Keller, G, "Statistics for Management", Cengage Learning.
4. Amir D. Aczel and Jayavel Sounder pandian, "Complete Business Statistics", TMH,
5. John C Lee, "Business and Financial Statistics Using MS-Excel", Cambridge.
6. J.K Sharma, "Business Statistics", Pearson.
7. Arora PN & others, "Complete Statistical methods", S. Chand.
8. Beri, GC, "Business Statistics", TMH.
9. Black Ken, "Business Statistics for Contemporary Decision Making", Wiley.
10. Levine, David M and other, "Statistics for managers using MS. Excel", PHI.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE – MTM106

Course: ECONOMICS FOR MANAGERS

Course Objectives:

1. To familiarize learners with Economic concepts and techniques
2. To understand the environment Business firms operate in
3. To know the impact of demand conditions and economic policies.
4. Study the impact of market conditions on economic variables
5. To evaluate market conditions and competitive dynamics for business opportunities
6. To study the role of economics in business performance

Course Outcomes:

1. Students can learn micro factors of economic behavior of consumers
2. Assess opportunities and threats faced by a business
3. Better understand the nature of products and demand conditions that can be used indecision making.
4. Apply economics to real world business for making informed decisions
5. Develop skills in forecasting techniques
6. Enhance critical thinking to identify economic challenges

Unit – I: Introduction to Managerial Economics

Introduction to managerial functions, nature and scope of managerial economics, relation with other subjects, fundamentals concepts of Managerial Economics, Decision Making Process, Decision making under certainty, uncertainty and Risk, Role and Functions of Managerial Economist, Use of Econometric Models.

Unit – II: Theory of Utility

Theory of Utility & Demand utility, Marginal Utility, Law of Marginal Utility, Demand concepts, determinants of demand, Law of Demand, Elasticity of demand, Types of Elasticity, Measurement of Elasticity (Numerics), Demand Estimation for Firm & Industry, Demand Forecasting Methods.

Unit – III: Production & Cost Structure

Production & Cost structure, production function, Determinants of Production, Theories of Production, Benham Theory, Law of Two Variable proportions, Law of Returns to Scale – Cost Concepts, Types of Costs, Short-term and Long-term Cost Curves, Learning Curve, Iso- cost Curve – Equilibrium – BEP Analysis.

Unit – IV: Markets

Markets & Market Behavior, Classification of Markets, Virtual Markets, Perfect Competition Market, Imperfect Competition Markets, Monopolistic Competition Market, Monopoly, Oligopoly, Strategies of Oligopolists, Agriculture Markets & Overview of Market Laws, Overview of Agriculture Market Committees (AMCs), Price Determination under different market structures.

Unit – V: Macro Economics

Macro Economics: National Income concepts and Measurement Income, Employment and Investment, Keynesian Theory & Employment and Investment, Inflation: Types of Inflation, ControlTechnique of Inflation. Fiscal policies – Budget – Current Budget.

Suggested Readings:

1. Dominik Salvatore, "Managerial Economics", Oxford University Press.
2. H. Craig Petersen, W. Cris Lewis, Sudhir K. Jain, "Managerial Economics", Pearson Publication.
3. D.M. Mithani, "Managerial Economics", Himalayan Publishing House.
4. Joel Dean, "Managerial Economics", Tata Mcgraw Hill.
5. R.L. Varshney, K.L. Maheshwari, "Managerial Economics", Sultan Chand Publications.
6. P L Mehatha, "Managerial Economics", S. Chand Publishing.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE – MTM107
Course: ADVANCED EXCEL

UNIT - I: NEW FETUTRES IN ADVANCED EXCEL:

Characteristics and Basic features of Advanced Excel: Comparison between Excel and Advanced Excel Creating, Naming Saving, Editing and Printing of Worksheets. Data Entry – Manual and Automatic Formatting cells and Cell referencing. Creating and using formulas and Functions Use of Copy, Move and Paste Options. Data and Graphical Options**:** Filling a Series, Sorting data, querying of data. Working with graphs and charts.

UNIT - II CHART RECOMMENDATIONS

Chart types and Chart Recommendations in Advanced Excel Create Charts, Chart Recommendations Format Charts, Chart Design i.e. Bar Charts / Pie Charts / Line Charts Using SLICERS, Filter data with Slicers Manage Primary and Secondary Axis Change in Charts Group, Chart Recommendations, Fine Tune Charts Quickly Select / De-select Chart Elements Format Style, Format Color, Filter Data being displayed on the Chart

UNIT – III DATA ANALYSIS

Importance of Data Analysis, Various Methods of Data Analysis, Instant Data Analysis, Quick Analysis Features, Quick Analysis of Data Create a PivotTable to analyze external data, Data Model in Excel : Explore Data Using Pivot Table, Create Relationship between Tables, Conditional Formatting.

UNIT –IV EXTERNAL DATA CONNECTION & SECURITY FEATURES

Pivot Table Tools, Creation of PivotTable to analyze external data, Connecting new external data source Update Data Connections, Automatically Refresh Data, Automatically refresh data at regular intervals, Enable Background Refresh, Security Features and Managing Passwords in Advanced Excel File-level and Workbook- level: Password Protection in Advanced Excel

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UNIT – V: VISUALIZATIONS & ADDITIONAL FEATURES

Basic Data Visualization Principles, Show the Data, Reduce the Clutter, Integrate the Text and the Graph, CreateCharts and other Visualizations, Visualization – Matrix, Visualization – Card, Visualization – Charts, Excel – Templates; Modify the internal Data Model, Workbook Relationship, Worksheet Relationship, Cell Relationship, Save a Workbook in another File Format.

Suggested Readings:

1. David Whigham, “Business Data Analysis Using Excel”, Oxford University Press, Indian
2. Michael Alexander and John Walkenbach "Excel Dashboards and Reports" Edition.
3. Paul Cornell, “Accessing & Analyzing DATA with MS-EXCEL”.
4. Microsoft Excel 365 Bible: The Comprehensive Tutorial Resource
5. R & D, “IT Tools and Applications”, Macmillan India Ltd.
6. Sanjay Saxena, “A First Course in Computers – Based on Windows Office XP”, Second Edition – Vikas Publishing House.

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II- SEMESTER

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE: MTM 201

Course: TECHNOLOGY FORECASTING & TRANSFER MANAGEMENT

Course Objectives:

1. Develop an understanding of technology forecasting as a process.
2. Identify the potential impact of emerging technologies on industry
3. Aim at providing inputs on technology assessment and capability
4. Understand theories and models related to technology adoption and diffusion
5. Study models relating to technology transfer, assessment, assimilation and implementation
6. Classify modes of technology transfer and their implications

Course Outcomes:

1. Enable to apply quantitative and qualitative methods of technology forecasting
2. Help define process of technology transfer
3. Identify methods of appraisal of projects and assess their feasibility
4. Help develop market research strategies for technology setups
5. Understand the factors influencing technology adoption in real-world scenario
6. Utilize the knowledge gained for improved technology applications

Unit I - Forecasting methods:

Forecasting as an input to Technology Management, elements of forecasting process, types of forecasting methods, Uncertainties in the context of forecasting process, coping with Uncertainties associated with evolving and ever changing technologies, Quantitative methods of Forecasting: Multiple Regression method, Economic Models, Time Series Models, Linear Trend Projection, Precursor, Envelop curves, Experience curves, Technical Assessment Relevance of Quantitative Methods in Technology Forecasting - Limitations and Safeguards.

Unit II: Qualitative methods of forecasting:

Morphological analysis, Relevance trees, Delphi method, Technological Gap analysis, Analogy Method, organizing for Technology Forecasting, Suitability of Qualitative Methods, in Technology Forecasting - Evaluation Process - Scope and Limitations - Complementarity of Quantitative and Qualitative Methods of Technology Forecasting, Box Jenkins method Forecasting Business conditions, Leading indicator method, Econometric method, Forecast Evaluation and Revision, cases and practical problems in the context of technological forecasting.

Unit III – Technology Transfer:

Definitions, classifications, channels of technology flow, Internal technology transfer, External technology transfer, International technology transfer,

Transfer Modes, Technology search strategy, Dimensions of Technology Transfer, Features & Routes of Technology Transfer, Technology Transfer agreements, Technology Transfer and absorption at unit level. Procedural and legal issues in the context of drafting technology transfer agreements.

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Unit IV – Technology Assessment:

Technology assessment, Assessment of Innovation, Technological metrics, Technological audits, Re-engineering the technology delivery process, Technology transfer for small companies, Technology Transfer by strategic partnering.

Technology absorption and diffusion, concepts, constraints of Technology absorption, Technology import in India. Technology Assessment, Technology evaluation, Diffusion of Technology. Technology Absorption and indigenization process.

Unit V - Technology Appraisal:

a) Concept of Project: Characteristics and importance of Technology Projects - TechnologyProject development cycle - Types of projects - Risk-return trade off.
b) Identification of investment opportunities: Sources of new project ideas - Preliminaryscreening of projects.
c) Feasibility Studies and Reports: Broad aspects of appraisal - Market feasibility, Technicalfeasibility, Operational feasibility, financial feasibility.

Suggested Readings:

1. Martino J p: Technological Forecasting for Decision-Making, North Holland, New York.
2. Porter Al et al: A Guidebook for Technology Assessment and Analysis, North Holland
3. Charles W. Gross and Robin J. Peterson: Business Forecasting, Houghton Mifflin Co.
4. Jarret J: Business Forecasting methods, Basil Blackwell Ltd, Oxford
5. Box and Jenkins: Time Series Analysis, Forecasting and control, Holden Day.
6. Warren Gilchrist, Stastical Forecasting, John Wiley
7. Tarek Khalil: Management of Technology, McGraw Hill
8. Cardullo M W: Introduction to Managing Technology, Wiley, New York
9. Manual on Technology Transfer, UNIDO
10. Sakonyi R: Technology Management, Averbach, Boca Raton
11. Project Appraisal: A Third World View Point: UNID Publications
12. Project Evaluation and Management: M.K.Singh.
13. Projects, Preparation, Appraisal and Implementation: Prasanna Chandra, TMH, NewDelhi.
14. Project Financing: H.P.S. Pahwa.
15. Clifford. F. Gray, Erik. W. Larson: Project Management, the Managerial Emphasis,McGraw Hill

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE: MB 202
Course: HUMAN RESOURCE MANAGEMENT

Course Objectives

1. To gain a strong understanding of Human Resource Management
2. To learn diverse Human Resource Management approaches and practices.
3. To develop skills to identify and evaluate potential employees.
4. To valuate competencies of potential employees effectively.
5. To understand the significance of talent acquisition in organizational success.
6. To apply HR principles for informed decision-making in real-world scenario

Course Outcomes:

1. Developing individuals into valuable Human Resources.
2. Cultivating globally competent HR managers.
3. Understanding the concepts and theories relating to management of human resources
4. Enhancing HR leadership skills with a global perspective.
5. Promoting innovation within business organizations.
6. Transforming individuals into strategic assets for organizations

Unit - I: HRM Evolution:

Functions of HRM, Typology, system & matrix of HR. HRM models. Aligning HR strategy with Corporate strategy, HRIS, e-HRM, HRMS, Strategic HR metrics & Interactive HR Dashboards. Humane Values & Competency Framework for innovative HR. Measure of Human Assets Potential. Human Capability Management. Survival Capacity Building for Pandemics & Disruptive Technologies.

Unit - II: HR Planning & Design:

Traditional, Functional & Strategic Job analysis, Position analysis questionnaire, Work Connectivity Index, Threshold traits analysis. Job Design & Redesign. Job evaluation: Competency Modeling, Cognitive task analysis. Performance Appraisal, HR Planning: Strategic Designing of Hybrid, Blended, Virtual & Gig workforces. Recruitment: Virtual Vs Real. Selection Process: Psychometrics in Aptitude & Psychological testing.

Unit - III: HR Training & Development

Training needs analysis. Off-the-job training: Vestibule, Simulation, Case study, Design thinking, Behaviour Modeling, Business Games, Adventure and Action Learning. On-the-job training: Job instruction, Job rotation, Apprenticeship, Demonstration, Psychodrama & Role Play. HRD. HR Accounting: Lev and Schwartz, Flamholtz and Hermanson's Models. HR Audit: Philips RoI model, Career planning model. Employee Development & Transition, MDP.

Unit - IV: Effective HR Systems:

Code of Conduct, Discipline & Ethics, Group dynamics, Learning Organization, QWL, Standing Orders, Strategic Rewards & Compensation Management, Employer Branding, Employee Value Proposition. Grievance redressal, Stress Management, Psychological Contract: Employee Engagement, Involvement & Loyalty. Peak Performance modeling for Human Capability, Human Capability & Human Competency.

Unit - V: Emerging HR Trends:

Workforce Diversity, Inclusivity & Equity. HR analytics, Empowering skills by Emotional Intelligence, Work life conflicts & integration. International HRM, Global HRM, Sustainable HRM, Strategic HRM & Agile HRM. HR Score card. Intelligent tutoring systems. Organizational Change, Design, Effectiveness & Development. Professional & Psychological Counseling for Pandemics, Jobloss, Mergers & Acquisitions.

Suggested Readings:

1. David Lepak, Mary Gower, Human Resource Management, Pearson.
2. Paul Banfield, Rebecca Kay, Human Resource Management, Oxford.
3. Decenzo, Human Resource Management, Wiley.
4. Wayne & Caseia, Ranjeet Nambudri, "Managing Human Resource, TMH.
5. Gomez Mejia et.al, Managing Human Resource, PHI.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE – MTM 203

Course: BUSINESS INTELLIGENCE

Course Objectives:

1. To provide an overview of BI concepts and its role in modern business environments.
2. To understand the of concepts of Business Intelligence and related topics
3. Enumerate data warehousing, storage, and database management for BI.
4. To enable learners to create meaningful business reports and interactive dashboards
5. To explore the role of BI in strategic decision-making and planning.
6. Understand the role of BI in daily life

Course Outcomes:

1. Emphasizes the practical need for good decision support system in an organization.
2. Helps in connecting statics for improved business performance
3. Helps in realizing the potential of Business Analysis in decision support.
4. Apply BI concepts and tools to solve practical business problems.
5. Be aware of data privacy regulations and best practices for securing BI systems.
6. Apply data mining techniques and build predictive models for business scenarios

Unit – I: Introduction to Business Intelligence (BI):

Definition, History and Evolution, Styles of Business Intelligence, Benefits if Business Intelligence, Real-time Business Intelligence, Business Intelligence Value Chain, Architecture of Business Intelligence.

Unit – II: Data Warehousing and Data Mining:

a) Date Ware housing (DWH): - Definition, Characteristic, types, Date ware housing frame work, Data Warehousing architecture, Alternative Architectures, Data ware housing Integration, Data ware housing- Development Approaches, Real time Data ware housing.

b) Data Mining: - Definition, Characteristic, Benefits, Date Mining Functions, Data Mining Applications, Data Mining techniques and tools. Text Mining, Web Mining.

Unit – III: Business Performance Measurement (BPM):

Definition, BPM v/s BI**,** BPM Processes-Strategize, Plan, Monitor, Act/Adjust, Performance Measurement, BPM Methodologies, BPM Architecture and Applications.

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Unit – IV: Business Analytics:

Business Analytics - Definitions, Tools and techniques of BA, Basics of Descriptive, Predictive and Prescriptive Analytics, Visual Analytics, Social Analytics, Text and Web Analytics, Sentiment Analysis, Benefits and Success of Business Analytics, Big Data-definition, Three V's (Volume, Variety, Velocity) of Big Data.

Unit – V: Data Visualization:

Data Visualization- Definition, History of Visualization, types of data – categorical, ordinal and quantitative data, Data Visualization tools – Multidimensional Data Visualization Tools (Column and Bar Graphs, Charts, Line Graphs, Scatter Plots, Pie graph) Hierarchical and Landscape Data Visualization Tools (Maps, Tree Graph) -Performance Dash boards and Score Cards.

Suggested Readings:

1. Business Intelligence – A Managerial Approach – by Turban, Sharada, Delen, King - Pearson – Second Edition – 2014.
2. Decision Support and Business Intelligence Systems – Turban, Aaronson, Liang, Sharada-Pearson, latest Edition.
3. Successful Business Intelligence, Cindi Howson, McGraw Hill Education – Indian Editio

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

Paper Code – MTM 204

Course: BUSINESS RESEARCH METHODS

Course Objectives:

1. To involve students in activities related to research.
2. To train students on data collection and data processing methods.
3. To impart report-writing skills to build better business models.
4. To cultivate a research-oriented mindset in students.
5. To equip students with proficiency in handling data.
6. To enhance students' ability to construct effective business models through applied research

Course Outcomes:

1. To understand various kinds of research designs and methods.
2. To enable learners to formulate the research problem and analytical approaches.
3. To acquire knowledge of qualitative and quantitative research for understanding changing market behavior.
4. To master research techniques for data collection and analysis.
5. To apply research skills effectively in practical scenarios.
6. To enhance critical assessment and research contribution abilities in the field.

Unit – I: Introduction to Research:

Business Research: Definition, Significance, Nature & Importance – Criteria of Business Research, Marketing Information System, paradigm shift in Research – Research Design Types of Research Designs – Descriptive, Exploratory, Diagnostic, and Causal Research – Types of research, Theoretical and Empirical Research – Cross-sectional and Time-series Research — Research Objectives – Research Hypotheses – Characteristics - Research from an Evolutionary Perspective – the Role of Literature Review in Research

Unit – II: Research process & data collection:

Research Process – Data Sources- Primary Data – Secondary Data - Data Collection Methods – Types of Data Collection - Questionnaire Design – Questionnaire Layout – Question Content - Wording– Target Population Identification – Sampling Process – Sampling Design – Sampling techniques –Sampling Procedure – Sampling Types – Pilot Study – Pre- Test.

Unit – III: Scaling and measurement:

Measurement and Scaling Techniques – Different types of Scales – Nominal, Ordinal, Interval and Ratio Scales – Purpose and Benefits of Scaling – Construction of Instrument Attitudinal Scales – Number of Dimensions in Scaling - Construction and Application - Data Analysis - Editing – Tabulation – Cross Tabulation – Data Content Validity, Construct Validity and Reliability

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Unit – IV: Data analysis and statistical techniques:

Test of Hypothesis – Type-I, Type - II Errors - Small Samples and Large Samples – Parametric and Non- Parametric Tests – Chi Square Test – McNemar Test – ANOVA – One Way and Two Way Analysis - Bivariate and Multivariate Statistical Techniques – Factor Analysis – Discriminant Analysis – Cluster Analysis – Correlation and Multiple Regression Analysis – Multidimensional Scaling.

Unit – V: Report design, writing, and ethics inbusiness research:

Report Preparation - Different Types of Reports – Contents of Report – Need for Executive Summary – Chapterization – Contents of Chapter – Report Writing – The Role of Audience – Readability – Comprehension – Tone – Final Proof – Report Format – Title of the Report – Ethics in Research – Ethical Behaviour of Research – Plagiarism – Essentials of Referencing - Subjectivity and Objectivity in Research.

Suggested Readings:

1. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research Methods, Tata Mc Graw Hill, New Delhi.
2. Alan Bryman and Emma Bell, Business Research Methods, Oxford University Press, New Delhi.
3. Uma Sekaran and Roger Bougie, Research Methods for Business, Wiley India, New Delhi.
4. William G Zikmund, Barry J Babin, Jon C. Carr, Atanu Adhikari ,Mitch Griffin, Business Research methods, A South Asian Perspective, Cengage Learning, New Delhi.
5. Bordens, K. S. and Abbott, B. B., Research Design and Methods - A Process Approach, New York, McGraw-Hill.
6. Creswell, J. W., Qualitative Inquiry & Research Design: Choosing Among Five Approaches, California, Sage Publications, Inc.
7. Charmaz, K., Constructing Grounded Theory: A Practical Guide through Qualitative Analysis, London, SAGE Publications Ltd.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE – MTM 205
Course: FINANCIAL MANAGEMENT

Course Objectives:

1. Understand the scope and goal of financial management.
2. To appraise learners with concepts of long-term and short-term investment decisions.
3. To understand the financial decisions of firms.
4. To acquire knowledge of fundamental financial management principles.
5. To explore investment options for both short and long-term scenarios.
6. To gain insights into impact of dividend policies of firms.

Course Outcomes:

1. Gain an understanding of the concepts of financial management
2. To obtain insight into corporate practices related to inventory and dividend policies.
3. To study the impact of corporate events, including mergers, acquisitions, alliances, and their implications.
4. To develop proficiency in optimizing cash flows through project appraisal techniques.
5. To apply corporate policies effectively, particularly in the areas of inventory and dividends.
6. To analyze and strategize corporate growth by considering various financial management techniques

Unit – I: The Finance function:

Nature and Scope; Evolution of finance function – Its new role in the contemporary scenario –Goals of finance function – maximizing vs. satisfying; Profit vs. Wealth vs. Welfare; the Agency relationship and costs; Risk-Return trade off; Concept of Time Value of Money – Future Value and Present value.

Unit – II: The Investment Decision:

Investment decision process- Project generation, project evaluation, project selection and project implementation. Developing Cash Flow; Data for New Projects; Using Evaluation Techniques – Traditional and DCF methods. The NPV vs. IRR Debate; Approaches for reconciliation. Capital budgeting decision under conditions of risk and uncertainty; Measurement of Risk – Risk adjusted Discount Rate, Certainty Equivalents and Beta Coefficient, Probability tree approach, Sensitivity analysis.

Unit – III: The Financing Decision:

Sources of finance – a brief survey of financial instruments; Capital Structure Theories, Concept and financial effects of leverage; The capital structure decision in practice: EBIT – EPS analysis. Cost of Capital: The concept – Average vs. Marginal Cost of Capital; Measurement of Cost of Capital – Component Costs and Weighted Average Cost of Capital

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Unit – IV: Current Assets Management and Dividend Decision:

Concept of current assets, characteristics of working capital. Factors determining working capital. Estimating working capital requirements, Working capital policy, Management of current assets: Cash Management, Receivables Management and Inventory Management. Bank norms for working capital financing, The Dividend Decision: Major forms of dividends – Cash and Bonus shares. The theoretical backdrop – Dividends and valuation; Major theories centered on the works of Gordon, Walter, and Lintner. A brief discussion on dividend policies of Indian companies.

Unit – V: Corporate Restructuring and Corporate Governance:

Corporate Mergers, acquisitions and takeovers: Types of mergers, Economic rationale of Mergers, motives for mergers; financial evaluation of mergers; Approaches for valuation: DCF approach andComparable Company approach (No practical exercises). Corporate Value based management systems. Approaches: Marakon approach and McKinsey approach; Principles of good corporate Governance.

Suggested Readings:

1. Jonathan Berk, Peter DeMarzo, Ashok Thampy, "Financial Management", Pearson.
2. Brigham, E. F. and Ehrhardt. M. C., "Financial Management Theory and Practice", Thomson South-Western.
3. Ross Westerfield Jaffe, "Corporate Finance", TMH Publishers
4. Vishwanath S. R., "Corporate Finance: Theory and Practice", Sage Publications.
5. Prasanna Chandra, "Financial Management Theory and Practice", Tata McGraw Hill,
6. I. M. Pandey, "Financial Management", Vikas Publishing House.
7. Sudershana Reddy, "Financial Management", HPH.
8. Rajiv Srivastava and Anil Misra, "Financial Management", Oxford Higher Education.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

PAPER CODE – MTM 206
Course: OPERATIONS RESEARCH

Course Objectives:

1. To provide an overview of Optimization Techniques for problem solving and decision making.
2. To introduce Linear Programming Problem (LPP) for business planning.
3. To explore network concepts and techniques including PERT and CPM.
4. To examine quantitative competitive models
5. To equip students with problem-solving skills using operations research tools
6. To enhance decision-making abilities in diverse business scenarios

Course Outcomes:

1. To enable the formulation of real-life organizational situations through quantitative models
2. To facilitate the development of strategies for optimal resource utilization
3. To equip learners with the skills to apply operations research tools for decision-making.
4. To study the role of networking techniques in businesses
5. To understand the role of operations research as a strategic business tool
6. Develop and run simulation techniques to understand complex processes and their working

Unit – I: Introduction

i. Introduction to OR- Origin, Nature, definitions, Managerial applications and limitations of OR.

ii. Linear and Non- Linear, Integer, Goal [Multi-Objective] and Dynamic Programming Problems (Emphasis is on Conceptual frame work-no numerical problems.

iii. Linear Programming: Mathematical model, Formulation of LPP, assumptions underlying LPP, Solution by the Graph, Exceptional cases.

Unit – II: Allocation Model – I

i. LPP - Simplex Method- Solution to LPP problems Maximization andMinimization cases Optimality conditions. Degeneracy.

ii. Dual - Formulation, Relationship between Primal - Dual, Solution of dual,Economic interpretation of dual.

iii. Sensitivity analysis and its implications.

Unit – III: Allocation Model - II

i. Transportation Problem (TP) - Mathematical model, IBFS using northwest corner rule, Row and Column Minimum methods, Matrix minimum method (LCM) and Vogel's approximation method, Unbalanced TP, Degeneracy, Optimality Test and Managerial applications.

ii. Assignment Problem (AP): Mathematical model, Unbalanced AP, RestrictedAP, method of obtaining solution- Hungarian method.

iii. Travelling salesman problem, Managerial applications of AP and TSP.

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Unit – IV: Network Models

i. Network fundamentals- scheduling the activities -Fulkerson's Rule –CPM- earliest and latest times -determination of ES and EF in the Forward Pass - LS and LF in backward pass determination of Critical Path, Crashing, time cost trade off.

ii. PERT-Beta Distribution, probabilistic models, Calculation of CP, resource analysis and allocation.

Unit – V: Waiting Line / Competitive Strategy Models

i. Queuing Theory - Concepts of Queue/Waiting Line - General structure of a Queuing system- Operating characteristics of Queues, deterministic Queuing models - Probabilistic Queuing Model –Cost Analysis - Single Channel Queuing model – Poisson arrival and exponential service times with infinite population.

ii. Game Theory- concepts, saddle point, Dominance, Zero-sum game, two, three and more Persons games, analytical method of solving two person zero sum games, graphical solutions for (m x 2) and (2 x n) games.

iii. Simulation- Process of simulation, Applications of simulation to different management Problems.

Suggested Readings:

1. N.D. Vohra, "Quantitative Techniques in Management", TMH.
2. J.K. Sharma, "Operations Research Theory and Applications, Macmillan.
3. Kasana, HS & Kumar, KD, "Introductory Operations Research theory and applications", Springer.
4. Chakravarty, P, "Quantitative Methods for Management and Economics",HPH.
5. Barry Render, Ralph M. Stair, Jr. and Michael E. Hanna, "Quantitativeanalysis for Management", Pearson.
6. Pannerselvam, R, "Operations Research", PHI.
7. Selvaraj, R, "Management Science Decision Modeling Approach", Excel.
8. Ravindran, A, Don T. Phillips and James J. Solberg, "Operations ResearchPrinciples and Practice", John Wiley and Sons.
9. Hillier, Frederick S. & Lieberman, "Introduction to Operations ResearchConcepts and Cases", TMH.
10. Prem Kumar Gupta & others, "Operations Research", S. Chand.

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MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2023-24

SEMESTER-II

Paper Code – MTM 207

Seminar Presentation

Credits: 2 **Marks: 50**

*****Seminar should be evaluated for 50 marks and then converted to Grade.

* Student Seminars will be done by students on Semester I and II subjects.

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