Programme Project Report – PPR

STEM – MBA

Two Year Programmes

Name of the Deptt: School of Commerce and Management

Name of the Programme: STEM MBA

PROGRAMMES MISSION & OBJECTIVES

PROGRAM MISSION:

"The mission of the STEM MBA program is to empower a diverse and talented group of students with the knowledge, skills, and ethical foundation needed to excel in leadership roles within STEM-focused industries. We aim to foster innovation, critical thinking, and the integration of science, technology, engineering, and mathematics with business acumen, preparing our graduates to impact the global marketplace positively.

PROGRAM OBJECTIVES:

- **Educational Excellence:**
  - Provide a rigorous and contemporary curriculum that equips students with a solid foundation in business management while integrating STEM principles.
  - Foster a continuous improvement and academic excellence culture to prepare students for leadership roles in STEM-related fields.
- **STEM Integration:**
  - Integrate STEM knowledge and methodologies into all aspects of business education, from decision-making and innovation to sustainability and data analytics.
  - Ensure students can apply their STEM expertise to address real-world business challenges.
- **Innovation and Entrepreneurship:**
  - Cultivate an entrepreneurial mindset and a spirit of innovation among students.
  - Encourage the development of innovative business solutions and the launch of entrepreneurial ventures within STEM sectors.
- **Global Perspective:**

- Prepare students to operate effectively in a global business environment by understanding international market dynamics, cultural diversity, and global challenges.
- Foster international collaboration and awareness in STEM-related business endeavours.

- **Ethical Leadership and Social Responsibility:**
  - Instil strong ethical principles in students and emphasise corporate social responsibility.
  - Promote ethical decision-making in the context of STEM industries and global business.
- **Data-Driven Decision-Making:**
  - Equip students with advanced data analysis skills and the ability to make data-driven decisions.
  - Ensure graduates can leverage data and analytics to drive business strategies and innovation.
- **Leadership and Management:**
  - Develop students' leadership and management abilities to lead teams and organisations effectively.
  - Foster a commitment to continuous improvement and adaptability to changing business landscapes.
- **Career Development and Industry Engagement:**
  - Provide career development resources, networking opportunities, and access to industry professionals.
  - Ensure students are well-prepared to secure meaningful employment or advance in their careers upon graduation.
- **Research and Innovation:**
  - Encourage faculty and students to engage in cutting-edge research and innovation in STEM-related business areas.
  - Contribute to advancements in STEM fields and business management through research.
- **Community Engagement:**
  - Foster a sense of community and social engagement among students, faculty, and alumni.
  - Encourage students to participate in community outreach, volunteerism, and initiatives that benefit society.

RELEVANCE TO MPBOU'S MISSION:

1. **Accessible Education:** A STEM MBA program can align with this mission by offering flexibility through distance learning, allowing students to pursue higher education in business and STEM fields, regardless of their location or work commitments.

2. **Inclusive Education:** A STEM MBA program can contribute to inclusivity by offering specialisations and courses relevant to a wide range of STEM fields, catering to the specific interests and career aspirations of a diverse student body.
3. **Quality Education:** A STEM MBA program can align with this goal by offering a curriculum that integrates both STEM and business education, ensuring that graduates are well-prepared for leadership roles in STEM-related industries.
4. **Innovative Pedagogy:** A STEM MBA program can embrace innovative pedagogical approaches, such as online courses, interactive simulations, and real-world case studies, to enhance the learning experience.

RELEVANCE TO MPBOU'S GOALS:

- **Lifelong Learning:** A STEM MBA program can support this goal by providing opportunities for professionals to enhance their knowledge and skills, encouraging continuous learning and career advancement.
- **Skill Development:** A STEM MBA program can contribute to this by equipping students with a combination of STEM and business skills, making them more competitive in the job market.
- **Research and Innovation:** A STEM MBA program can facilitate research and innovation in STEM fields and business management, promoting original research and problem-solving.
- **Community Engagement:** A STEM MBA program can encourage students to apply their knowledge to address real-world problems in STEM and contribute to the development of their communities.
- **Global Outreach:** A STEM MBA program can align with this goal by attracting international students interested in pursuing STEM and business education through open and distance learning.

NATURE OF PROSPECTIVE TARGET GROUP OF LEARNERS

- **STEM Background:** Prospective learners typically have educational backgrounds or work experience in STEM fields, including but not limited to engineering, technology, mathematics, natural sciences, or related disciplines.
- **Professionals Seeking Career Advancement:** Many learners are mid-career professionals who have established themselves in their respective STEM industries and are looking to advance into leadership and managerial roles. They may be engineers, scientists, researchers, or technologists wanting to take on management responsibilities.

- **Entrepreneurs and Innovators:** Some learners may have innovative ideas in STEM-related fields and wish to develop their own startups or entrepreneurial ventures. They seek business acumen and skills to bring their ideas to market successfully.
- **Diverse Educational Backgrounds:** The target group is diverse in terms of educational backgrounds, with some holding bachelor's degrees in STEM disciplines and others coming from more technical or academic backgrounds, seeking a bridge to the business world.
- **Global Aspirations:** Prospective learners may have aspirations to work in international STEM markets, and they seek a program that provides them with a global perspective, understanding of market dynamics, and cultural awareness.
- **Continuous Learners:** These individuals are committed to lifelong learning and professional development. They understand the importance of staying current with both STEM innovations and business management practices.
- **Geographic Diversity:** STEM MBA programs that offer online and distance learning options attract a geographically diverse group of learners, making it accessible to those who may not be able to attend traditional, campus-based programs.
- **Diverse Career Aspirations:** Learners have varied career aspirations, including roles such as project managers, technology consultants, innovation leaders, biotech entrepreneurs, healthcare administrators, and more. The STEM MBA program should accommodate these diverse career goals.
- **Analytical and Problem-Solving Orientation:** Given their STEM background, prospective learners tend to be analytical thinkers who are comfortable with data and enjoy solving complex problems. They seek a program that hones these skills and applies them to business challenges.
- **Community and Social Impact:** Some learners may have a strong interest in applying STEM and business knowledge to address societal and environmental challenges, seeking careers in environmental management, sustainable business, and socially responsible enterprises.
- **Diverse Age Groups:** The age group of prospective learners can vary widely, with some pursuing a STEM MBA immediately after completing their undergraduate degrees and others returning to education later in their careers.

SPECIFY THE TARGET GROUP:

- **STEM Professionals with Technical Backgrounds:**
  - Engineers (e.g., mechanical, electrical, civil, software).

- Scientists (e.g., physicists, chemists, biologists).
- Mathematicians and statisticians.
- Information technology professionals.

- **Early and Mid-Career Professionals:**
  - Recent STEM graduates looking to combine their technical skills with business knowledge.
  - Mid-career professionals seeking career advancement or a shift into management roles.
- **STEM Entrepreneurs and Innovators:**
  - Individuals with innovative STEM-related ideas or products.
  - Aspiring entrepreneurs and startup founders in the STEM sector.
- **Biotechnology and Healthcare Professionals:**
  - Biotech researchers and professionals.
  - Healthcare administrators and clinicians.
- **Environmental and Sustainability Enthusiasts:**
  - Professionals interested in green technologies and sustainable practices.
  - Those seeking to integrate environmental concerns with business strategies.
- **Data Scientists and Analysts:**
  - Individuals with expertise in data analysis and analytics.
  - Those aiming to apply data-driven decision-making to business challenges.
- **IT and Technology Managers:**
  - IT professionals aspiring to take on managerial roles.
  - Technology consultants and experts looking to lead technology-related projects.
- **International and Global-Minded Learners:**
  - Aspirants with a global perspective looking to work in international STEM markets.
  - Learners interested in understanding cultural diversity and global market dynamics.
- **Community and Social Impact Advocates:**
  - Those passionate about using STEM and business knowledge to address societal and environmental challenges.
  - Aspiring leaders in socially responsible and sustainable enterprises.
- **Lifelong Learners and Continuous Improvement Enthusiasts:**
  - Individuals committed to lifelong learning and personal and professional development.
  - Those who understand the importance of staying current in both STEM and business practices.

- **Diverse Age Groups:**
  - Learners from various age groups, including recent graduates, early-career professionals, mid-career professionals, and mature learners.
- **Geographically Diverse Learners:**
  - Learners from diverse geographic regions, including those who may not have access to traditional, campus-based programs. Online and distance learning options make the program accessible to a wide audience.

The target group for a STEM MBA program is diverse and spans various industries, professions, and career stages. The program aims to cater to the educational and career aspirations of individuals with STEM backgrounds seeking a strong business and management foundation.

NEEDS OF THE TARGET GROUP:

- Learners in STEM fields often lack formal education in business and management. They need a program with a strong foundation in core business concepts, including finance, marketing, operations, and strategy.
- STEM professionals need a program that effectively integrates STEM principles with business practices. They seek to apply their technical knowledge to solve real-world business challenges.
- Many individuals in this target group aspire to take on leadership and management roles in STEM-related industries. They need training in leadership skills, team management, and strategic thinking.
- Aspiring entrepreneurs and innovators seek education in entrepreneurship, including business planning, funding strategies, and commercialisation of innovative ideas.
- Given the increasing importance of data in business, learners often require proficiency in data analysis, data-driven decision-making, and analytics tools.
- Professionals with international aspirations need a program that imparts a global perspective, including insights into international markets, cross-cultural communication, and global business strategies.
- Many of these learners are working professionals with busy schedules. They need flexibility in program delivery, including online and part-time study options.
- Early and mid-career professionals looking to enhance their employability, advance in their current careers, or transition into more managerial roles.
- Learners may be strongly interested in researching their respective STEM fields or contributing to innovation.

- Those interested in addressing societal or environmental challenges seek a program that equips them to apply STEM and business knowledge to make a positive impact.
- Learners benefit from networking opportunities, industry partnerships, and access to professionals in STEM and business sectors.
- The program should be accessible to learners from diverse geographic locations in urban and rural areas. Distance learning options may be essential for those without easy access to physical campuses.
- Learners often seek a program that provides value for their investment, with cost-effective tuition and financial aid options.

APPROPRIATENESS OF PROGRAM TO BE CONDUCTED IN OPEN & DISTANCE LEARNING (ODL) MODE TO ACQUIRE SPECIFIC SKILLS & COMPETENCE:

Conducting a STEM MBA program in an Open and Distance Learning (ODL) is highly appropriate for acquiring specific skills and competence in the following ways:

- **Accessibility and Inclusivity:** ODL accommodates individuals from different geographic locations, backgrounds, and circumstances. This mode ensures that people with specific skills and competence requirements, such as STEM professionals looking to acquire business skills, can do so.
- **Flexibility:** ODL allows learners to study at their own pace and on their own schedules. This flexibility is crucial for professionals who want to acquire specific skills and competence while balancing work and other commitments.
- **Customisation:** ODL programs can offer a range of specialisations and elective courses, enabling learners to tailor their education to acquire the specific skills and competence they need for their chosen career paths. STEM professionals can choose courses that align with their career goals.
- **Integration of Learning and Work:** STEM professionals must apply what they learn immediately. ODL programs allow them to integrate their studies with their professional experiences, reinforcing learning and acquiring specific skills and competence.
- **Cost-Effectiveness:** ODL can be more cost-effective than traditional on-campus programs. STEM professionals can acquire the skills and competence they need without the expense of relocating or taking time off from work.

- **Real-World Application:** ODL can include practical assignments and projects that closely simulate real-world business scenarios. This approach allows learners to apply their knowledge and skills directly to the workplace.
- **Interactivity and Engagement:** Modern ODL platforms often incorporate interactive elements such as discussion forums, live webinars, and virtual labs. These features enhance engagement and provide opportunities for collaborative learning and skill development.
- **Continuous Learning:** STEM professionals typically engage in lifelong learning to stay current with industry trends and technological advancements. ODL provides a pathway for continuous learning and skill development without disrupting one's career.
- **Global Perspective:** ODL programs can attract a global audience, facilitating cross-cultural interactions and fostering a global perspective. This is valuable for STEM professionals who aspire to work in international contexts.
- **Accessibility of Expert Faculty:** ODL programs can tap into a global pool of expert faculty, ensuring that learners have access to high-quality instructors and mentors.
- **Technological Integration:** ODL leverages technology, making it an ideal mode for STEM professionals who are already comfortable with digital tools and platforms. It aligns with their existing technical competencies.
- **Lifelong Learning:** STEM professionals often value the concept of lifelong learning. ODL supports this by offering courses, micro-credentials, and continuing education opportunities.

EXPECTED LEARNING OUTCOMES OF STEM MBA

Knowledge Attainment:

- Demonstrate a comprehensive understanding of fundamental business concepts, theories, and principles, including finance, marketing, operations, and strategy.
- Explain key business terminology, frameworks, and models relevant to decision-making and problem-solving in business contexts.
- Integrate STEM principles with business management concepts to make informed and strategic decisions.
- Apply technical knowledge to analyse complex business challenges and identify innovative solutions.

- Acquire in-depth knowledge in specialised areas of STEM and business, including data science, biotechnology, healthcare management, information technology, environmental management, or engineering.
- Demonstrate expertise in specific industry-related concepts, regulations, and practices.
- Understand the global business environment, international market dynamics, and the impact of globalisation on industries.
- Analyse and adapt to international business strategies and cross-cultural communication.

Transferable Skills and Competencies:

- Develop leadership skills to effectively lead teams and organisations in STEM-related industries.
- Manage projects, resources, and operations efficiently while fostering a culture of innovation.
- Utilise data analytics and quantitative techniques to make data-driven business decisions.
- Apply critical thinking and problem-solving skills to address complex issues.
- Foster an entrepreneurial mindset and demonstrate the ability to innovate in STEM fields.
- Develop business plans, strategies, and product ideas, and understand the commercialisation process.
- Apply ethical principles and social responsibility in business practices, adhering to academic and professional ethical standards.
- Assess and make ethically sound decisions in complex situations.
- Communicate complex ideas, data, and strategies effectively to diverse audiences, both orally and in writing.
- Develop strong interpersonal communication skills for team collaboration and leadership.

Reflection of Academic, Professional, and Occupational Standards:

- Demonstrate proficiency in academic research and scholarly writing.
- Conform to academic standards and integrity in research and coursework.
- Align professional and occupational competencies with industry standards and best practices.
- Engage in continuous professional development and lifelong learning to stay current with industry trends.
- Apply recognised occupational standards, certifications, and regulations in STEM and business sectors.
- Meet or exceed industry-specific requirements, maintaining compliance with occupational codes of ethics and conduct.

Instructional Design:

The STEM M.B.A. programme is a two-year degree programme of 72 credits. The course material for the programme has been developed in-house with contributions from seasoned academicians as well. The instructional design comprises all learning activities i.e., reading and comprehending the SLM, availing audio-visual aids to enhance knowledge, attending counselling sessions and preparing assignments.

The Programme is of 2 year duration with annual examinations. The maximum period allowed is 4 years (double the duration). The Programme structure is as follows.

First Year			
S. No.	**Name of Subject**	**Credits**	**Total Marks**
1	Financial & Management Accounting	4	100
2	Business Ethics	4	100
3	Organisational Behaviour & Management Processes	4	100
4	Computer Application in Management	4	100
5	Business Environment	4	100
6	Research Methodology and Quantitative Techniques	4	100
7	Human Resource Management	4	100
8	Managerial Economics	4	100
9	Production and Operation Management	4	100
Total		**36**	**900**
Second Year			
1	Marketing Management	4	100
2	International Business	4	100
3	Business Communication	4	100
4	Financial Management	4	100
5	Strategic Management	4	100
6	Total Quality Management	4	100
7	Elective Course – Opt any one from the Elective Courses	4	100
8	Elective Course – Opt any one from the Elective Courses	4	100
9	Project Work – From any elective course	4	100

	Total	36	900

Elective Course

1	Biotechnology Management	4	100
2	Healthcare Management	4	100
3	Management Information System	4	100
4	Engineering Management	4	100
5	Environmental Management	4	100
6	Data Science and Analytics	4	100
7	Digital Marketing	4	100

(a) Detailed Syllabus of the Programme: Given as Annexure -01

(b) Duration of the Programme: The Duration of the Programme is two years.

(c) Faculty and Support Staff Requirement: At present, there are three faculty members in the Department. The Department have all support staff for its the smooth functioning.

(d) Instructional Delivery Mechanism:

The instructional delivery mechanisms of the program should be designed to cater to the diverse needs of the learners, provide flexibility, and ensure effective learning outcomes. The program should also provide adequate support services such as academic counselling, technical support, and mentorship to ensure that learners receive the necessary guidance and assistance throughout the program.

As the University functions in the Open and Distance Learning mode, the programmes that we offer are designed to meet the varied requirements of the distant learner. Keeping this in view, the course material developed by the Department is learner friendly. Each course is divided into four to five blocks, which are further divided into units. Each Block consists of three to four units. This number has been determined taking into consideration the learning capabilities of our learners. The structure of the unit is in line with the guidelines laid down by the DEB-UGC, the apex regulatory body of Open and Distance Learning. The content is kept simple and lucid and follows the self-instructional pattern. Each lesson includes a number of self-assessment questions along with hint answers so that the students are able to track their progress as they proceed with the lesson. At the end of each unit, a list of other relevant books is also provided. Besides providing quality study material to our learners, the Department, following the ODL pattern, has defined its programmes in the terms of credits. In the ODL system, one credit is equivalent to 30 study hours i.e. the study input required for completion of the programme. Normally the M.B.A. programme is

a 72-credit programme. This comprises all learning activities ie., reading and comprehending the SLM, availing audio-visual aids to enhance knowledge, attending counselling sessions and preparing assignments. Thus, in the M.B.A. programme, a learner is expected to put in 2160 study hours to complete the programme in two years' time.

(vi) Procedure for admission, curriculum transaction and evaluation:

Admission Process :

Notifications issued by the University in Regional and National Newspapers and in the official website. The admission process is online through the MP Online Portal. Payment online (various options like net banking etc.). Submission of the printout of the application by the candidate to the concerned study centre along with original documents for eligibility, date of birth, etc., and along with fee paid receipt. After the Verification of applications- for fulfilment eligibility criteria (marks cards) documents, fee paid details. Approval of the admission and issue of self-learning material (Study Materials) to the students.

Contact Programmes :

The personal contact programme in every course shall extend over a period of 13 working days in each year and is usually conducted at the beginning of the session. The students are expected to come prepared in the class in order to discuss their problems meaningfully. 75% attendance in the personal contact programme is mandatory.

Eligibility: A Bachelor's degree from a recognised university.

Fee Structure: STEM M.B.A. Previous & STEM M.B.A. Final:

Rs. 9000: Per Year

Evaluation norms: A learner will be evaluated based on Assignments and term-end examination. Assignments carry 30% weightage whereas the term end examination carry 70% weightage.

Evaluation system:

- Students shall have a minimum of 50% of total marks of the University examinations in each Course. The overall passing minimum is 50% both in aggregate of Internal Assessment and External Examination in each Course.
- Every course shall have two components of assessment, namely,
  - Internal Assessment: This assessment will be carried outs per the Academic Schedule.
  - Year End Examination "ESE": This assessment will be carried out at the end of the Academic Schedule.

Theory course assessment weightings:

The general guidelines for the assessment of Theory Courses, Department Electivesand Non – non—department electives shall be done continuously as given in Table.

Table: Weightage for Assessment

S.No.	Assessment	Weightage	Duration
1.	First Periodical Assessment	30%	2 periods
2.	Second Periodical Assessment	30%	2 Periods
Out of the two periodical assessments, the highest marks obtained in anyone will be reflected in the grade card.			
4.	End Year Exam	70%	3 hours

Grading System

Based on the student's performance in each Year, grade is awarded with a final letter grade at the end of the exam evaluation of each Course. The letter grades and the corresponding grade points are as follows.

Table 3: Grading system

Range of Marks	Letter Grade	Grade Points	Remarks
90 – 100	S	10	Outstanding
80-89	A	09	Excellent
70-79	B	08	Very Good
60-69	C	07	Good
50-59	D	06	Average
40-49	E	05	Pass
<40	U	00	To Reappear for End-Year Examination

GPA and CGPA

Grade Point Average (GPA) is the ratio of the sum of the product of the number of credits Ci of course "i "and the grade points Pi earned for that course taken over all courses "i" registered and successfully completed by the student to the sum of Ci for all "i". That is,

$$GPA = \frac{\sum_1^n \ C_i \ P_i}{\sum_1^n \ C_i}$$

Cumulative Grade Point Average (CGPA) will be calculated in a similar manner, in any Year, considering all the courses enrolled from the First Year onwards. The Grade card will not include the computation of GPA and CGPA for courses with letter grade "U" until those grades are converted to the regular grades.

Grade Sheet

Based on the performance, each student is awarded a final letter grade at the end of the Year in each course. The letter grades and corresponding grade points are given in Table 3. A student is considered to have completed a course successfully and earned credits if he/she secures a letter grade other than U in that course. After results are declared, grade sheet will be issued to each student which will contain the following details:

- Program and discipline for which the student has enrolled.
- The course code, name of the course, category of course and the credits foreach course registered in that Year
- The letter grade obtained in each course
- Annual Grade Point Average (GPA)
- The total number of credits earned by the student up to the end of thatYear in each of the course categories.
- The Cumulative Grade Point Average (CGPA) of all the courses taken.
- Credits earned under Non – CGPA courses.
- Additional credits earned for the respective UG degree or respective UGdegree with Minor specialisation.

Class/Division

Classification is based on as follows: CGPA ≥ 8.0: First Class with Distinction

6.5 ≤ CGPA <8.0: First Class

5.0 ≤ CGPA <6.5: Second Class

(i) Further, the award of 'First class with distinction' is subject to the candidate becoming eligible for

the award of the degree, having passed the examination in all the courses in his/her first appearance with effect from II Year and within the minimum duration of the programme.

(ii) The award of 'First Class' is further subject to the candidate becoming eligible for the award of the degree, having passed the examination in all thecourses within 5 years.

(iii) The period of authorised break in study will not be counted for the purpose of the above classification.

Eligibility For The Award of Degree

A student will be declared to be eligible for the award of the STEM MBA degree if he/she has Registered and successfully obtained credit for all the core courses:

- Successfully acquired the credits in the different categories as specified in the curriculum corresponding to the discipline of his/her study within the stipulatedtime:
- Has no dues to all sections of the institute, including hostels and has nodisciplinary action pending against him/her.
- The award of the degree must be recommended by the Academic Counciland approved by the Board of Management of the university.

Re-View Of Answer Scripts / Single Valuation

If any student feels aggrieved on the final outcome of the assessment in any course, the student shall apply to the Controller of Examinations, along with the prescribed fee, for the review of Tern End examination answer script, within the stipulated time after the announcement of the results of the examinations. The Controller of Examinations shall facilitate the review of the answer script jointly to be carried outby the student and the faculty detailed for this purpose. If any discrepancy is noticed during review the same shall be rectified and the originally awarded grade accordingly amended.

(vii) Requirement of the laboratory support and library resources:

Internet Leased Line

Computer Lab: The University has most modern high-tech Computer Lab with 24 hrs. Internet facility for studying and R&D activities. The state-of-the-art facility features hardware & software that is geared to specific academic programmes.

Research Lab: University equipped with round the clock available Hi-tech research Lab. which includes latest configured systems with Hi-speed internet facility loaded with latest software for research purpose.

Library: The University library is the hub of knowledge with more than 105832 books, Online Journals/Magazines, Back Volumes:, Thesis & Dissertations:, News Papers: 12, Book Bank: 25850 are

conveniently accessible for the students and staff of MPBOU. Library includes Main reading area, separate reading area and reference section.

The MPBOU system consists of a Central Library and Departmental Libraries which collectively support the teaching, research and extension programmes of the Institute. All students, faculty members and employees of the Institute are entitled to use the Library facilities enrolling membership.

Internet Facilities: One Gbps – Lease Line Link are available at the university. University is fully networked with a campus wide network interconnecting all departments. Campus is fully Wi-Fi with high Speed internet connection available round-d-clock.

MS TEAMS Platform: The University has acquired the Zoom platform license and has gone 100% virtual in terms of delivering the regular classes during the COVID lockdown. This has given enough experience for the faculty and expertise to handle the platform for online learning. More than 150 guest lecturers have been organised in the brief period of three weeks inviting industry experts. The MPBOU team is now digitally empowered to conduct OL classes on this virtual platform on a regular basis which shall make the learning process very effective.

LMS: The Institute is using MOODLE and Microsoft Teams for Online teaching andto conduct test and Assignments

(Viii) Cost estimate of the Programme and the provisions:

The STEM MBA programme in English has been prepared in-house. The internal faculty has made contribution through units. The Department has utilised the acumen and expertise of seasoned academicians in developing the course material. The expenses incurred in outsourcing units is as follows:

Cost Estimates for the Development of the Programme:

Programme	**Programme Development**	**Delivery**	**Total**
M.B.A.	10,00000/-	5,00000/-	15,00000/-

(ix) Quality Assurance Mechanism and expected programme outcomes:

Quality assurance mechanisms and expected program outcomes are important aspects of any educational program, including M.B.A.. Here are some quality assurance mechanisms and expected program outcomes of M.B.A.:

Quality assurance mechanisms are critical in ensuring that an MBA program delivers on its expected outcomes and meets the needs of learners and the industry. The following are some of the quality assurance mechanisms that can be put in place for an MBA program:

- Accreditation: MBA programs can be accredited by recognised bodies to ensure that they meet certain standards of quality. Accreditation can also provide assurance to learners, employers, and other stakeholders that the program meets industry standards.
- Curriculum design and review: MBA programs should have a well-designed and up-to-date curriculum that aligns with industry needs and trends. Regular curriculum reviews can ensure that the program remains relevant and up-to-date.
- Faculty qualifications and development: The faculty teaching in an MBA program should have appropriate qualifications and experience in the field of business and management. Regular professional development opportunities can also ensure that faculty remain current with their field's latest developments.
- Student support: MBA programs should provide appropriate student support services, such as academic advising, career counselling, and access to resources such as libraries and technology.
- Assessment and evaluation: MBA programs should use appropriate assessment methods to evaluate learners' knowledge and skills. Evaluation can also gather feedback from learners and other stakeholders to improve the program.

Expected program outcomes for an MBA program typically include:

- Mastery of business and management concepts and practices: Learners should demonstrate a deep understanding of business and management's fundamental concepts and practices.
- Advanced critical thinking and problem-solving skills: MBA learners should be able to apply advanced critical thinking and problem-solving skills to complex business problems.
- Effective communication and interpersonal skills: Learners should be able to communicate effectively in a range of business contexts and demonstrate strong interpersonal skills.
- Leadership and management skills: MBA learners should demonstrate advanced leadership and management skills, including the ability to lead and manage teams and organisations.
- Ethical and socially responsible decision-making: Learners should demonstrate an understanding of ethical and socially responsible decision-making and be able to apply this knowledge in a range of business contexts.

FIRST YEAR

Subject Name: FINANCIAL & MANAGEMENT ACCOUNTING

1. **Introduction:** Financial Objectives- Profit and Wealth Maximization, Finance Functions, Role of Finance Manager.
2. **Capitalisation:** Basics of Capitalisation, Estimation of Annual Net Earnings, Capitalization Rate, Overcapitalization, Undercapitalization.
3. **Capital Structure:** Principles of Capital Structure, Management, Factors Affecting Capital Structure.
4. **Capital Structure and Cost of Capital:** Concept of Cost of Capital- Importance, Calculation, Composite, Leverage, Theories of Capital Structure.
5. **Time Value of Money:** Compounding and Discounting Techniques, Present Value of Cash Flows, Techniques of Evaluation of Capital Expenditure Proposals.
6. **Sources of Working Capital:** Meaning and Concept of Working Capital, Optimum Working Capital, working of- Capital Cycle, Capital Forecasts, Capital Management, Management Policies and Various Elements, Cash Management- Nature, Planning Aspect, Control Process, Models, Cash Budgets, Playing and Kinds of Floats.

Subject Name: BUSINESS ETHICS

Unit 1: BUSINESS ETHICS

Introduction – Meaning - Scope – Types of Ethics – Characteristics – Factors influencing Business Ethics – Importance of Business Ethics - Arguments for and against business ethics- Basics of business ethics - Corporate Social Responsibility – Issues of Management – Crisis
Management

Unit 2: PERSONAL ETHICS

Introduction – Meaning – Emotional Honesty – Virtue of humility – Promote happiness –
karma yoga – proactive – flexibility and purity of mind.

Unit 3: ETHICS IN MANAGEMENT

Introduction – Ethics in HRM – Marketing Ethics – Ethical aspects of Financial Management – Technology Ethics and Professional ethics.

Unit 4: ROLE OF CORPORATE CULTURE IN BUSINESS

Meaning – Functions – Impact of corporate culture – cross cultural issues in ethics

Unit 5: CORPORATE GOVERNANCE

Meaning, scope, composition of BODs, Cadbury Committee, various committees, reports on corporate governance, scope of Corporate Governance, Benefits and Limitations of CorporateGovernance with living examples.

SKILL DEVELOPMENT

1. State the arguments for and against business ethics
2. Make a list of unethical aspects of finance in any organisation
3. List out ethical problems faced by managers
4. List out issues involved in Corporate Governance.
5. List out unethical aspects of Advertising

BOOKS FOR REFERENCE

1. Murthy CSV: Business Ethics and Corporate Governance, HPH
2. Bholananth Dutta, S.K. Podder – Corporation Governance, VBH.
3. Dr. K. Nirmala, Karunakara Readdy: Business Ethics and Corporate Governance, HPH
4. H.R.Machiraju: Corporate Governance
5. K. Venkataramana, Corporate Governance, SHBP.
6. N.M.Khandelwal : Indian Ethos and Values for Managers
7. S Prabhakaran; Business ethics and Corporate Governance
8. C.V. Baxi: Corporate Governance
9. R. R. Gaur, R. Sanghal, G. P. Bagaria; Human Values and Professional ethicsB O B Tricker, Corporate Governance; Principles, Policies and Practices
10. Michael, Blowfield; Corporate Responsibility
11. Andrew Crane; Business Ethics
12. Ghosh; Ethics in Management and Indian ethos.

Subject Name: ORGANISATIONAL BEHAVIOR & MANAGEMENT PROCESSES

1. **Introduction:** Emergence, Concepts, Importance, Nature, Characteristic, Models, Cognitive, Behaviorist, Social Cognitive Framework, Relationship with Other Fields.
2. **Perception:** Nature, Concept, Process and Importance.
3. **Attitude:** Concept, Process, Importance, Attitude Measurement.
4. **Personality:** Concept, Nature, Types and Theories.
5. **Learning:** Concept and Theories.

6. **Work Motivation:** Concept, Application, Principles Theories Involvement, Theories ofMotivation: Maslow's Need Hierarchy, Herzberg Theory of Motivation.
7. **Group Dynamics:** Definitions Types of Groups, Stage of Group Development, Group Characteristics, Group Structure, Groups Norms and Group Cohesiveness, Group Decision-Making.
8. **Leadership:** Definition and Framework of Leadership Perspectives, Leadership Theories and Models: Traits Theories, Behavior Theories, Leadership Styles, Nature of Conflict, Reactions of Conflict, Managing Conflict.
9. **Organisational Change:** Forces of Change, Process for Planned Organizational Culture, Globalization and Organizational Cross Cultures, the Emergence of Global Organization.

Subject Name: COMPUTER APPLICATION IN MANAGEMENT

Unit- I -Fundamentals of Computers:

1. **Data, Information and EDP**: Data, Information Need and Concept of Data and Information;Levels of Information from Data: Data Processing: Electronic Data Processing; Electronic Machines;
2. **Numbers Systems and Codes:** Different Numbers Systems- Binary, Octal, Decimal, Hexagonal, and their Conversion from Used in Computers; BCD, EBCDIC, ASCII, Gray and Conversions.
3. **Computer Arithmetic and Gates:** Binary Arithmetic, Complements, Addition and Subtraction; Conversion from One System to Another; Logic Gates, Their Truth Table and Application Minimization, and K-Maps.
4. **Computer Processing Systems:** Definition of Computer, Hardware/ Software Concepts; Generation of Computers; Types of Computers; Elements of Digital

Computer, CPU and its Functions; Various Computer Systems.

5. **I/O Devices:** Basics Concepts of I/O Devices; Various Input Devices-Keyboard, Mouse; MICR, OCR, Microphones.
6. **Various Output Devices:** VDU, Printer, Plotter, Spooling, LS.
7. **Storage Devices:** Primary and Secondary Memory; Types of Memories; Memory Capacityand its Enhancement; Memory Devise and Their Comparisons; Auxiliary Storage, Type ofDisks (Magnetic and Optical); Various Devices and Their Comparison.
8. **System Software:** Role of Software, Different System Software: O.S., Utilities, Element of O.S.-its Types and Variations; DOS and Windows.

9. **Computer and Networks:** Need of Communication; Data Transmission; Baud; Bandwidth; Communication Channel; Multiplex, Basic Network Concepts; O.S.I. Model; Types of Topologies; LAN, WAN; Client Server Concept.

Unit-II: Computer Based Business Application:

1. **Word Processing:** Meaning and Role of Word Processing in Creating of Documents, Editing, Formatting and Printing Documents, Using Tools Such as Spelling Check, Thesaurus, etc. in Word Processors (MS-Word);
2. **Electronic Spreadsheet:** Structure of Spreadsheet and its Applications to Accounting, Finance and Marketing Functions of Business, Creating a Dynamic/Sensitive Worksheet, Concept of Absolute and Relative Cell Reference; Using Built-in Functions, Goal Seeking and Solver Tools; Using Graphics and Formatting of Worksheet; Sharing Data With Other Desktop Applications; Strategies of Creating Error-Free Worksheet (MS-Excel, Lotus 123).
3. Practical Knowledge of Wings Accounting (Software), Tally etc.
4. **Programming under a DBMS Environment: The Concept of Database Management Systems:** Data Fields, Records and Files, Sorting and Indexing Data; Understanding Programming Environment in DBMS; Developing Menu Driven Applications Query Language (MS-Access).

Unit-III: Electronic Data Interchange (EDI)

- Introduction to EDI; EDI Standards; Financial EDI (FEDI); FEDI for International Trade Transactions; Applications of EDI; Advantages of EDI; Future of EDI.
- Unit-IV: The Internet and its Basic Concepts:
- Internet-Concept, History, Development in India; Technological Foundation of Internet; Distributed Computing; Client-Server Computing; Internet Protocol Suite; Application of Distributed Computing; Client-Server Computing; Internet Protocol Suite in the Internet
- Environment; Domain Name System (DNS); Domain Name Service (DNS); Genetic Top- Level Domain (gTLD); Country Code Top-Level (ccTLD);- India; Allocation of Second-Level Domain; IP Addresses; Internet Protocol**; Applications of Internet in Business, Education, Government, etc.**

Unit- V: Information System Audit:

Basic Idea of Information Audit; Difference with the Traditional Concepts of Audit; Conduct and Applications of IS Audit in Internet Environment.

Subject Name: BUSINESS ENVIRONMENT

1. **Indian Business Environment:** Concept, Components and Importance.
2. **Economic Trends (Overview):** Income; Savings and investments; industry; Trade and Balance of Payments; Money, Finance, Prices.
3. **Problems of Growth:** Unemployment; Poverty; Regional imbalances; Social Injustice; Inflation; Parallel Economy; Industrial Sickness.
4. **Role of Government:** Monetary and Fiscal Policy; Industrial Policy; Industrial Licensing, Privatisation; Devaluation; Export Import Policy; Regulation of Foreign Investment; Collaboration in the Light of Recent Changes.
5. **The Current Five-Year Plan: Major Policies; Resource Allocation.**
6. **International Environment:** International Trading Environment (Overview); Trends in World Trade and the Problems of Developing Countries; Foreign Trade and Economic Growth; International Economic Grouping; International Economic Institutions- GATT, WTO, UNCTAD, World bank, IMF, GSP, GSP; Counter Trade.

Subject Name: RESEARCH METHODOLOGY AND QUANTITATIVE TECHNIQUES

1. **Introduction:** Concept, of Research and its Applications, Scientific Method; Identification and Formulation of Research Problem. Survey of Literature. Process of Research: Steps Involved in Research Process. Research Design- Meaning, Purpose and Principles.
2. **Data Collection and Hypothesis:** Observation, Questionnaire, Interview and Case Study. Hypothesis and Testing of Hypothesis; Exploratory, Descriptive and Causal Research Designs; Basic Principles and Types of Sampling, Precision and Accuracy of Sample Based Research; Sampling and Non-Sampling Errors, Sampling Distribution.
3. **Presentation and Analysis of Data;** Classification, Tabulation and Graphical Representation of Data. Statistical Techniques; Measures of Central Tendency and Variability. Statistical Estimation, Interval and Point Estimation; Chi-Square Test and t-test. Linear Programming Analysis of Variance: One Way and Two Way, Factor Analysis; Regression Analysis, Data Analysis Using Software Packages.
4. **Report Writing:** Components and Characteristic; Types of Reports; Precautions and Principles of Report and References Writing.

Subject Name: HUMAN RESOURCE MANAGEMENT

1. **Introduction:** Meaning, Definition, Scope, Evolution, Objectives of HRM Qualities of HR/ Personnel Manager, Role of Human Resource Manager, Development of HRM in India, Distinction

between HRM and PM.

2. **Human Resources Planning:** Meaning, Objectives, Benefits of Human Resources Planning, Process and Problems in Human Resources Planning, Recent Implication in HRP, Staffing, Recruitment, Types of Tests.
3. **Training and Development:** Meaning, Definition, Need, Advantages, Objectives, Importance of Training, Types of Training, Difference between Training and Development, Education Classification of Training Methods, Executive Development, and Knowledge Management.
4. **Trade Unions:** Meaning, Characteristics, Functions and Role of Trade Unions, Unions Structure, Wages and Salary Administration, Wage Boards and Pay Commissions, Wage Incentives, Quality Circles, Industrial Democracy, Socio-Technical Systems.
5. **Performance Evaluation:** Performance Appraisal, Promotions, Transfer, Demotions, Separation, Grievance.

Subject Name: MANAGEMENT SCIENCE

Unit-1

1. **Management Concepts:** Principles, History, Principles of Scientific, Functions of Management, Scientific Theories, Functions of Manager.
2. **Management Thoughts:** Administration and Levels of Management, Development ofManagement Thoughts.
3. **Planning:** Definition, Importance, Types of Plans, Strategies, Policies and Planning Premises, Principles and Limitations of Planning.
4. **Objectives:** Defining Objectives, Characteristic of Organizational, Importance, Areas Needingand Criteria of Good Objectives, Management by Objectives (MBO).
5. **Forecasting:** Elements of the Forecasting Process, Features, Planning, Advantages, Limitationsof Forecasting, Types of Forecast, Forecasting Techniques.
6. **Decision- Making:** Definition, Importance, Types of Decisions, Factors Involved and Common Difficulties in Decision-Making, Guidelines for Effective Decision Making.

Unit-2

1. **Organisation:** Definitions Formal and Informal Organisations, Classical Principles of Good Management.
2. **Departmentation:** Need, Importance, Advantages, Principles of Departmentation.
3. **The Concept of Authority:** Meaning, Characteristics, Distinction between Authority and Power,

Sources of Authority.

4. **Delegation of Authority:** Meaning, Types of Delegation-Principles, Advantages, Importance, Effective, Limits.
5. **Centralisation and Decentralisation:** Types, Advantages, Disadvantages, Distinction between Delegation and Decentralisation.
6. **Line and Staff:** Concept and Differentiation, Line and Staff Relationship, Conflicts and Types of Staff.
7. **Nature and Purpose of Staffing:** Staffing, Responsibility for Staffing, Manpower Planning (MRP), Human Resource Planning (HRP), Aims and Objectives of HRP.
8. **Staffing:** Selection Process & Techniques, Types of Tests, Limitations of Selections Tests, Interview, Principles of Interviewing.
9. **Human Resource Management:** Scope and Objectives of Personnel Management, Training-Need, Objectives Importance, Responsibility.
10. **Directing/ Directions:** Definitions, Features, Importance, Principles and Elements, Managingand Human Factor, Creativity and Innovation.
11. **Leadership:** Meaning, Nature, Need, Importance, Functions and Qualities, Leadership Theories.
12. **Motivation:** Definitions, Importance, Process, Elements, Nature or Characteristics, and Theoriesof Motivation
13. **Communication:** Definitions, Process Principles and Methods, Barriers, Ten Commandments.

Unit-4

1. **Control Process:** Definitions, Importance, Limitations, Characteristics, Elements and Types Control.
2. **Control Techniques:** Traditional and Modern Techniques of Controlling.
3. **Information Technology in Controlling:** IT, Uses and Challenges of IT.
4. **Productivity and Operations Management:** An Overview of Production Management Techniques Employed in Planning and Controlling Operations Managements.
5. **Overall and Preventive Control:** Overview and Assumption of Direct Control System, Principle and Assumption, Advantages of Preventive Control System.

6. **Globalisation and Liberalisation:** Globalisation, Essential Conditions, Globalisation in Indian Business, Obstacles, Factors Favoring Globalisation.
7. **International Management:** Introduction Unified Global Management Theory.

Subject Name: MARKETING MANAGEMENT

1. **Introduction to Marketing:** Marketing: Definition, Key Concepts and Trends; Marketing Environment; Marketing Strategy: Market Segmentation, Target Marketing Selection and Marketing Mix.
2. **Consumer Behavior:** Consumer Behavior: Customer Decision Making Framework, Buying Process; Customer Satisfaction; Customer Relationship Marketing; The Product: Meaning, Levels, Product Mix Decisions, Product Life Cycle, New Product Development; Pricing: Objectives and Strategies.
3. **Promotion and Distribution:** Marketing Information System and Marketing Research; Promotion: Meaning, Types and Strategies; Channel Management, Supply Chain Management, Sales- Force Management and Process of Personal Selling.
4. **Global Marketing:** Contemporary Issues in Marketing: Green Marketing; Global Marketing; Retailing in India; Brand Management; Competitive Strategies; Customer Loyalty.

Subject Name: PRODUCTION AND OPERATION MANAGEMENT

1. **Work Study:** Method Study-Process Chart, Flow Process Chart, Flow Diagram, Man and Machine Chart and Two Handed Chart. Work Measurement- Time Study, Tools and in Time Study, Performance Rating, Allowance and Use of Some Time Standards, Time and Motion Study. Principles of Human Motion Economy (Introduction to Ergonomics).
2. **Plant Layout and Material Handling:** Concept of Plant Layout. Types of Layout (Process, Product and Combination Type); Their Characteristic; Merits and Demerits. Factors Affecting Plant Layout. Work Station Design; Factors Considered in Designing a Work Station. Introduction and Functions of Material Handling. Selection of Material Handling Equipment for Different Equipment.
3. **Production Planning and Quality Control:** Types of Production: Job, Batch and Mass Production. Material Planning and Allocation. Process Planning and Process Sheet Inventory Control: Need and Advantages of Inventory Control.
4. **Inspection and Quality Control:** Inspection. Need and Planning for Inspection. Types of

Inspection. Role of Operator and Inspector in Inspection. Quality Control and Quality Assurance. Meaning and Need for Quality Control. Statistical Quality Control. Acceptance Sampling (Single and Sequential Sampling Plans). Control Charts for Variables and Attributes, Interpretation of Patterns in Control Charts, O.C. Curves. Concept of TQM. Machine Capability Studies.

5. **Standards and Codes:** National and International Codes. ISO-9000, Concept and its Evolution and Implications.
6. **Repair and Maintenance:** Objectives and Importance of Maintenance. Different Types of Maintenance. Nature of Maintenance Problem. Range of Maintenance Activities. Schedules of Preventive Maintenance. Advantage of Preventive Maintenance.
7. **Cost Estimation:** Introduction and Functions of Cost Estimation. Estimation Procedure. Estimation of Costs and Ladder of Costs. Depreciation, Methods of Calculating Depreciation. Overhead Expenses and Distribution of Overhead Expenses Calculation of Cost of Machining and Metal.
8. **Value Engineering:** Concept of Value Engineering and Techniques.

Subject Name: INTERNATIONAL BUSINESS

1. **Marketing Basics:** Marketing Versus Sales, Effective Marketing, Role of the Marketing Plan, Marketing Potential, The Role of Marketing in Business, Marketing Functions, The Hierarchy of Effects, Common Marketing Mistakes, Found Versus Created Markets.
2. **Elements of the Marketplace:** Elements of Domestic Marketing, Elements of Export Marketing, Decision Making for Entering International Markets, Commonality and Conflict.
3. **The Dimensions of International Marketing:** Defining Market Conditions, the Dawn of Exchange Rates, International Business.
4. **International Trade:** Growth of International Markets, Pride, Prosperity and National Industries, Absolute and Comparative Advantage, Coproduction and Trade, Trade Among Nations.
5. **The Role of Government:** Sovereignty, Prestige and Security, Host Government Trade Barriers, Home Government Intervention, Formal and Informal Restrictions, Trading Blocs, the WTO and International Intervention, Overseas Risk Management.
6. **The Role of Cultural Forces:** Language, Local Customs, History, Education, Religion, Family, Climate, Xenophobia, Cultural Adaptation, Guidelines for Cultural Analysis, Profile of an International Marketer.
7. **Developing Products for the Foreign Market:** Carrying an Established Product Across Borders, When to Make New Products, the Product Cycle, Resistance to Old Product, Meeting the New

Demands for Quality, Financing & Product Development, Research.

8. **Market Research:** Defining Research Objectives, Designing Your Research Process, Sources for International Commercial Research, Collecting Information, Effective Competition Studies, the Value of Objectivity, Interpretation of Research, Guidelines for Cultural Research, Commercial Research, Competition Profiles.
9. **Preparing for Market Entry:** Segmentation, Differentiation, Positioning, Public Relations, Problems to Avoid in New Markets, Matching Goods to Market, the Pricing Process, Product Life Cycle, Warranty and Service Considerations, Matching Services to Market, Commercial and Consumer Services Pricing, Financing Strategies, Transaction Settlement, Brand Selection and Equity, Gaining Market Share.
10. **Developing Distribution:** Controlling the Channels, Distributions Strategies, Managing Logistics, Channel Options and Problems, Selecting Teammates.
11. **Advertising and Promotions:** Challenges of the Foreign Market, Standard versus Adapted Advertising, Agency Selection, Media Planning, Being Believable.
12. **Making Contact: Different Products and Promotions:** Personal Selling, Industrial Sales, Sponsorships, Direct Marketing, Push versus Pull.
13. **Staffing the New Market:** Personnel Restrictions, Selection Guidelines, Overall Management, Operations Management, Cultural Training, Motivating the Overseas Team, International Specialists, and International Divisions.
14. **Evaluating Performance:** Sales Analysis, Market Share Growth, Tracking Satisfaction, and Marketing Audit.
15. **The Marketing Plan:** Guideline for Marketing Success.
16. **The Marketing Audit:** The Marketing Audit.

Subject Name: BUSINESS COMMUNICATION

1. **Basics of Communication:** Introduction, Why Communication, Meaning and definition of Communication, Importance of Communication, Elements Of Communication Process, Communication Process Models, Basics Forms Of Communications, Effective Communication.
2. **Communication Theories:** Assumptions about Communication, Communication Theory, Communication Models, Uses of theories and models.
3. **Audience Analysis:** Introduction, Types of Audience, Importance of Audience Analysis, Analysing Individual and Members of Audience.

4. **Self-Development:** What is self-development, Objectives of self- development, How Self-Development Improves Communication, How Communication Leads to Self- Development, How to Development Oneself.
5. **Developing Positive Attitude:** Impact of Positive Attitude on Communication, How to Develop Positive Thinking.
6. **Corporate Communication:** Corporate Communication, Corporate Communication and Marketing Communication, Types of Corporate Communication.
7. **Formal vs. Informal Communication Network:** Formal Communication Network, Informal Communication.
8. **Barriers to Communication:** Semantic Barriers, Physical Barriers, Organisational Barriers, Psychological Barriers, How to Overcome Communication Barriers.
9. **Practices in Business Communication:** Group Communication, Group Discussion, Seminar, Mock Interview, Presentations, Listening.
10. **The Essentials of Effective Communication:** 7c's of Communication, Other Principles of Communication.
11. **Non-Verbal Communication:** Kinesics, Proxemics, Physical Context.
12. **Writing Skill:** Writing Skill, Business Writing, You- Attitude, Steps In Effective Writing.
13. **Letter and Memo Writing: Formats:** Functions of Business Letters, Types of Letters, Parts of Business Letters, Format Of Business Letters, How to make Business Letters Effective.
14. **Request Letters:** Approaches to request Letters.
15. **Good News Letters:** Purpose of Good news letters, Organization of Good news letters.
16. **Bad News Letters:** What is bad news letter, purpose of writing bad news letters, the right Attitude, Drafting news message.
17. **Persuasive, Sales and Collection Letters:** Types Of Persuasive Letters, Purpose Of Persuasive Letters, How to Persuade Others, Approach to Persuasive letters, Most Common Forms Of Persuasive Letters, Letters Applying Or Offering For Agency.
18. **Memo Writing:** Memo, Memo Format, How to write effective Memos.
19. **Report Writing:** Meaning of Business Report, Types of Reports, Importance of Reports,Essentials of Good Business Report, Steps in Business Report Writing, Structure of Reports.
20. **Speeches and Presentations:** Characteristics of a good speech, How to make Effective Speech, Presentations, Support, Speech, Sales Presentation.

21. **Listening:** Importance of Listening, Types of Listening, and Barriers to effective Listening.
22. **Interviewing Skill:** Types of Interview, Staging and conducting effective interviews, conducting the Interview, Information Gathering Interviews, Selection Interview.
23. **Resumes and Job Application:** Job Application Letters, Writing Solicited Letters, Resume Writing.
24. **Modern Forms of Communication:** Facsimile (FAX), Video Conferencing, Electronic, Electronic Mail (E-Mail).
25. **SWOT Analysis:** SWOT Analysis and Communication, use of SWOT analysis byorganisations

Subject Name: STRATEGIC MANAGEMENT

1. Introduction, Strategic Management, Business Policy, Corporate Strategy, Basic Concept of Strategic Management, Mission, Vision, Objectives, Impact of Globalization, Basic Model of Strategic Management, Strategic Decision Making, Impact of Internet and E-Commerce, Role of Strategic Management in Marketing, finance, HR and Global Competitiveness.
2. Environment Scanning, Industry Analysis, Competitive Intelligence ETOP Study, OCP, SAP Scanning, Corporate Analysis, Resource Based Approach, Value-Chain Approach, Scanning Functional Resources, Strategic Budget and Audit.
3. SWOT Analysis, TOWS Matrix, Various Corporate Strategic Stability, Retrenchment and Combination Strategy. Process of Strategic Planning, Stages of Corporate Development, Corporate Restructuring, Functional Strategy, BCG Model, GE 9 Cell, Porters Model: 5 Force and Porters Diamond Model, Strategic Choice.
4. Strategy Implementation through Structure, through Human Resource Management: throughvalue and ethics. Mc Kinsey's 7S Model, Organization Life Cycle, Management and Control, Activity Based Costing, Strategic Information Systems, Case Study related to the Entire Syllabus.

Subject Name: FINANCIAL MANAGEMENT

1. **Stock Exchange:** Definition, Market Participants, The Role of Stock Exchanges, Corporate Governance, Trading in stock Exchanges, AMEX, NASDAQ, LSE, NYSE, FSE, PSE, TSE, SSE, Madrid Stock Exchange.
2. **Indian Stock Exchange:** Bombay Stock Exchange: BSE Sensex, Sensex Milestones, National Stock Exchange: Innovations, Indices, Mission, Logo, Corporate Structure, Board of Directors, Committee on Trade Issues (COTI), Capital Market Segment.
3. **Capital Market:** Types of Market, The Primary Stock Market, Beneficial Effects of Primary

Market, Secondary Stock Market, Process of Purchase/ Sales of Shares, Bodies Regulating Share Market, what is SEBI? Advantages of Listing on stock Exchange.

4. **Investment Management:** Investment Concepts, Investment objectives, Investment Alternatives, Investment Process, Equity, Investment Strategies, Fundamental Analysis/Equity analysis, Industry Cycle, The Annual Report, Profit and Loss Rations, Stock Utilization.
5. **Technical Analysis:** Introduction, DOW Theory, Basic Principles of Technical Analysis, Different types of Charts, Charting: Support and Resistance, Trading Guidelines, Uptrend and Downtrend Psychology, ELLIOT's Wave Principle, Moving Averages, Trading with Moving Averages.
6. **Analysis of any listed company:** Company Background, shareholding Pattern, Corporate Announcement.

Subject Name: TOTAL QUALITY MANAGEMENT

1. **Introduction:** Definition of Quality, Dimension of Quality, Quality Planning, Quality Cost-Analysis Techniques for Quality Costs, Basic Concepts of Total Quality Management, Historical Review, Principles of TQM, Leadership - Concepts, Role of Senior Management, Quality Council, Quality Statements, strategic Planning, Deming Philosophy, Barriers to TQM Implementation.
2. **TQM Principle:** Customer satisfaction- Customer Perception of Quality, Customer Complaints, Service Quality, Customer retention, Employee Involvement - Motivation, Empowerment, Terms, Recognition and Reward, Performance Appraisal, Benefits, Continuous Process Improvement - Juran Trilogy, PDSA Cycle, 5S, Kaizen, Supplier Partnership - Partnering Sourcing, Supplier Selection, Supplier rating, Relationship Development, Performance Measures- Basic Concepts, strategy, Performance Measure.
3. **Statistical Process Control (SPC):** The Seven toils of Quality, Statistics Fundamentals - Measureof Central Tendency and Dispersion, Population and Sample, Normal Curve, Control Charts for Variables and attributes, Process Capability, Concept of six Sigma, New Seven Management Tools.
4. **TQM Tools:** Benchmarking - Reasons to Benchmark Process, Quality function Deployment(QFD) - House of Quality, QFD Process, Benefits, Taguchi Quality Loss Function, Total productive Maintenance (TPM) - Concept, Improvement Needs. FEMA - Stages of FEMA.
5. **Quality System:** Need for ISO 9000 and other quality Systems, ISO 9000:2000 Quality System-Elements, Implementation of Quality System, documentation, Quality Auditing QS9000, ISO14000 - Concept, Requirements and Benefits.

SPECIALISED ELECTIVE COURSES FOR STEM MBA

Subject Name: MANAGEMENT INFORMATION SYSTEM

1. **Introduction to Information System in Business:** Organization, Management and Network Enterprises Information system in enterprises, Information system, Organization, Managementand Strategy: The changing role of Information system in organisation, Decision making, business strategy.
2. Computer Hardware and Computer software, Telecommunications, Categories of computer and Computer system, what is software, System software telecommunication and Networks.
3. **Information System for Managerial Decision Support, Managing Knowledge:** Knowledge Management in organisation, Information and Knowledge work system. Group Discussion Support System (GDSS), What is GDSS, Characteristics of GDSS.
4. **Enterprise and Global Management:** Redesigning the Organisation with Information System: Business Process reengineering and Total Quality Management. Management international Information system: The Growth of international information system, organising international information system, Managing global system.

Subject Name: ENVIRONMENTAL MANAGEMENT

Unit 1: Study of Nature, Resources and Ecosystem

1. **Environment Studies - Scope and Importance:** Objectives, Environment, Types of Environments, Need for Public Awareness, Environment Ethics, Environmental Education, Multidisciplinary Nature of Environmental Education, Scope of Environmental Education.
2. **Natural Resources:** Objectives, Introduction, Classification of Natural Resources, Principal Natural Resources and their Problems- Forest Resources, Water Resources, Mineral Resources, Food Resources, Energy Resources, Land Resources**.**
3. **Ecosystem:** Objectives, Types of Ecosystem, Ecosystem Components, Ecosystem- Structure and Function, Food Chain and food Web. Ecological Pyramids, Major Ecosystems, Ecological Succession (Changes in Biotic Community).

Unit 2: Biodiversity and Pollution Control

1. **Biodiversity and ITS Conservation:** Objectives, Levels of Biodiversity, Bio Geographical Classification of India, Value of Biodiversity, Man-Wildlife Conflicts, Conservation of Biodiversity, Hot Spots of Biodiversity, Biodiversity Conservation of India.

2. **Environment Pollution:** Objectives, pollutions, Types of Pollution, Atmospheric or Air pollution, Water pollution, Soil pollution, Radioactive pollution, Noise pollution, Solid Waste Management, Role of Individual in Prevention of Pollution, Environmental Disasters and Their Management.
3. **Social Issues and The Environment:** Objectives, Sustainable Development, Water Conservation, Resettlement and rehabilitation of People Environmental Ethic and Resource Use, Global Environmental Changes, Greenhouse Effect, Relative Contribution and Effects of Greenhouse, Wasteland Development.

Unit 3: Study of Population Growth and Case Studies

1. **Human Population and The Environment:** Objectives, human Population Growth, Maximum Carrying Capacity, Environment and Human Health, Family welfare Programme, Human Rights, Women and Child Welfare, role of Information Technology in Environment and Human Health.
2. **Field Work:** Introduction Visit to a Local Area to Document environmental Assets- River, Forest, Grasslands, Hill Mountains, A Visit to Local Pollution Sites-Urban Site Rural Site,

Agricultural Site, Study of Common Plants, Insects and Birds, Study of Simple Ecosystem - Pond Ecosystem, River, Hill Slope.

Subject Name: Data Science and Analytics:

Course Outcome

- Apply machine learning algorithms to solve business problems.
- Analyse large datasets to extract valuable insights for decision-making.
- Develop predictive models for sales forecasting and customer behavior.
- Communicate complex data findings to non-technical stakeholders.
- Utilise data visualisation tools to create informative reports and dashboards.

Unit 1 : Deep Learning and Neural Networks

Unit 2 : Natural Language Processing

Unit 3 : Time Series Analysis

Unit 4 : Business Analytics with R or Python

Unit 5 : Data Visualisation and Communication

Subject Name: Biotechnology Management:

Course Outcome

- Navigate the regulatory landscape and compliance requirements in the biotech industry.
- Identify funding sources and strategies for biotech startups.

- Develop marketing and branding strategies for biopharmaceutical products.
- Understand clinical trial phases and their significance in biotech product development.
- Evaluate ethical considerations in biotechnology research and innovation.

Unit 1 : Biopharmaceutical Marketing

Unit 2 : Regulatory Affairs in Biotech

Unit 3 : Clinical Trials and Drug Development

Unit 4 : Biotech Investment and Venture Capital

Unit 5 : Bioprocess Engineering

Subject Name: Healthcare Management:

Course Outcome

- Analyse healthcare policy and its impact on the industry.
- Develop strategies to improve patient care and healthcare delivery.
- Implement health information systems to enhance operational efficiency.
- Evaluate the role of telemedicine and digital health solutions in modern healthcare.
- Assess the ethical and social responsibilities of healthcare organisations.

Unit 1 : Health Information Systems

Unit 2 : Healthcare Quality and Patient Safety

Unit 3 : Health Economics and Policy Analysis

Unit 4 : Telemedicine and Digital Health

Unit 5 : Healthcare Strategy and Innovation

Subject Name: Information Technology Management:

Course Outcome

- Create IT governance frameworks to align IT strategy with business objectives.
- Implement cybersecurity measures to protect organisational assets and data.
- Develop cloud computing strategies and migration plans for businesses.
- Assess the impact of IT compliance and regulations on business operations.
- Apply enterprise systems and ERP solutions to streamline organisational processes.

Unit 1 : Cybersecurity Management

Unit 2 : Cloud Computing and Virtualization

Unit 3 : IT Project Portfolio Management

Unit 4 : IT Governance and Compliance

Unit 5 : Enterprise Systems and ERP

Subject Name: Environmental Management:

Course Outcome

- Implement sustainable practices and assess their environmental impact.
- Understand environmental laws and regulations affecting different industries.
- Develop renewable energy projects and evaluate their feasibility.
- Assess the environmental impact of products and processes using life cycle analysis.
- Apply circular economy principles to reduce waste and resource consumption.

Unit 1 : Sustainable Supply Chain Management

Unit 2 : Environmental Policy and Regulation

Unit 3 : Renewable Energy and Clean Technologies

Unit 4 : Environmental Impact Assessment

Unit 5 : Circular Economy and Sustainability

Subject Name: Engineering Management:

Course Outcome

- Plan and manage engineering projects effectively within budget and timeline constraints.
- Implement lean and Six Sigma methodologies to improve production and processes.
- Develop quality control systems to enhance product and service quality.
- Innovate in engineering design and technology to stay competitive.
- Analyse and optimise the entire product lifecycle, from concept to disposal.

Unit 1 : Project Management for Engineers

Unit 2 : Lean Six Sigma and Process Improvement

Unit 3 : Product Lifecycle Management

Unit 4 : Systems Engineering and Integration

Unit 5 : Innovation in Engineering Design

Subject Name : Digital Marketing

Unit 1 : Introduction to Digital Marketing; Objectives of Digital Marketing; Marketing in Digital Economy; Influential Digital Subcultures; Digital Marketing Strategy;

Un it 2 : Search Marketing & Search Advertising Search Engine Optimization; Organic & Paid Search Results; Overview of Google AdWords; Keyword Research and analysis; Tracking the success of SEM;

Search Engine Optimisation techniques; On-page & Off-page optimisation; Search Advertising: Basic Concepts; Elements of Search Ad; Managing Pay Per Click Process

Unit 3 : Social Media Marketing & Digital Display Advertising (DDA) Different Social Media Channels; Social Media Marketing (SMM) Process; Managing and Analysing SMM Process; Key Stakeholders in Digital Display; Managing DDA Process

Unit 4 : Email & Mobile Marketing Email Strategy & Planning; Advantages & Challenges of Email Marketing; Managing Email Marketing Process; Understanding Mobile Marketing; Mobile Messaging Channels; Mobile Commerce; Managing Mobile Marketing Process

Unit 5 : Affiliate & Video Marketing Affiliate Marketing: Basic Concepts, Building Blocks of Affiliate Marketing; Video Marketing: Basic Concepts, Video Production & Promotion; Content Marketing: Basic Concepts, Strategic Building Blocks of content Marketing

QUALITY ASSURANCE MECHANISM AND EXPECTED PROGRAMME OUTCOMES

1. Enrollment of Students:

- **Mechanism:**
  - Clearly defined admission criteria and procedures that are accessible to prospective students.
  - Outreach activities to reach a diverse pool of applicants, including underrepresented groups in STEM fields.
  - Support services such as academic advising and counseling to guide potential students through the enrollment process.
- **Expected Outcomes:**
  - A diverse and qualified student body with equitable access to the STEM MBA program.
  - Transparency in admission processes and opportunities for underrepresented groups to participate.

2. Examination Results:

- **Mechanism:**
  - A rigorous curriculum with regular assessments and examinations that align with program objectives.
  - Standardised grading and assessment criteria to ensure consistency and fairness.
  - Mechanisms for review and appeals for students dissatisfied with their grades.
- **Expected Outcomes:**
  - Reliable and valid assessment of student performance.
  - Fair and consistent examination results that reflect students' understanding of STEM MBA concepts.

3. Placements/Satisfaction of Passing Out Students:

- **Mechanism:**
  - Career development services, including internships, workshops, and job placement assistance.
  - Collaboration with STEM industry partners to create opportunities for students to gain practical experience.
  - Regular surveys and feedback collection from graduates to assess their satisfaction with job placements and the overall program.

- **Expected Outcomes:**
    - High employability and job placement rates for STEM MBA graduates.
    - Positive feedback from graduates indicating satisfaction with their placements and the program's relevance.

4. Administrative Feedback:

- **Mechanism:**
    - A structured feedback process that allows students to provide input on administrative processes and services.
    - Regular communication channels between students, faculty, and program administrators.
    - A responsive administrative team that addresses concerns and inquiries promptly.
- **Expected Outcomes:**
    - Improved administrative processes and services based on student feedback.
    - Effective resolution of administrative issues and inquiries.
    - Enhanced communication and transparency between stakeholders.

Name & Signature of Programme Coordinator(s)

Name and signature of the Director of the School of Studies with seal

Enclosure:

1. Report of Exploratory Expert Committee Meeting
2. Need Assessment Report