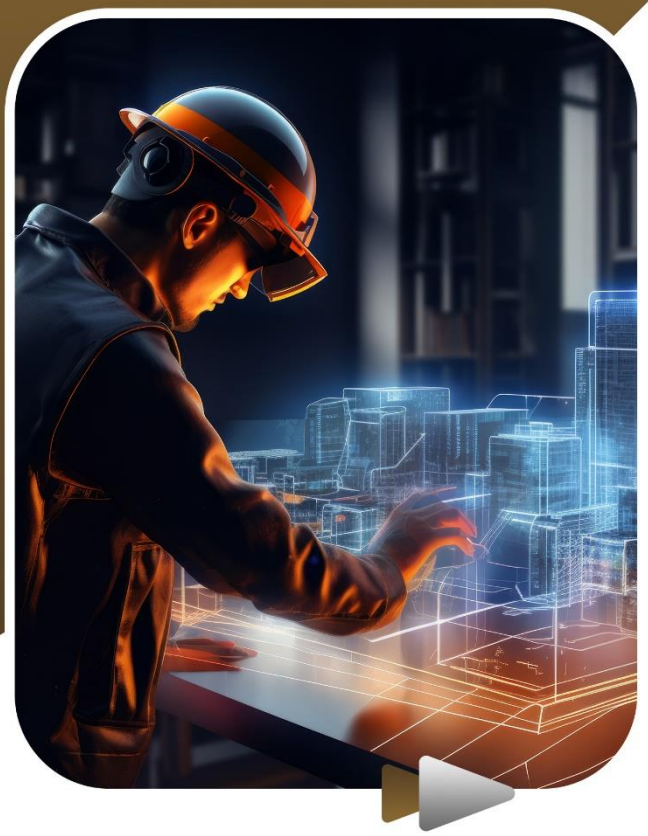


Outcome Based Education (OBE) Manual

Department of

Masters in Business Administration

Regulation : PG R24

OVERVIEW

Outcome Based Education (OBE) is an educational model that forms the base of a quality education system. There is no single specified style of teaching or assessment in OBE. All educational activities carried out in OBE should help the students to achieve the set goals. The faculty may adapt the role of instructor, trainer, facilitator, and/or mentor, based on the outcomes targeted.

OBE enhances the traditional methods and focuses on what the Institute provides to students. It

shows the success by making or demonstrating outcomes using statements" able to do" in favour of students. OBE provides clear standards for observable and measurable outcomes.

National Board of Accreditation (NBA) is an authorized body for the accreditation of higher education institutions in India. NBA is also a full member of the Washington Accord. NBA accredited programmes and not the institutions.

Higher Education Institutions are classified into two categories by NBA

Tier – 1: Institutions consists of all IITs, NITs, Central Universities, State Universities and Autonomous Institutions. Tier - 1 institution can also claim the benefits as per the Washington Accord.

Tier - 2 Institutions consists of affiliated colleges of universities.

What is Outcome Based Education (OBE)?

Institutions adopting OBE try to bring changes to the curriculum by dynamically adapting to the requirements of the different stakeholders like Students, Parents, Industry Personnel and Recruiters. OBE is all about feedback and outcomes.

Four levels of outcomes from OBE are:-

1. Program Educational Objectives (PEOs)
2. Program Outcomes (POs)
3. Course Outcomes (COs)

Why OBE?

1. International recognition and global employment opportunities.
2. More employable and innovative graduates with professional and soft skills, social responsibility and ethics.

3. Better visibility and reputation of the technical institution among stakeholders.
4. Improving the commitment and involvement of all the stakeholders.
5. Enabling graduates to excel in their profession and accomplish greater heights in their careers.
6. Preparing graduates for the leadership positions and challenging them and making them aware of the opportunities in the technology development.

Benefits of OBE

Clarity: - The focus on outcome creates a clear expectation of what needs to be accomplished by the end of the course.

Flexibility: - With a clear sense of what needs to be accomplished, instructors will be able to structure their lessons around the student's needs.

Comparison: - OBE can be compared across the individual, class, batch, program and institute levels.

Involvement: - Students are expected to do their own learning. Increased student's involvement allows them to feel responsible for their own learning, and they should learn more through this individual learning.

- Teaching will become a far more creative and innovative career
- Faculty members will no longer feel the pressure of having to be the "source of all knowledge".
- Faculty members shape the thinking and vision of students towards a course.

India, OBE and Accreditation:

From 13 June 2014, India has become the permanent signatory member of the Washington Accord. Implementation of OBE in higher technical education also started in India. The National Assessment and Accreditation Council (NAAC) and National Board of Accreditation (NBA) are the autonomous bodies for promoting global quality standards for technical education in India. NBA has started accrediting only the programs running with OBE from 2013.

The National Board of Accreditation mandates establishing a culture of outcome-based education in institutions that offer Engineering, Pharmacy, Management program. Reports of outcome analysis help to find gaps and carryout continuous improvements in the education system of an Institute, which is very essential.

1. VISION, MISSION, QUALITY POLICY, PHILOSOPHY & CORE VALUES

Vision of the Department

To excel in management education and research by developing sustainable management professionals, visionary entrepreneurs, and competent global leaders, leveraging innovation and technology for societal advancement.

Mission of Department

DM1: To develop competent and socially responsible management graduates by imparting value-based education, fostering critical thinking, ethical leadership, and entrepreneurial spirit, and commitment to sustainable practices.

DM2: To empower students with industry-relevant skills, knowledge of advanced business technologies, and research-driven insights, supporting lifelong career growth and success in the global management landscape.

Quality Policy

- Ensure excellence in education through innovative teaching and continuous improvement.
- Promote ethical, skilled, and employable graduates who drive sustainable technologies.
- Encourage research, industry collaboration, and community engagement for societal benefit.

Philosophy

The essence of learning lies in pursuing the truth that liberates one from the darkness of ignorance and Marri Laxman Reddy Institute of Technology and Management firmly believes that education is for liberation.

Contained therein is the notion that management education includes all fields of administration that plays a pivotal role in the development of world-wide community contributing to the progress of civilization. This institute, adhering to the above understanding, is committed to the of development of Management Studies in congruence with the natural environs. It lays great emphasis on intensive research and education that blends professional skills and high moral standards with a sense of individuality and humanity. We thus promote ties with local communities and encourage transnational interactions in order to be socially accountable. This accelerates the process of transfiguring the students into complete human beings making the learning process relevant to life, instilling in them a sense of courtesy and responsibility.

Core Values

Excellence: All activities are conducted according to the highest international standards.

Integrity: Adheres to the principles of honesty, trustworthiness, reliability, transparency and accountability.

Inclusiveness: To show respect for ethics, cultural and religious diversity and freedom of thought.

Social Responsibility: Promotes community engagement, environmental sustainability, and global citizenship. It also promotes awareness of, and support for, the needs and challenges of the local and global communities.

Innovation: Supports creative activities that approach challenges and issues from multiple perspectives in order to find solutions and advance knowledge.

2. Program Educational Objectives (PEOs)

Program Educational Objectives (PEOs) should be defined by the Head of the Department in consultation with the faculty members. PEOs are a promise by the department to the aspiring students about what they will achieve once they join the programme. PEO assessment is not made compulsory by NBA as it is quite difficult to measure in Indian context. NBA assessors usually do not ask for PEO assessment. PEOs are about professional and career accomplishment after 4 to 5 years of graduation. PEOs can be written from different perspectives like Career, Professional Competency and Behavior. While writing the PEOs do not use the technical terms as it will be read by prospective students who wants to join the programme. Three to five PEOs are recommended.

Program Educational Objective – I: Management Foundation

To Build a strong foundation in management concepts to foster analytical thinking, promote research orientation, and encourage lifelong learning.

Program Educational Objective – II: Analytical & Innovative Decision-Making

To Equip students to critically analyze business problems and utilize innovative tools and techniques for effective decision-making.

Program Educational Objective – III: Leadership & Professional Competence

To Develop communication, leadership, and professional skills essential for success in the fields of business, management, and entrepreneurship.

Program Educational Objective – IV: Strategic Planning & Technological Advancement

To Drive strategic planning and optimize business operations in a dynamic environment by leveraging emerging technologies.

2.1 Mapping of program educational objectives to program outcomes:

The following Figure 1 shows the correlation between the PEOs and the POs

PEO-I	PEO-II	PEO-III	PEO-IV
PO1, PO2 & PO8	PO2, PO6 & PO7	PO3, PO4 & PO5	PO1, PO6 & PO7

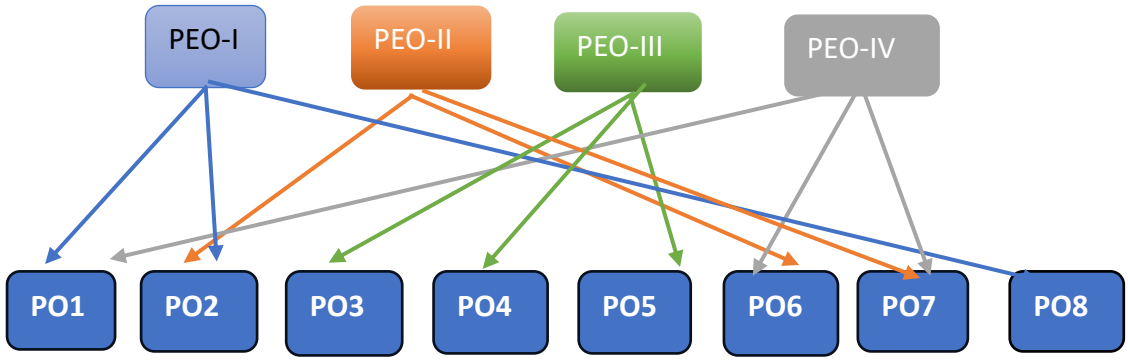


FIGURE 1: Correlation between the PEOs and the POs

3. Program Outcomes (POs)

A Program Outcome is broad in scope and be able to do at the end of the programme. POs are to be in line with the post graduate attributes as specified in the Washington Accord. Pos are to be specific, measurable and achievable. NBA has defined 5 POs which is common for all the institutions in India and department added 3 additional POs. In the syllabus book given to students, there should be clear mention of course objectives and course outcomes for all the courses.

MBA - PROGRAM OUTCOMES (PO's) A post graduate of the Master of Business Administration Program will demonstrate:	
PO1	**Application of Management Knowledge** Apply knowledge of Management theories and practices to solve business problems.
PO2	**Analytical and Critical Thinking** Foster Analytical and Critical thinking abilities to get a real-life exposure on data analysis tools used in industry for decision making.
PO3	**Value-Based Leadership** Develop value based leadership to understand and analyze business situations and be able to descend discussions to logical conclusion.
PO4	**Ethical and Sustainable Business Practices** Understand, analyze and communicate economic, legal, and ethical aspects of business and be able to apply management knowledge to develop sustainable solutions.
PO5	**Team Leadership and Collaboration** Lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment
PO6	**Entrepreneurial and Innovative Skills** Formulate entrepreneurial and innovative skills to conduct research and implement practical solute.
PO7	**Strategic Project Management** Manage the industry – academia by iinculcating entrepreneurship ability in multidisciplinary domains using strategic approaches.
PO8	**Lifelong Learning and Global Competence** Demonstrate the ability for self-directed, lifelong learning with enthusiasm and commitment, enhancing knowledge and technical competencies globally.

4. RELATION BETWEEN THE PROGRAM EDUCATIONAL OBJECTIVES AND PO'S

Broad relationship between the program objectives and the program outcomes is given in the following Table below:

MBA Expanded PO–PEO Mapping with Detailed Justification

PEO	Mapped PO	Detailed Justification
PEO I: Management Foundation	**PO1**	Builds the fundamental understanding of management concepts, enabling students to apply theoretical knowledge in foundational learning.
	PO2	Supports cultivation of analytical and critical thinking, essential for developing conceptual clarity and research orientation.
	PO4	Understanding ethical and legal dimensions contributes to a well-rounded foundation in management concepts.
	PO8	Encourages habitual self-learning, research inclination, and global competence aligned with lifelong learning.
	PO6	Introducing innovation and entrepreneurial thinking early strengthens foundational managerial perspectives.
PEO II: Analytical & Innovative Decision-Making	**PO2**	Builds strong analytical skills required to interpret data and evaluate business alternatives logically.
	PO6	Drives innovative thinking, creativity, and idea generation, which supports problem-solving and modern decision-making.
	PO7	Develops project management and strategic thinking skills essential for data-driven, structured decision processes.
	PO1	Application of management models aids in constructing more effective decisions based on theories and frameworks.
	PO4	Ethical considerations guide responsible and sustainable decision-making processes.
PEO III: Leadership & Professional Competence	**PO3**	Instils value-based and ethical leadership which is central to building professional managerial capability.
	PO5	Enhances teamwork, interpersonal skills, and leadership abilities essential for professional success.
	PO4	Encourages ethical conduct and sustainable professional practices, strengthening professionalism.
	PO8	Continuous learning ensures leaders stay updated, professionally relevant, and globally competent.
	PO1	Applying management knowledge enables more confident communication, leadership, and managerial execution.

PEO IV: Strategic Planning & Technological Advancement	**PO7**	Supports strategic thinking, planning, execution, and optimization of operations in dynamic environments.
	PO6	Encourages innovative use of technology and entrepreneurship for organizational growth.
	PO1	Application of management principles is essential for strategic implementation and operational improvements.
	PO2	Analytical and critical thinking aids in evaluating strategic alternatives and technological choices.
	PO8	Lifelong learning helps managers stay updated with technological advancements and global business trends.

Expanded Weighted Correlation Matrix (1–3 Scale)

PEO \ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
PEO I	**3**	**3**	**-**	**2**	**-**	**1**	**-**	**3**
PEO II	**2**	**3**	**-**	**1**	**-**	**3**	**3**	**-**
PEO III	**2**	**-**	**3**	**3**	**3**	**-**	**-**	**2**
PEO IV	**3**	**2**	**-**	**-**	**-**	**3**	**3**	**2**

Weight Meaning

3 = Strong & Direct Alignment

2 = Moderate Alignment

1 = Supportive / Indirect Contribution

5. Blooms Taxonomy

Bloom's taxonomy is considered as the global language for education. Bloom's Taxonomy is frequently used by teachers in writing the course outcomes as it provides a readymade structure and list of action verbs. The stages ascend in complexity and what they demand of students. First students need to simply remember information provided to them — but reciting something doesn't demonstrate having learned it, only memorization. With understanding comes the ability to explain the ideas and concepts to others. The students are then challenged to apply the information and use it in new ways, helping to gain a deeper understanding of previously covered material and demonstrating it moving forward. Questioning information is a vital part of learning, and both analysis and evaluation do just this. Analyzing asks a student to examine the information in a new way, and evaluation demands the student appraise the material in a way that lets them defend or argue against it as they determine. The final step in the revised taxonomy is creating, which entails a developing new product or point of view. How does this learned information impact your world? How can it be used to impact not just your education but the way you interact with your surroundings? By utilizing Bloom's Taxonomy, students are not going to forget the information as soon as the class ends - rather, they retain and apply the information as they continue to grow as a student and in their careers, staying one step ahead of the competition.

5.1 Incorporating Critical Thinking Skills into Course Outcome Statements.

Many faculty members choose to incorporate words that reflect critical or higher-order thinking into their learning outcome statements. Bloom (1956) developed a taxonomy outlining the different types of thinking skills people use in the learning process. Bloom argued that people use different levels of thinking skills to process different types of information and situations. Some of these are basic cognitive skills (such as memorization) while others are complex skills (such as creating new ways to apply information). These skills are often referred to as critical thinking skills or higher-order thinking skills.

Bloom proposed the following taxonomy of thinking skills. All levels of Bloom's taxonomy of thinking skills can be incorporated into expected learning outcome statements. Recently, Anderson and

Krathwohl (2001) adapted Bloom's model to include language that is oriented towards the language used in expected learning outcome statements. A summary of Anderson and Krathwohl's revised version of Bloom's taxonomy of critical thinking is provided in Figure 2.

FIGURE 2: Revised version of Bloom's taxonomy

5.2 Definitions of the different levels of thinking skills in Bloom's taxonomy:

1. **Remember** –recalling relevant terminology, specific facts, or different procedures related to in- formation and/or course topics. At this level, a student can remember something, but may not really understand it.

2. **Understand** –the ability to grasp the meaning of information (facts, definitions, concepts, etc.) that has been presented.

3. **Apply** –being able to use previously learned information in different situations or in problem solving.

4. **Analyze** –the ability to break information down into its component parts. Analysis also refers to the process of examining information in order to make conclusions regarding cause and effect, interpreting motives, making inferences, or finding evidence to support statements/arguments.

5. **Evaluate** –being able to judge the value of information and/or sources of information based on personal values or opinions.

6. **Create** –the ability to creatively or uniquely apply prior knowledge and/or skills to produce new and original thoughts, ideas, processes, etc. At this level, students are involved in creating their own thoughts and ideas

5.3 List of Action Words Related to Critical Thinking Skills

Here is a list of action words that can be used when creating the expected student learning out- comes related to critical thinking skills in a course. These terms are organized according to the different levels of higher-order thinking skills contained in Anderson and Krathwohl's (2001) re- vised version of Bloom's taxonomy.

Here is the revised Bloom's document with action verbs, which we frequently refer to while writing COs for our courses.

The cognitive process dimensions- categories:

Lower Order of Thinking (LOT)			Higher Order of Thinking (HOT)		
Remember	**Understand**	**Apply**	**Analyse**	**Evaluate**	**Create**
Interpreting Illustrating Classifying Summarizing Inferring (concluding) comparing explaining	Recognizing (identifying) Recalling (retrieving)	Executing Implementing	Differentiating Organizing Attributing	Checking (coordinating, detecting, testing, monitoring) Critiquing (judging)	Planning Generating Producing (constructing)

The Knowledge Dimension			
Concrete Knowledge → Abstract knowledge			
Factual	**Conceptual**	**Procedural**	**Metacognitive**
• Knowledge of terminologies • Knowledge of specific details and elements	• Knowledge of classifications and categories • Knowledge of principles and generalizations • Knowledge of theories, models and structures	• Knowledge of subject specific skills and algorithms • Knowledge of subject specific techniques and methods • Knowledge of criteria for determining when to use appropriate procedures	• Strategic Knowledge • Knowledge about cognitive task, including appropriate contextual and conditional Knowledge • Self- Knowledge

Action Verbs for Course Outcomes

Lower Order of Thinking (LOT)				Higher Order of Thinking (HOT)		
Definitions	**Remember**	**Understand**	**Apply**	**Analyse**	**Evaluate**	**Create**
Bloom's Definition	Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.	Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	Compile information together in a different way by combining elements in a new pattern or proposing alternative solution.
Verbs	• Choose • Define • Find • How • Label • List • Match • Extend	• Classify • Compare • Contrast • Demonstrate • Explain • Illustrate • Infer • Interpret	• Apply • Build • Choose • Construct • Develop • Interview • Make use of • Model	• Analyze • Assume • Categorize • Classify • Compare • Discover • Dissect • Distinguish	• Agree • Appraise • Assess • Award • Choose • Criticize • Decide • Deduct • Importance	• Adapt • Build • Solve • Choose • Combine • Invent • Compile • Compose • Construct

Action Verbs for Course Outcomes

Lower Order of Thinking (LOT)				Higher Order of Thinking (HOT)		
Definitions	**Remember**	**Understand**	**Apply**	**Analyse**	**Evaluate**	**Create**
Verbs	• Name • Omit • Recall • Relate • Select • Show • Spell • Tell • What • When • Where • Which • Who • Why	• Outline • Relate • Rephrase • Show • Summarize • Translate • Experiment with • Illustrate • Infer • Interpret • Outline • Relate • Rephrase • Show • Summarize • Translate • Experiment with	• Organize • Plan • Select • Solve • Utilize • Identify • Interview • Make use of • Model • Organize • Plan • Select • Solve • Utilize • Identify	• Divide • Examine • Function • Inference • Inspect • List Motive • Simplify • Survey • Take part in • Test for Theme • Conclusion • Contrast	• Defend • Determine • Disprove • Estimate • Evaluate • Influence • Interpret • Judge • Justify Mark • Measure • Opinion • Perceive • Prioritize • Prove • Criteria • Criticize • Compare • Conclude	• Create • Design • Develop • Estimate • Formulate • Happen • Imagine • Improve • Make up • Maximize • Minimize • Modify • Original • Originate • Plan • Predict • Propose • Solution

6. Guidelines for writing Course Outcome Statements:

Well-written course outcomes involve the following parts:

1. Action verb
2. Subject content
3. Level of achievement as per BTL
4. Modes of performing task (if applicable)

6.1 Course Outcomes (COs)

A Course Outcome is a formal statement of what students are expected to learn in a course. When creating Course Outcomes remember that the outcomes should clearly state what students will do or produce to determine and/or demonstrate their learning. Course learning outcome statements refer to specific knowledge, practical skills, areas of professional development, attitudes, higher-

order thinking skills, etc. that faculty members expect students to develop, learn, or master during a course.

A well-formulated set of Course Outcomes will describe what a faculty member hopes to successfully accomplish in offering their particular course(s) to prospective students, or what specific skills, competencies, and knowledge the faculty member believes that students will have attained once the course is completed. The learning outcomes need to be concise descriptions of what learning is expected to take place by course completion.

6.2 Developing Course Outcomes

When creating course outcomes consider the following guidelines will helps to develop either individually or as part of a multi-section group:

- Limit the course outcomes to 6 statements for the entire course [more detailed outcome scan be developed for individual units, assignments, chapters, etc. if the instructor(s) wish (es)].
- Focus on overarching knowledge and/or skills rather than small or trivial details
- Focus on knowledge and skills that are central to the course topic and/or discipline.
- Create statements that have a student focus rather than an instructor centric approach (basic e.g., "upon completion of this course students will be able to list the names of the 28 states and 8 union territories" versus "one objective of this course is to teach the names of the 28 states and 8 union territories").
- Focus on the learning that results from the course rather than describing activities or lessons that are in the course.
- Incorporate and/or reflect the institutional and departmental missions.
- Include various ways for students to show success (outlining, describing, modelling, depicting, etc.) rather than using a single statement such as "at the end of the course, student will know as the stem for each expected outcome statement.

When developing learning outcomes, here are the core questions to satisfy:

- What do we want students in the course to learn?
- What do we want the students to be able to do?
- Are the outcomes observable, measurable and are they able to be performed by the students?

Course outcome statements on the course level describe:

- What faculty members want students to know at the end of the course AND
- What faculty members want students to be able to do at the end of the course?

Course outcomes have three major characteristics

- They specify an action by the students/learners that is observable
- They specify an action by the students/learners that is measurable
- They specify an action that is done by the students/learners rather than the faculty members

Effectively developed expected learning outcome statements should possess all three of these characteristics. When this is done, the expected learning outcomes for a course are designed so that they can be assessed. When stating expected learning outcomes, it is important to use verbs that describe exactly what the student(s) / learner(s) will be able to do upon completion of the course.

6.3 Relationship of Course Outcome to Program Outcome

The Course Outcomes need to link to the Program Outcomes.

Learning outcomes formula:

STUDENTS SHOULD BE ABLE TO + BEHAVIOR + RESULTING EVIDENCE

For example, instructor can use the following template to write an appropriate course level learning outcome.

"Upon completion of this course students will be able to (knowledge, concept, rule or skill you expect them to acquire) by (how will they apply the knowledge or skill/how will the instructor assess the learning)."

6.4 Characteristics of Effective Course Outcomes

Well written course outcomes:

- Describe what instructor wants from students to learn in the course.
- Are aligned with program goals and objectives.
- Tell how to know an instructional goal has been achieved.
- Use action words that specify definite, observable behaviours.
- Are assessable through one or more indicators (papers, quizzes, projects, presentations, journals, portfolios, etc.)
- Are realistic and achievable.
- Use simple language

6.5 Examples of Effective Course Outcomes

After successful completion of the course, Students will be able to:

- Explain core management theories, principles, and functions in business organizations.
- Apply quantitative and qualitative tools to analyze business problems and support managerial decision-making.
- Evaluate alternative business strategies using data-driven and evidence-based approaches.
- Demonstrate domain-specific skills (e.g., marketing, finance, HR, operations) to solve real-world organizational issues.
- Develop and present professional reports and participate effectively in team-based business projects.

- Examine ethical issues in business and propose responsible managerial actions with leadership perspective.
- Utilize modern business analytics and digital tools for managerial decision-making.
- Formulate strategic business plans considering global, environmental, and sustainability perspectives.
- Illustrate the significance of pre and final accounts and causes of depreciation on fixed assets to measure its impact on business accounting.
- Discuss various forms of production functions to know its affects in the cost of production.
- Discuss about company and companies acts that helps to initiate enterprises.
- Determine and apply the appropriate statistical procedures to analyze the results of simple experiments.
- Recognize the significance, limitations, origin and different branches of statistics for better managerial analysis.
- Produce a strategic plan for a small manufacturing business.
- Analyse a character's motivation and portray that character before an audience.

A more detailed model for stating learning objectives requires that objectives have three parts: a condition, an observable behavior, and a standard. The table below provides three examples.

S No	Condition	Observable Behavior	Standard
1	Given a list of management decisions	the student will be able to classify each statement as event or case study	with at least 70% accuracy
2	Immediately following a fifteen- minute discussion on a topic.	The student will be able to summarize in writing the major issues being discussed.	Mentioning at least three of the five major topics.
3	Givenan algebraic equation with one unknown.	the student will be able to correctly solve a simple linear equation	Within a period of five minutes.

The following examples describe a course outcome that is not measurable as written, an explanation for why the course outcome is not considered measurable, and a suggested edit that improves the course outcome.

Original course outcome	Evaluation of language used in this course outcome	Improved course outcome

Explore in depth the literature on an aspect of teaching strategies.	Exploration is not a measurable activity but the quality of the product of exploration would be measurable with a suitable rubric.	Upon completion of this course the students will be able to: write a paper based on an in- depth exploration of the literature on an aspect of Teaching strategies.

Examples that is TOO general and VERY HARD to measure. . .

- . . . Will appreciate the benefits of learning a foreign language.
- . . . Will be able to access resources at the Institute library.
- . . . Will develop problem-solving skills.
- . . . Will have more confidence in their knowledge of the subject matter. Examples that are Still general and HARD to measure. . .
- . . . Will value be knowing a second language as a communication tool.
- . . . Will develop and apply effective problem-solving skills that will enable one to Adequately Navigate through the proper resources within the institute library.
- . . . Will demonstrate the ability to resolve problems that occur in the field.
- . . . Will demonstrate critical thinking skills, such as problem solving as it relates social issues.

Examples that is SPECIFIC and relatively EASY to measure. . .

- . . . Will be able to read and demonstrate good comprehension of text in areas of the student's interest or professional field.
- . . . Will demonstrate the ability to apply basic research methods in psychology, including research design, data analysis, and interpretation.
- . . . Will be able to identify environmental problems, evaluate problem-solving strategies, and develop science-based solutions.
- . . . Will demonstrate the ability to evaluate, integrate, and apply appropriate information from various sources to create cohesive, persuasive arguments, and to propose design concepts.

An Introspection - Examine Your Own Course Outcomes

- If you have written statements of broad course goals, take a look at them. If you do not have a written list of course goals, reflect on your course and list the four to six most important student outcomes you want your course to produce.
- Look over your list and check the one most important student outcome. If you could only achieve one outcome, which one would it be?
- Look for your outcome on the list of key competencies or outcomes society is asking

us to produce. Is it there? If not, is the reason a compelling one?

- Check each of your other" most important" outcomes against the list of outcomes. How many are on the list of key competencies?
- Take stock. What can you learn from this exercise about what you are trying to accomplish as a teacher? How clear and how important are your statements of outcomes for your use and for your students'? Are they very specifically worded to avoid misunderstanding? Are they supporting important needs on the part of the students?

WRITE YOUR COURSE OUTCOMES!

One of the first steps you take in identifying the expected learning outcomes for your course is identifying the purpose of teaching the course. By clarifying and specifying the purpose of the course, you will be able to discover the main topics or themes related to students' learning. Once discovered, these themes will help you to outline the expected learning outcomes for the course. Ask yourself:

- What role does this course play within the program?
- How is the course unique or different from other courses?
- Why should/do students take this course? What essential knowledge or skills should they gain from this experience?
- What knowledge or skills from this course will students need to have mastered to perform well in future classes or jobs?
- Why is this course important for students to take?

6.6 CO-PO Course Articulation Matrix (CAM) Mapping

Course Articulation Matrix shows the educational relationship (Level of Learning achieved) be- tween course outcomes and program outcomes for a course. This matrix strongly indicates whether the students are able to achieve the course learning objectives. The matrix can be used for any course and is a good way to evaluate a course syllabus.

The below table gives information about the action verbs used in the POs and the nature of POs, stating whether the POs are technical or non-technical. Instructor need to understand the intention of each POs and the Bloom's level to which each of these action verbs in the POs correlates to. Once it has understood the POs then can write the COs for a course and see to what extent each of those CO's correlate with the POs.

Type	POs	Action Verb(s) in POs	Bloom's level(s) for POs	Bloom's level(s) for COs

<table>
<tr><td rowspan="14">Professional</td><td>PO 1</td><td>Apply</td><td>L3</td><td rowspan="14">• Bloom’s L1 to L4 for Theory Courses.
• Bloom’s L1 to L5 for Laboratory Courses.
• Bloom’s L1 to L6 for Mini Project and Main Project.</td></tr>
<tr><td rowspan="3">PO 2</td><td>Identify</td><td>L2</td></tr>
<tr><td>Formulate</td><td>L6</td></tr>
<tr><td>Review</td><td>L2</td></tr>
<tr><td rowspan="2">PO 3</td><td>Design</td><td>L6</td></tr>
<tr><td>Develop</td><td>L3, L6</td></tr>
<tr><td rowspan="3">PO 4</td><td>Analyze</td><td>L4</td></tr>
<tr><td>Interpret</td><td>L2, L3</td></tr>
<tr><td>Design</td><td>L6</td></tr>
<tr><td rowspan="3">PO 5</td><td>Create</td><td>L6</td></tr>
<tr><td>Select</td><td>L1, L2, L6</td></tr>
<tr><td>Apply</td><td>L3</td></tr>
<tr><td rowspan="2">PO 6</td><td>Interpret</td><td>L2, L3</td></tr>
<tr><td>Select</td><td>L1, L2, L6</td></tr>
<tr><td>PO 7</td><td>Create</td><td>L6</td></tr>
<tr><td>Non-Professional</td><td>PO 8</td><td colspan="3">THUMB RULE
• If Bloom’s L1 Action Verbs of a CO: Correlates with any of PO8, then assign1.
• If Bloom’s L2 to L3ActionVerbs of a CO: Correlates with any of PO8, then assign 2.
• If Bloom’s L4 to L6 Action Verbs of a CO: Correlates with any of PO8, then assign3.</td></tr>
</table>

At the end, the POs can be calculated using various descriptors that you may define. The mapping of CO towards a PO is evaluated using descriptors such as High, Medium, Low etc.

Observations:

1. The PO1, PO2 and PO5 are purely of knowledge-based aspects required for effective managerial decisions.
2. The PO3 and PO4 are about the behavioral aspects for sustainable management implications.
3. PO6 and PO7 are relates to the explorative actions for the knowledge gained through the program.
4. The PO8 is about the skills to develop and succeed in the competitive world.
5. The core subjects while writing the Course Outcomes (CO) the Blooms Level 1 to Level4 is suggestible, where as if it is the professional elective, seminar or the laboratory the Blooms Level1 to Level 5 is most preferable.
6. In the case of Project work almost all six levels of Blooms can appropriate based on the need and importance of the work.
7. For a given course, the course in-charge has to involve all the other course coordinators who taught that course and ask for suggestions in the CO-PO mapping. The course in-charge has to take the average value of all of these CO-PO mappings and finalize the values or the course in-charge can go with what the majority of the faculty members prefer for.

8. While mapping the CO with respective PO, the action verbs used in the CO has to correlate with intention of PO based on the thumb rule given in the table and map the values along with justification. (Applies only for mapping COs to non-technical POs).

6.7 Tips for Assigning the values while mapping COs to POs.

- Select action verbs for a CO from different Bloom's levels based on the importance of the particular CO for the given course.
- Stick on to single action verbs while composing COs but you may go for multiple action verbs if the need arises.
- You need to justify for marking of the values in CO-PO articulation matrix. Use a combination of words found in the COs, POs and your course syllabus for writing the justification. Restrict yourself to one or two lines.
- Values to CO-PO (technical POs in particular) matrix can be assigned by

  (a) Judging the importance of the particular CO in relation to the POs. If the CO matches strongly with a particular PO criterion, then assign 3, if it matches moderately then assign 2 or if the match is low then assign 1 else mark with " - " symbol.

  (b) If an action verb used in a CO is repeated at multiple Bloom's levels, then you need to judge which Bloom's level is the best fit for that action verb.

6.8 Method for Articulation

1. Identify the key competencies of POs to each CO and make a corresponding mapping table with assigning mark at the corresponding cell. One observation to be noted is that the first five POs are purely of professional in nature, while the other POs are nonprofessional.
2. Justify each CO - PO mapping with a justification statement and recognize the number of vital features mentioned in the justification statement that are matching with the given Key Attributes for Assessing Program Outcomes. Use a combination of words found in the COs, POs and your course syllabus for writing the justification
3. Make a table with number of key competencies for CO – PO mapping with reference to the maximum given Key Attributes for Assessing Program Outcomes.
4. Make a table with percentage of key competencies for CO – PO mapping with reference to the maximum given Key Attributes for Assessing Program Outcomes.
5. Finally, Course Articulation Matrix (CO - PO Mapping) is prepared with COs and POs on the scale of 0 to 3, 0 being no correlation (marked with " - "), 1 being the low/slight correlation, 2 being medium/moderate correlation and 3 being substantial/high correlation based on the following strategy

0–0 ≦ C ≦ 5% - No correlation.

1 – 5 < C ≦ 40% - Low / Slight.
2 – 40% < C < 60% - Moderate
3 – 60% ≦ C < 100% - Substantial / High

7. Key Competencies for Assessing Program Outcomes:

PO	NBA statement / Vital features	Blooms Taxonomy
PO1	**Application of Management Knowledge** Apply knowledge of Management theories and practices to solve business problems. **Key Competencies** **Knowledge and understanding of** 1. Fundamental principles, theories and practices of Management 2. Various types, disciplines, and philosophies in management 3. Organizational models and their behaviours 4. **Decision-making techniques** for addressing managerial and organizational challenges. 5. **Strategic application** of management concepts in functional areas such as HR, Marketing, Finance, and Operations.	**5**
PO2	**Analytical and Critical Thinking** Foster Analytical and Critical thinking abilities to get a real-life exposure on data analysis tools used in industry for decision making. **Key Competencies** 1. Acquire knowledge methods, models, comparison, tools, techniques, analytics 2. Understanding the Challenges, Drivers, and their Determinants 3. classify the applications, approaches, assumptions and the respective computations, 4. Investigate and Interpret the Issues, their causes and effect, crisis 5. Develop effectiveness & efficiency analysis 6. Awareness and ability to experiment in areas of planning, designing, perception, evaluation, measures, ratios, etc.	**6**
PO3	**Value-Based Leadership** Develop Value based leadership to understand and analyze business situations and be able to descend discussions to logical conclusion. **Key Competencies**	**6**

	1. Show maturity by focusing on achieving goals to drive performance. 2. Demonstrate self-direction by taking vaguely defined problems and working systematically toward resolution. 3. Collaborate effectively in classroom teams, hands-on labs, and design projects. 4. Interact confidently with people at all levels of an organization. 5. Build positive relationships and get along well with others. 6. Contribute actively and work effectively within a team.	
PO4	**Ethical and Sustainable Business Practices** Understand, analyze and communicate economic, legal, and ethical aspects of business and be able to apply management knowledge to develop sustainable solutions. **Key Competencies** 1. Analyze the Values, Empathy, professional Ethics 2. Examine the Social Responsibility Corporate Governance, Transparency 3. Categorize the Diversification, Quality 4. Inspect the socio, Economic, Political, Ethical and Legal issues.	**4**
PO5	**Team Leadership and Collaboration** Lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment. **Key Competencies** 1. Function effectively as an individual, and as a leader in diverse teams. 2. Capacity to build cohesive and high-performing teams 3. Maturity – requiring the achievement of goals to drive their performance 4. Foster collaboration by encouraging open communication and knowledge sharing within the team. 5. Resolve conflicts constructively to maintain a positive and productive team environment. 6. Motivate and guide team members toward achieving common organizational goals.	**6**
PO6	**Entrepreneurial and Innovative Skills** Formulate entrepreneurial and innovative skills to conduct research and implement practical solute **Key Competencies** 1. Considerate of Management principles to apply in research. 2. Classify the performance of systems and modelling.	**4**

	3. apply quantitative methods and research in order to solve Management problems. 4. Collaborate with stakeholders to transform research outcomes into real-world applications.	
PO7	**Strategic Project Management** Manage industry-academia projects in respective and multidisciplinary domains using strategic approaches to sustain in dynamic business scenarios. 1. Application of project-based knowledge and research methods, analysis and interpretation of data. 2. Industry-Academia Experience through project work in the program curriculum. 3. Quantitative methods to multidisciplinary domains of Management. 4.Integrate contemporary tools, technologies, and management practices to optimize project outcomes. **5.** Sustainability orientation, and professional values in project decision- making.	**5**
PO8	**Lifelong Learning and Global Competence** Demonstrate the ability for self-directed, lifelong learning with enthusiasm and commitment, enhancing knowledge and technical competencies Globally. **Key Competencies** 1. Pursue professional, Academic, Global certifications. 2. Begin and work towards advanced programs to further deepen knowledge in Management and related areas. 3. Stay updated on industry trends and emerging technologies to remain relevant in the field. 4. Learn at least 1–2 new significant skills annually to ensure continuous growth and development. 5. Engage in ongoing self-improvement efforts to enhance both personal and professional growth. 6. Be adaptable to technological changes by actively pursuing new learning opportunities and challenges.	**6**

8. Program Outcomes Attained through course modules:

Courses offered in Master of Business Administration Curriculum (MLRITM-R24) and POs attained through course modules for I, II, III, and IV semesters.

Code	Subject	PO							
		1	2	3	4	5	6	7	8
24MBA001	Management & Organizational Behavior	✓	✓	✓	✓	✓	✓	✓	✓
24MBA002	Financial Accounting and Analysis	✓	✓	✓	✓	✓	✓	✓	✓
24MBA003	Business Economics	✓	✓	✓	✓	✓	✓	✓	✓
24MBA004	Business Law and Environment	✓	✓	✓	✓	✓	✓		✓
24MBA005	Statistics for Management and Research Methodology	✓	✓	✓	✓	-	✓	✓	✓
24MBA006D	Project Management	✓	✓	✓	✓	✓	-	✓	✓
24MBA007	Business Communication Skills – Lab	✓	✓	✓	✓	✓	✓	-	✓
24MBA008	Human Resource Management	✓	✓	✓	✓	✓	-	-	✓
24MBA009	Financial Management	✓	✓	✓	✓	✓	✓	✓	✓
24MBA010	Marketing Management	✓	✓		✓	✓		✓	✓
24MBA011	Quantitative Techniques for Management	✓	✓	✓	✓	✓	✓	✓	✓
24MBA012	Entrepreneurship and Design Thinking	✓	✓	✓	✓	✓	✓	✓	✓
24MBA013	Management Information System	✓	✓		✓	-	✓	✓	✓
24MBA014A	Python	✓	✓	✓	✓	✓	-	-	-
24MBA015	Statistical Data Analysis – Lab	✓	✓	✓	✓	✓	✓	✓	✓
24MBA016	Supply Chain Management	✓	✓	✓	✓		✓	✓	✓
24MBA017	Business Analytics	✓	✓	✓	✓	✓	✓	✓	✓
24MBA018	Production & Operations Management	✓	✓	✓	✓	✓	✓	✓	✓
24MBA019M	Digital Marketing	✓	✓	✓	✓	✓	-	-	✓
24MBA019F	Security Analysis and Portfolio Management	✓	✓	✓	✓	✓	✓	-	-
24MBA019H	Performance Management & Employee Development	✓	✓	✓	✓	✓	-	-	✓
24MBA020M	Sales and Promotion Management	✓	✓	✓	✓	✓	✓	✓	✓
24MBA020F	Financial Institutions, Markets and Services	✓	✓	✓	✓	✓	✓	✓	✓

24MBA020H	Leadership & Change Management	✓	✓	✓	✓	✓	✓		✓
24MBA021M	Consumer Behavior	✓	✓	✓	✓	✓	✓	✓	-
24MBA021F	Strategic Management Accounting	✓	✓	✓		✓	✓	✓	✓
24MBA021H	Employee Relations	✓	✓	✓	✓	✓	✓	-	✓
24MBA023	Strategic Management	✓	✓	✓	✓	✓	✓	✓	✓
24MBA024M	International Marketing	✓	✓	✓	✓	✓	-	-	✓
24MBA024F	International Financial Management	✓	✓	✓	✓	✓	✓	✓	✓
24MBA024H	International Human Resource Management	✓	✓	✓	✓	✓	-	-	✓
24MBA025M	Retailing Management	✓	✓	✓	✓	✓	✓	✓	✓
24MBA025F	Banking, Insurance and Risk Management	✓	✓	✓	✓	✓	✓	✓	✓
24MBA025H	Compensation & Reward Management	✓	✓	✓	✓	✓	✓	-	✓
24MBA026M	Marketing Analytics	✓	✓	✓	✓	✓	✓	✓	✓
24MBA026F	Financial Analytics	✓	✓	✓	✓		✓	✓	✓
24MBA026H	HR Analytics	✓	✓	✓	✓	✓	✓	✓	-

9. Methods for measuring Learning Outcomes and Value Addition:

There are many different ways to assess student learning. In this section, we present the different types of assessment approaches available and the different frame works to interpret the results.

i) Continuous Internal Assessment (CIA)
ii) Semester end examination (SEE)
iii) Comprehensive Assessment Tool (CAT)
iv) Laboratory and project work
v) Course exit survey
vi) Program exit survey
vii) Alumni survey
viii) Employer survey
ix) Course expert committee
x) Program Assessment and Quality Improvement Committee (PAQIC)
xi) Department Advisory Board (DAB)
xii) Faculty meetings

xiii) Professional societies

THE ABOVE ASSESSMENT INDICATORS ARE DETAILED BELOW.

9.1 Continuous Internal Assessment (CIA)

The framework for Continuous Internal Assessment (CIA) for the Postgraduate (PG) courses includes Continuous Internal Examinations (CIEs), assignments, PPT/poster presentations, case studies, and viva voce. All these are mandatory and designed in a systematic way to assess the understanding of concepts, analytical and problem-solving skills, communication skills, and overall subject competency in accordance with the principles of Outcome-Based Education (OBE).

The assessment performance is formally evaluated to ensure consistency, transparency, and achievement of Course Outcomes (COs) and Program Outcomes (POs). Constructive feedback is given to the students to enable continuous improvement and improve the teaching-learning process, thereby improving overall performance and achievement of outcomes.

9.2 Semester End Examination (SEE)

The semester end examination assessment is conducted for all the courses in the department. Before the Semester end examinations course reviews are conducted, feedback taken from students and remedial measures will be taken up such that the student gets benefited before going for end exams. The positive and negative comments made by the students about the course are recorded and submitted to the departmental academic board (DAB) and to the principal for taking necessary actions to better the course for subsequent semesters.

9.3 Comprehensive Assessment Tool (CAT)

A **Comprehensive Assessment Tool** (CAT) module can be designed to evaluate students through multiple academic and skill-based activities such as assignments, PPT presentations, poster presentations, certifications, and participation. Below is a sample CAT module structure that can be used for students.

Laboratory, seminars and Project Works

The laboratory and seminars works are continuously monitored and assessed to suit the present demands of the industry. Students are advised and guided to do project works giving solutions to research / industrial problems to the extent possible by the capabilities and limitations of the student. The results of the assessment of the individual projects and laboratory work can easily be

conflated in order to provide the students with periodic reviews of their overall progress and to produce terminal marks and grading.

9.5 Course Exit Surveys

Students are encouraged to fill-out a brief survey on the fulfillment of course objectives. The data is reviewed by the concerned course faculty and the results are kept open for the entire faculty. Based on this, alterations or changes to the course objectives are undertaken by thorough discussions in faculty and DAB meetings.

9.6 Programme Exit Survey

The programme exist questionnaire form is to be filled by all the students leaving the institution. The questionnaire is designed in such a way to gather information from the students regarding the program educational objectives, solicit about program experiences, carrier choices, as well as any suggestions and comments for the improvement of the program. The opinions expressed in exit interview forms are reviewed by the DAB for implementation purposes.

9.7 Alumni Survey

The survey asks former students of the department about the status of their employment and further education, perceptions of institutional emphasis, estimated gains in knowledge and skills, involvement a sunder graduate student, and continuing involvement with Marri Laxman Reddy Institute of Technology and Management. This survey is administered every three years. The data obtained will be analyzed and used in continuous improvement.

9.8 Employer Survey

The main purpose of this employer questionnaire is to know employer's views about the skills they require of employees compared to the skills actually possessed by them. The purpose e is also to identify gaps in technical and vocational skills, need for required training practices to fill these gaps and criteria for hiring new employees. These employer surveys are reviewed by the College Academic Council (CAC) to affect the present curriculum to suit the requirement so the employer.

9.9 Course Expert Committee

The course expert team is responsible in exercising the central domain of expertise in developing and renewing the curriculum and assessing its quality and effectiveness to the highest of professional standards. Inform the Academic Committee the 'day-to-day' matters as are relevant to the offered courses. This committee will consider the student and staff feedback on the efficient and effective development of the relevant courses. The committee also review the course full stack content developed by the respective course coordinator.

9.10 Programme Assessment Committee (PAC)

PAC Monitors the achievements of Program Outcomes (POs) and PEO's. It will evaluate the program effectiveness and proposes the necessary changes. It also prepares the periodic reports on program activities, progress, status or other special reports for management. It also motives the faculty and students towards attending workshops, developing projects, working models, paper publications and engaging in research activities.

9.11 Department Advisory Board (DAB)

Departmental Advisory Board plays an important role in the development of the department. Department level Advisory Board will be established for providing guidance and direction for qualitative growth of the department. The Board interacts and maintains liaison with key stakeholders. DAB will Monitor the progress of the program and develop or recommend the new or revised goals and objectives for the program. Also, the DAB will review and analyze the gaps between curriculum and Industry requirement and gives necessary feedback or advices to be taken to improve the curriculum.

9.12 Faculty Meetings

The DAB meets bi-annually for every academic year to review the strategic planning and modification of PEOs. Faculty meetings are conducted at least once in fortnight for ensuring the implementation of DAB's suggestions and guidelines. All these proceedings are recorded and kept for the availability of all faculties.

9.13 Professional Societies

The importance of professional societies like HMA, ISTD, IMA etc., are explained to the students and they are encouraged to become members of the above to carry out their continuous search for knowledge. Student and faculty chapters of the above societies are constituted for a better technical and entrepreneurial environment. These professional societies promote excellence in instruction, research, public service and practice.

10. CO - Assessment processes and tools:

The institute has the following methods for assessing attainment of COs

Direct method and **indirect method**

10.1 Direct Assessment:

- Continuous Internal Evaluation (CIE), Semester End Examinations, assignment and Viva-Voce/PPT/Poster Presentation are used for CO calculation.
- Rubric values are calculated for individual courses and are formulated and summed for assessing the PO's.
- Viva-voce/PPT/Poster Presentation is indicative of the student's communication and presentation skills.
- Assignment from their syllabus is allotted to them. The allotted syllabus topic should be related to their discipline but that is not directly related to the classroom work. This provides excellent platform for self-study and create the habit of life long and independent learning.
- The weighted average of the POs for all the courses is calculated.

Assessment Methods:

A **course-end survey** is conducted at the end of each semester to gather student feedback on the achievement of **Course Outcomes (COs).**

Weightage for CO attainment

Assessment Method	Assessment Tool	Weightage in CO attainment
Direct Assessment	Continues Internal Examinations (CIE)	80 %
	QUIZ	
	CAT	
	Semester End Examination (SEE)	
Indirect Assessment	Course End Survey (CES)	20 %

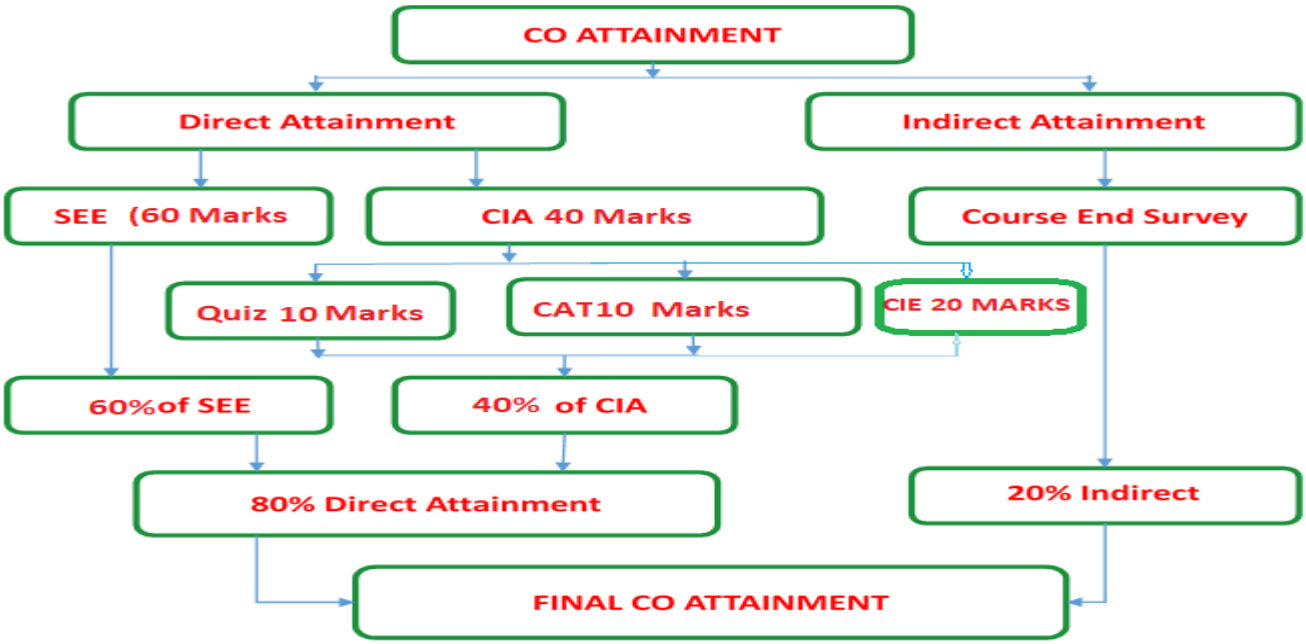


Figure: Process of Theory Course Outcome Assessment and attainment

Direct Assessment Methods

Direct methods are based on the student's knowledge and performance in the various assessments and examinations. These assessment methods provide evidence that a student has command over a specific course, content or skill or that the students work demonstrates a specific quality such as creativity, analysis or synthesis. The various direct assessment tools used to assess the impact of delivery of course content is listed below. The tools used in direct Assessment are shown in Table.

Table Tools used in direct assessment

Activities	**CIA-1**	**CIA-2**	**SEE**	**Total Marks**
Continuous Internal Evaluation (CIE)	10 marks	10 marks		20 marks
Quiz	5 marks	5 marks		10 marks
CAT	5 marks	5 marks		10 marks
Semester End Examination (SEE)			60 marks	60 marks
Total	--	--	100 marks	

S. no	Courses	Components	Frequency	Max. Marks	Evidence
1	Core / Elective	Continuous Internal Evaluation	Twice in a semester	20	Answer script

S. no	Courses	Components	Frequency	Max. Marks	Evidence
		PPT / Case study/ Subject Viva-voce	Twice in a semester	10	PPT
		Assignment	Twice in a semester	10	Assignment script
		Semester End Examination	Once in a semester	60	Answer script
2	Laboratory	Day to day write-up on experiment	Twice in a semester	10	Lab record
		Viva-voce/Tutorial/Case study/poster presentation	Twice in a semester	10	Observation record
		Lab Project design/PPT	Twice in a semester	10	Work sheets
		Internal practical examination	Twice in a semester	10	Answer script
		Semester End Examination	Once in a semester	60	Answer script
3	Project	**Pre-submission** 1. Project Title and Objectives 2. Methodology 3. Chapterization 4. Theoretical Framework & Review of Literature 5. Company & Industry Profile 6. Data Analysis & Interpretation 7. Findings, Suggestions & Conclusion 8. Test of Hypothesis **TOTAL**	IV Sem	10 - 15 10 15 - 10 - 15 - 10 - 15 **100**	Presentations & Scripts
		Viva-Voce /Semester End Examination	IV Sem	100	Thesis report
4	Seminar	**Seminar** 1.Presentation skills 2.Content & Research depth 3.PPT/Design 4. Q&A **TOTAL**	Twice in a semester	30 30 20 20 **100**	Seminar report

10.2 Indirect Assessment Methods

Course Outcomes and Program Outcomes are also assessed using the indirect assessment method.

The tools and processes used in indirect assessment are shown in Table. Indirect assessment is done using course-end survey, Program exit survey, Alumni survey and Employer survey.

In Course-end survey, questionnaires are prepared based on the level of understanding of the course and the questions are mapped to Course Outcomes.

Table Tools used in indirect assessment

S No	Tools	Process	Frequency
1	Course end survey	• Taken for every course at the end of the semester • Gives an overall view that helps to assess the extent of coverage/ compliance of COs • Helps the faculty to improve upon the various teaching methodologies	Once in a semester
2	Program exit survey	• Taken at the end of the program • It is designed such that the graduating students get an opportunity to provide meaningful feedback on their program • Helps to assure and enhance quality of the program	Once in a year
3	Alumni survey	• Focuses on the alumni preparedness and industry needs • Reports are analyzed, and analyzed for improvement of curriculum	Once in a year
4	Employer survey	• Gives valuable inputs in correlation with the trends and requirements of the employer. • Inputs are used in making amendments in the curriculum	Once in a year

11. PO - Assessment tools and Processes

Program Outcome assessment tools are categorized into direct and indirect methods to assess the program outcomes.

1. Direct Assessment Methods:

- ❖ Semester End Examinations
- ❖ Midterm Examinations
- ❖ Assignment
- ❖ Subject Viva-voce/PPT/Poster Presentation/Case study

2. Indirect Assessment Methods:

- ❖ Program Exit Feedback Survey
- ❖ Alumni Survey
- ❖ Employer Survey
- ❖ The Program exit survey is a questionnaire prepared by Program Coordinator and answered by every individual student about the program after the completion of program. This is collected from the post graduating students of that year.
- ❖ The employee survey is obtained from the recruiters of the department during placement drives.
- ❖ The process and assessment tools used and its weights to find the Program Outcomes

is shown

- Like assessing the Course Outcomes, Program Outcome assessment tools are categorized into direct and indirect methods to assess the POs. Various tools considered for the attainment of POs are listed in table

In continuation to the process adopted for course attainment, the course outcomes (COs) of each course are mapped to the program outcomes (POs). The attainment levels of course outcomes help in computing the PO based upon the mapping done. In direct assessment, the POs value is computed with CO-PO strength and program articulation matrix.

Table Attainment of PO

	Assessment	Tools	Weight
PO Attainment	Direct Assessment	CO attainment of courses	80%
	Indirect Assessment	Student Exit Survey	20%
		Alumni Survey	
		Employer survey	

The CO values of both theory and laboratory courses with appropriate weightage as per CO-PO mapping, as per Program Articulation Matrix are considered for calculation of direct attainment of PO's.

PO Direct Attainment is calculated using the following rubric:

PO Direct Attainment = (Strength of CO-PO) *CO attainment / Sum of CO-PO strength.

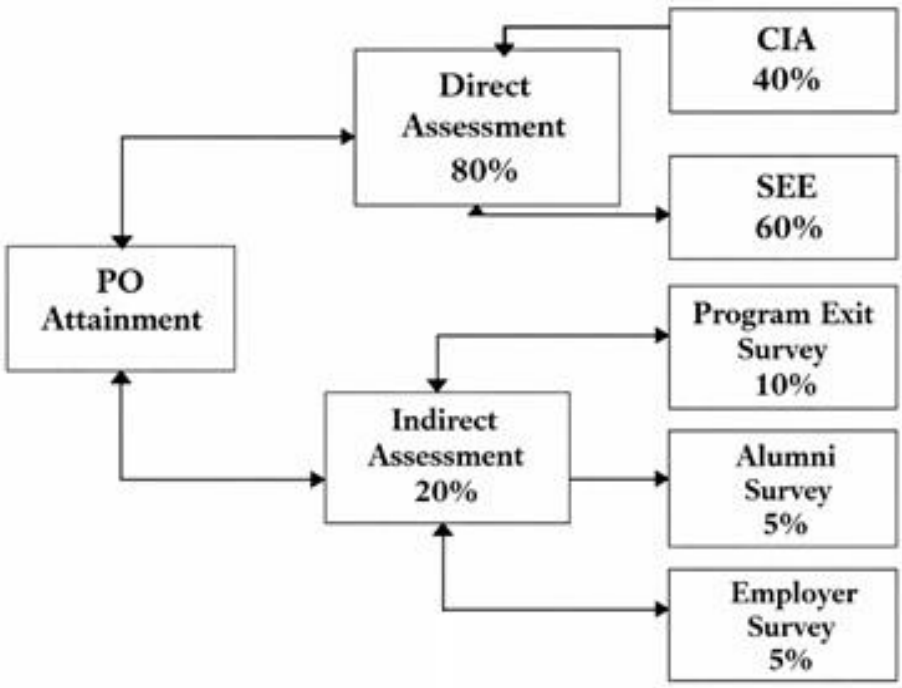


Figure represents the evaluation process of PO attainment through course outcome attainment

Table Tools used for attainment of Po's

Direct Assessment tools		Description of assessment	Evaluation of COs
Continuous Internal Assessment (CIA)	Theory	Average of two internal assessment tests are considered asthe final marks.	Each question in mid theory paper is mapped against COs for every question. All two mid questions are framed in such a way to cover all COs. Every question of mid is mapped with COs. The marks allocated for each question are taken for measuring the CO Attainment.
	Assignment/Subject PPT/ Poster Presentation/Case study	Each subjects have two Assignment modules per semester. Each Subject has one PPT/Poster Presentation	Assignment/PPT/Poster Presentation etc. are mapped against COs and marks are taken for measuring the CO attainment.
	Labora tory	**Continuous Evaluation:** Day-to-day evaluation of practical work is carried out throughout the semester, following the completion of each experiment. **Other Activities:** Viva voce, tutorials, case studies, applications, or poster presentations/PPT related to laboratory are considered for evaluation. **Laboratory Examinations:** Two laboratory examinations are conducted during the semester, and the evaluation is done accordingly.	The evaluation of laboratory work is closely linked to Course Outcomes (COs). Each experiment is mapped to specific COs, and student performance is assessed through day-to-day records, observations, and viva, which reflect their understanding and application of concepts.
Semester End Examination (SEE)	Theory /Practical	Conduction of both theory and practical examinations are as per the academic calendar.	Each question in SEE paper is mapped against COs of respective courses. The allocated marks are taken for assessing the CO attainment.

	Project	Project evaluation is done during IV semester to test the student's independent understanding, analysis and design skills. Phase wise project review or evaluation are conducted. The tool evaluates the students in relation to their technical, oratory and presentation skills.	The project guide and coordinator follow the rubrics which is set Project Review Committee Appropriate rubrics are used for assessing attainment of PO's. This assessment tool plays a vital role in meticulously evaluating student's attainment level of all the program outcomes defined towards the completion of program.
Indirect Assessment Tools		**Description**	**Evaluation Process**
Program Exit survey	This survey provides the information about program satisfaction and asks graduates to indicate the level of preparation provided by their graduate program. The questionnaires are on curriculum data, examination questions, assignments, PPT and project presentation, and therefore to assess the achievement of each PO. Information about their overall experience of the institute, department, and facilities and student activities. The aim of the survey to remove the gaps and to further strengthen different types of supporting activities for students. Depending on the inputs received, the teaching learning process, curriculum, and assessment process will be reviewed. The survey highlights the areas in which the institution should invest resources to enhance a student's learning and development experience.		This survey is conducted for the students who have passed out of the program for that year. The questionnaire consists of question which is relevant for assessing POs. Each question is having 5 options namely Excellent, good, fair, and poor which is given the marks of 5, 4, 3,2 and 1 respectively.
Alumni survey	This survey is conducted to seek input from alumni on the importance of the curriculum in contributing to their progress or otherwise in their jobs or higher studies and their feedback would be of great help in the revision of the curriculum. This survey provides the information to identify where the academic program that needs to be strengthened or expanded.		Collect the information from alumni after two years of graduation. The questionnaire consists of question which is relevant for assessing POs. Each question is having 5 options namely Excellent. Good, Fair, and poor which is given the marks of 5, 4, 3, 2, 1 respectively.

Employer survey	This survey helps to determine graduate skills, capabilities and opportunities. The placement and training center of the organization collects feedback from the industry / employer during recruitment drive in the campus. This feedback helps the institution to assess the quality of its students and infrastructure, thereby helping the institution to understand the attainment of POs.	Collect the information from employers who had given jobs to our graduates. The questionnaire consists of question which is relevant for assessing POs. Each question is having 5 options namely Excellent. Very Good, Good, Fair, and poor which is given the marks of 5, 4, 3,2, 1, respectively.

The steps involved in PO Assessment process are as follows*:*

1. Course outcomes are assessed through Continuous Internal Examination and Semester End Examination. The analysis is done to find the level of attainments of COs.
2. The attainment of POs is being calculated based on the COs attainment.
3. Attainment of POs of a course is calculated as Sum of product of CO attainment and CO - PO mapping by sum of weight contributed to CO - PO mapping.
4. Attainment of POs through all the courses is calculated by taking the Average across all Courses addressing that POs
5. For indirect assessments, survey questionnaire is circulated to students, alumni and employer. The surveys are assessed and evaluated to determine the strength of attainmentlevel of POs.

   Attainment of PO's based on survey (Indirect Assessment) = [(5*No of Excellent responses) +(4*No of Very good responses) + (3* No of Good responses) + (2* No of Fair responses) + (1* No of Poor responses)/ (Total number of responses*5)]

6. Overall attainments of POs are calculated by taking 80% of direct attainment and 20% of indirect attainment.
7. PO attainment = (Direct attainment *0.8) + (Indirect attainment *0.2)

Assessment Tools and Processes used for measuring the attainment of each PO

PO Attainment:

Final attainment of PO = 80% of direct assessment of CO + 10% of Program Exit Survey + 5% of Alumni Survey + 5% of Employer Survey

If the PO attainment value is below the target, an essential remedial action has been taken.

12. Course Description:

The "Course Description" provides general information regarding the topics and content addressed in the course. A sample course description is given in Annexure – A for the reference.

The "Course Description" contains the following contents:

- Course Overview
- Prerequisite(s)

- Marks Distribution
- Content delivery / Instructional methodologies
- Evaluation Methodology
- Course Objectives
- Course Outcomes
- Program Outcomes
- How Program Outcomes are assessed
- Mapping of each CO with PO(s)
- Justification for CO – PO mapping- direct
- Total count of key competencies for CO – PO mapping
- Percentage of key competencies for CO – PO
- Course articulation matrix (PO mapping)
- Assessment methodology-direct
- Assessment methodology-indirect
- Syllabus
- List of Text Books / References / Websites
- Course Plan

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTOR

Course Title	**BUSINESS ECONOMICS**				
Course Code	**24MBA003**				
Program	MBA				
Year/ Semester	I/I				
Course Type	**CORE**				
Regulation	MLRS-R24				
Course Structure	**Theory**			**Practical**	
	Lectures	**Tutorials**	**Credits**	**Laboratory**	**Credits**
	4	-	4	-	-
Course Coordinator	Mr. SHAIK FIROZ KHAN				
Date Approved by BOS	06-08-2024				
Course Webpage	www.mlritm.ac.in/				

I. COURSE OVERVIEW:

This course provides a comprehensive understanding of **Business Economics**, integrating economic principles with managerial decision-making. It explores the **nature, scope, and applications** of economics in business environments, emphasizing demand-supply analysis, production, cost structures, and market dynamics. Students will gain insights into **pricing strategies, market behavior, and firm theories** relevant to real-world business scenarios. The course bridges **economic theory and managerial practice**, enabling effective strategic and operational decisions. Ultimately, it develops analytical and critical thinking skills essential for **sustainable business growth and global competitiveness**.

COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
UG	-	-	Basic concepts of management

II. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
BUSINESS ECONOMICS	60 Marks	40 Marks	100

III. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	Basic concepts of management

IV. Employability Skills:

This course equips students with essential employability skills such as **effective communication, critical thinking, and problem-solving**, enabling them to analyze business situations and make informed decisions. It fosters **teamwork, collaboration, and leadership abilities**, preparing students to work efficiently in diverse professional environments. The program enhances **digital literacy and adaptability**, ensuring readiness for technology-driven and dynamic workplaces. Students also develop strong **time management and organizational skills** to meet business objectives effectively. Additionally, it instills **ethical and professional behavior**, promoting integrity and accountability in all professional interactions.

V. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	PPT	✓	Assignments	✗	ALP	✗	MOOCs
✓	Presentation	✓	Seminars	✗	Management Talk	✓	Group Discussion	✓	Concept Videos

VI. EVALUATION METHODOLOGY:

The performance of a student in a course will be evaluated for 100 marks each, with 40 marks allotted for CIA (Continuous Internal Assessment) and 60 marks for SEE (Semester End-Examination). In CIA, for theory subjects, during a semester, there shall be CIE 1 for 10 Marks and CIE 2 for 10 Marks, there will be a Quiz for 5 Marks before CIE 1 and another Quiz for 5 Marks before CIE 2 and CAT 1 for 5 Marks and CAT 2 for 5 Marks will be conducted same as Quiz.

The total of two midterm examinations and total of two Quiz & CAT shall be taken as the final marks for midterm examinations.

The semester end examinations (SEE), will be conducted for 60 marks consisting of two parts viz. i) **Part-A** for 10 marks, ii) **Part-B** for 50marks.

a. Part-A is a compulsory question which consists of ten sub-questions from all units carrying equal marks.

b. Part-B consists of five questions (numbered from 2 to 6) carrying 10 marks each. Each of these questions is from each unit and may contain sub-questions. For each question there will be an “either” “or” choice, which means that there will be two questions from each unit and the student should answer either of the two questions.

c. The duration of Semester End Examination is 3 hours.

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2). To finalize CIE marks these 30 marks will be scale down to 10 marks. Each CIA includes a quiz worth 5 marks, 05 marks for Comprehensive Assessment Tool (CAT).

Table 1: Outline for Continuous Internal Evaluation (CIE-I and CIE-II) and SEE

Activities	CIA-I	CIA-II	Total of CIA	SEE	Total Marks
Continuous Internal Evaluation (CIE)	10 Marks	10 Marks			Total of CIA + SEE
Quiz	5 Marks	5 Marks			
CAT	5 Marks	5 Marks			
Total Marks	**20 Marks**	**20 Marks**	**40 Marks**	**60 Marks**	**100 Marks**

VII. COURSE OBJECTIVES:

The students will try to learn:	
I	To introduce the fundamental concepts, nature and scope of business economics for managerial decision-making.
II	To provide understanding of demand and supply analysis, elasticity, and demand forecasting techniques.
III	To explain production functions, cost concepts, and their role in short-run and long-run business decisions.
IV	To familiarize students with different market structures and pricing–output decisions.
V	To develop knowledge of various pricing strategies and theories of the firm in domestic and international contexts.

VIII. COURSE OUTCOMES:

After successful completion of the course, students should be able to:	
1	Apply economic principles, opportunity cost, marginalism in business decision-making processes
2	Demonstrate the concepts of demand & supply, elasticity, market equilibrium and apply demand forecasting in business decisions.
3	Classify production - cost functions, returns to scale for break-even analysis and managerial decisions.
4	Judge the price-output decisions in different market structures and their impact on firms behaviour.
5	Design various pricing strategies, theoretical foundations of the firm and international pricing practices

IX. COURSE LEARNING OUTCOME (CLOs):

S.No	Topic Name	CLO No.	Course Learning Outcome	Course Outcome	Bloom's Level
1	Definition, Nature & Scope of Business Economics	CLO 1	Understand the nature, scope, and relevance of business economics in managerial decision-making.	CO1	Understand
2	Relationship with Other Disciplines	CLO 2	Explain how business economics integrates with accounting, finance, marketing, and management sciences.	CO1	Understand
3	Basic Economic Principles	CLO 3	Apply opportunity cost, marginalism, equi-marginalism, incremental and discounting principles in business decision-making.	CO1	Apply
4	Risk & Uncertainty	CLO 4	Analyze the role of risk and uncertainty in economic decisions.	CO1	Analyze
5	Demand & Demand Function	CLO 5	Understand demand, law of demand, and determinants of demand.	CO2	Understand
6	Elasticity of Demand	CLO 6	Analyze different types of demand elasticity and evaluate their managerial significance.	CO2	Analyze, Evaluate
7	Demand Forecasting	CLO 7	Apply suitable demand forecasting methods for business planning.	CO2	Apply
8	Supply & Elasticity of Supply	CLO 8	Understand supply function, law of supply, and elasticity of supply.	CO2	Understand
9	Market Equilibrium	CLO 9	Analyze how demand and supply interact to determine equilibrium.	CO2	Analyze
10	Production Function	CLO 10	Understand production functions with one and two variables and related concepts.	CO3	Understand
11	Cobb-Douglas Production Function	CLO 11	Analyze returns to scale and MRTS using Cobb-Douglas function.	CO3	Analyze
12	Economies of Scale & Innovation	CLO 12	Evaluate economies of scale and the impact of innovation on competitiveness.	CO3	Evaluate

S.No	Topic Name	CLO No.	Course Learning Outcome	Course Outcome	Bloom's Level
13	Cost Concepts & Cost-output Relationships	CLO 13	Apply cost concepts, short-run and long-run cost relationships in decisions.	CO3	Apply
14	Break-even Analysis	CLO 14	Apply break-even analysis for assessing financial feasibility.	CO3	Apply
15	Classification of Market Structures	CLO 15	Understand features and competitive situations of various market structures.	CO4	Understand

X. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Apply knowledge of Management theories and practices to solve business problems.	3	CIE/ Quiz/ SEE/ Assignments/ Mngt Talk/ Viva-Voce/ Internship Report
PO2	Foster Analytical and Critical thinking abilities to get a real-life exposure on data analysis tools used in industry for decision making.	2	CIE/ Quiz/ SEE/ Assignments/ Mngt Talk/ Viva-Voce/ Internship Report
PO3	Develop Value based leadership to understand and analyze business situations and be able to descend discussions to logical conclusion.	2	CIE/ Quiz/ SEE/ Assignments/ Mngt Talk/ Viva-Voce/ Internship Report
PO4	Understand, analyze and communicate economic, legal, and ethical aspects of business and be able to apply management knowledge to develop sustainable solutions.	3	CIE/ Quiz/ SEE/ Assignments/ Mngt Talk/ Viva-Voce/ Internship Report
PO5	Lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	1	CIE/ Quiz/ SEE/ Assignments/ Mngt Talk/ Viva-Voce/ Internship Report
PO6	Formulate entrepreneurial and innovative skills to conduct research and implement practical solute	3	CIE/ Quiz/ SEE/ Assignments/ Mngt Talk/ Viva-Voce/ Internship Report
PO7	Manage industry-academia projects in respective and multidisciplinary domains using strategic approaches to sustain in dynamic business scenarios.	2	CIE/ Quiz/ SEE/ Assignments/ Mngt Talk/ Viva-Voce/ Internship Report
PO8	Demonstrate the ability for self-directed, lifelong learning with enthusiasm and commitment, enhancing knowledge and technical competencies Globally.	1	CIE/ Quiz/ SEE/ Assignments/ Mngt Talk/ Viva-Voce/ Internship Report

3 = High; 2 = Medium; 1 = Low

XI. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	√	√				
CO 2	√	√	√	√				
CO 3	√	√	√	√		√	√	
CO 4	√	√	√	√	√	√	√	
CO 5	√	√	√	√	√	√	√	√

XII. JUSTIFICATIONS FOR CO – PO MAPPING –DIRECT

R24 REGULATION - MBA PROGROMME OUTCOMES			
CO's	**PO No.**	**Program Outcomes (POs)**	**Blooms Taxonomy**
CO1			
	PO	**Mapped Competencies**	
	PO1	1. Fundamental principles, theories and practices of management	4
		2. Various types, disciplines, and philosophies of management	
		3. Organizational models and their behavioural aspects	
		4. Decision-making techniques for addressing management problems	
	PO2	1. Acquire knowledge methods, models, components, and issues of analysis	3
		2. Understand the Challenges, Drivers, and Issues of organizations	
		3. Classify the applications, approaches, and results of analysis	

	PO3	1. Global Business Environment and its implications	2
		2. Analyzing economic policies and their impact on business	
	PO4	1. Comprehend global economy, market dynamics, and legal structures	2
		2. Analyze contemporary issues in global economy	
CO2			
	PO	**Mapped Competencies**	
	PO1	1. Fundamental principles, theories and practices of management	3
		2. Various types, disciplines, and philosophies of management	
		3. Decision-making techniques for addressing management problems	
	PO2	1. Acquire knowledge methods, models, components, and issues of analysis	3
		2. Understand the Challenges, Drivers, and Issues of organizations	
		3. Classify the applications, approaches, and results of analysis	
		4. Develop effectiveness & efficiency analysis for organizational solutions	
	PO3	1. Global Business Environment and its implications	2
		2. Analyzing economic policies and their impact on business	
	PO4	1. Comprehend global economy, market dynamics, and legal structures	2
		2. Communicate effectively across global business contexts	
CO3			

	PO	**Mapped Competencies**	
	PO1	1. Fundamental principles, theories and practices of management	3
		2. Organizational models and their behavioral aspects	
		3. Decision-making techniques for addressing management problems	
	PO2	1. Acquire knowledge methods, models, components, and issues of analysis	3
		2. Classify the applications, approaches, and results of analysis	
		3. Develop effectiveness & efficiency analysis for organizational solutions	
	PO3	1. Understanding cultural, legal, and ethical issues in organizations	2
		2. Analyzing economic policies and their impact on business	
	PO4	1. Comprehend global economy, market dynamics, and legal structures	2
		2. Analyze contemporary issues in global economy	
	PO6	1. Application of quantitative tools for analysis	2
		2. Business analytics for decision-making	
	PO7	1. Exposure to cross-functional management areas	2
		2. Application of multi-domain concepts in solving business problems	
CO4			
	PO	**Mapped Competencies**	
	PO1	1. Fundamental principles, theories and practices of management	3
		2. Decision-making techniques for addressing management problems	

		3. Strategic application of management concepts	
	PO2	1. Acquire knowledge methods, models, components, and issues of analysis	3
		2. Understand the Challenges, Drivers, and Issues of organizations	
		3. Investigate and Interpret the Issues, Drivers, and Challenges in organizational context	
	PO3	1. Global Business Environment and its implications	3
		2. Ethical theories and principles for business decision-making	
		3. Analyzing economic policies and their impact on business	
	PO4	1. Comprehend global economy, market dynamics, and legal structures	2
		2. Analyze contemporary issues in global economy	
	PO5	1. Manage conflict and negotiations	2
		2. Exhibit adaptability and resilience	
	PO6	1. Business analytics for decision-making	2
		2. Data-driven strategy formulation	
	PO7	1. Integration of knowledge from diverse fields	2
		2. Understanding the impact of multidisciplinary approaches on organizations	
CO5			
	PO	**Mapped Competencies**	
	PO1	1. Fundamental principles, theories and practices of management	2
		2. Strategic application of management concepts	
	PO2	1. Acquire knowledge methods, models, components, and issues of analysis	3

		2. Understand the Challenges, Drivers, and Issues of organizations	
		3. Awareness and ability to experiment in practical business situations	
	PO3	1. Global Business Environment and its implications	2
		2. Analyzing economic policies and their impact on business	
	PO4	1. Comprehend global economy, market dynamics, and legal structures	3
		2. Communicate effectively across global business contexts	
		3. Understand socio-economic and cultural dimensions	
	PO5	1. Achieve organizational goals collaboratively	3
		2. Exhibit adaptability and resilience	
		3. Promote innovation and motivation in teams	
	PO6	1. Application of quantitative tools for analysis	2
		2. Integration of IT with functional areas of management	
	PO7	1. Adaptability to multidisciplinary work settings	2
		2. Application of multi-domain concepts in solving business problems	
	PO8	1. Awareness of socio-economic changes	2
		2. Global changes and their business implications	

XII TOTAL COUNT OF KEY COMPETENCIES FOR CO – PO MAPPING

	Program Outcomes / No. of Key Competencies Matched

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
	5	6	6	4	6	5	5	6
CO1	1,2,3,4	1,2,3	1,4	1,5				
CO2	1,2,4	1,2,3,5	1,4	1,3				
CO3	1,3,4	1,3,5	2,4	1,5	2,3	1,4		
CO4	1,4,5	1,2,4	1,3,4	1,5	2,6	3,4	2,5	
CO5	1,5	1,2,6	1,4	1,3,7	4,6,7	2,5	3,4	2,4

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – PO:

Course Outcomes	Program Outcomes / No. of key competencies							
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
	5	6	6	4	6	5	5	6
CO 1	80	50	33.3	50				
CO 2	60	66.6	33.3	50				
CO 3	60	50	33.3	50	33.33	40		
CO 4	60	50	50	50	33.33	40	40	
CO 5	40	50	33.3	75	50	40	40	33.3

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – **0**≤ $\boldsymbol{C}$≤ 5% –No correlation; **2** − 40 % <$\boldsymbol{C}$< 60% –Moderate.

1 – 5 <$\boldsymbol{C}$≤ 40%– Low/ Slight; **3** – 60% ≤ $\boldsymbol{C}$< 100% – Substantial /High

Course Outcomes	**Program Outcomes**							
	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**
CO 1	3	2	1	2				
CO 2	3	3	1	2				
CO 3	3	2	1	2	1	1		
CO 4	3	2	2	2	1	1	1	
CO 5	1	2	1	3	2	1	1	1
TOTAL	**13**	**11**	**6**	**11**	**4**	**3**	**2**	**1**
AVERAGE	**2.6**	**2.2**	**1.2**	**2.2**	**1.3**	**1**	**1**	**1**

XV. ASSESSMENT METHODOLOGY – DIRECT

CIE Exams	✓	SEE	✓	Assignments	✓
Quiz	✓	Project/ Viva-Voce	✓	Case study	-
Mngt Talk	-	Certification	-	Laboratory Practices	-

XVI. ASSESSMENT METHODOLOGY – INDIRECT

✓	Course End Survey (CES)

I. SYLLABUS

22MBA002: BUSINESS ECONOMICS

L	T	P	C
4	0	0	4

I Semester: MBA

Unit – I	Introduction to Business Economics	13

Definition, Nature and Scope, Relationship with Other Disciplines, Business Decision-making Process, Basic Economic Principles: The Concept of Opportunity Cost, Marginalism, Equi-marginalism, Incremental Concept, Time Perspective, Discounting Principle, Risk and Uncertainty.

Unit – II	Theory of Demand and Supply	13

(a) Demand Analysis: Demand, Demand Function, Law of Demand, Determinants of Demand, Types of Demand. Elasticity of Demand, Types, Measurement and Significance of Elasticity of Demand. Demand Forecasting, Need for Demand Forecasting, Methods of Demand Forecasting. (b) Supply, Supply Function, Determinants of Supply, Law of Supply, Elasticity of Supply. (c) Market Equilibrium

Unit – III	Production and Cost Analysis	16

Production Function, Production Function with One and Two Variables, Cobb-Douglas Production Function, Marginal Rate of Technical Substitution, Isoquants and Isocosts, Returns to Scale, Economies of Scale, Innovations and Global Competitiveness. Cost Concepts, Determinants of Cost, Cost-Output Relationship in the Short-run and Long-run, Short-run vs. Long-run Costs, Average Cost Curves, Break Even Analysis.

Unit – IV	Market Structures- Pricing and Output decisions	12

Classification of Market Structures,

Features and Competitive Situations. Price-Output Determination under Perfect Competition, Monopoly, Monopolistic Competition and Oligopoly – both the Long-run and the Short-run.

Unit – V	Pricing Strategies	10

Pricing Policy, Price Discrimination, Cost Plus Pricing, Pricing of Multiple Products, Transfer Pricing, Pricing over Product Life Cycle. Theory of Firm, Managerial Theories and Behavioural Theories of Firm. International Price Discrimination: Dumping, Effects of Dumping.

Reference Books:

- D.M. Mithani, Managerial Economics, Himalaya Publishing House, 9e, 2022.
- Satya P. Das & J.K. Goyal, Managerial Economics, Sage Publications, 2e, 2022.

- Dominick Salvatore, Siddhartha K. Rastogi, Managerial Economics, Oxford Publications, 9e, 2020.
- H L Ahuja, Business Economics, S. Chand & Co, 13e, 2019.
- Geetika, Piyali Ghosh, Purba Roy Choudhury, Managerial Economics, Tata McGraw-Hill, 3e, 2018.
- H L Ahuja, Business Economics, S. Chand & Co, 13e, 2019.
- Suma Damodaran, Managerial Economics, Oxford Publications, 2e, 2018.
- P. N. Chopra, Managerial Economics, Kalyani Publishers,1e,2018.

E- Resources

1. http://2012books.lardbucket.org/pdfs/managerial-economics-principles.pdf
2. http://library.wub.edu.bd/assets/images/repository/Managerial_Economics.pdf
3. Leslie Sklair, Globalization: Capitalism and its Alternative, Oxford University Press, 2002.
4. http://www.studynama.com/community/threads/485-Managerial-economics-ebook-lecture-notes-pdf-download-for-MBA-students

II. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No.	Topics to be Covered	Course Outcomes	Reference
1	Introduction to Course, Overview of Business Economics	CO1	R1: 1.1
2	Definition, Nature and Scope of Business Economics	CO1	R1: 1.2–1.3
3	Relationship with Other Disciplines	CO1	R1: 1.4
4	Business Decision-Making Process	CO1	T1: 2.1–2.3
5	Opportunity Cost and Marginalism	CO1	T1: 2.1–2.3
6	Equi-marginal Principle and Incremental Concept	CO1	T1: 2.3
7	Time Perspective and Discounting Principle	CO1	T1: 2.4
8	Risk – Meaning and Types	CO1	R2: 3.1
9	Uncertainty and Business Decisions	CO1	R2: 3.1
10	Risk vs Uncertainty – Decision Criteria	CO1	R2: 3.1
11	Application of Economic Principles in Business	CO1	T1: 2.4
12	Case Discussion	CO1	R1: 1.4
13	Unit I Review	CO1	R1: 1.1
14	Demand – Meaning and Law of Demand	CO2	T1: 3.1–3.3
15	Determinants of Demand	CO2	T1: 3.1–3.3
16	Demand Function and Types of Demand	CO2	R1: 3.4
17	Elasticity of Demand – Types	CO2	T1: 3.5
18	Measurement of Elasticity	CO2	T1: 3.6
19	Significance of Elasticity	CO2	R2: 3.7

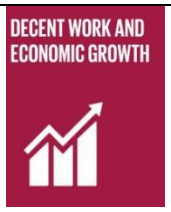
20	Demand Forecasting – Need	CO2	T1: 3.8
21	Demand Forecasting – Survey Methods	CO2	R1: 3.9
22	Demand Forecasting – Statistical Methods	CO2	R1: 3.9
23	Supply – Meaning and Determinants	CO2	T1: 4.1–4.2
24	Law of Supply & Elasticity of Supply	CO2	R2: 4.3
25	Market Equilibrium	CO2	T1: 4.4
26	Shifts in Demand and Supply	CO2	T1: 4.4
27	Production Function – Meaning	CO3	T1: 5.1
28	Production Function – One Variable	CO3	T1: 5.1
29	Law of Returns	CO3	T1: 5.1
30	Production Function – Two Variables	CO3	R1: 5.2
31	Cobb-Douglas Production Function	CO3	R2: 5.3
32	Isoquants and their Properties	CO3	T1: 5.3–5.4
33	MRTS	CO3	T1: 5.3–5.4
34	Iso-cost Lines and Producer's Equilibrium	CO3	T1: 5.3–5.4
35	Returns to Scale	CO3	T1: 5.5
36	Economies of Scale	CO3	R1: 5.6
37	Innovations & Global Competitiveness	CO3	R2: 5.7
38	Cost Concepts	CO3	T1: 6.1–6.2
39	Determinants of Cost	CO3	R2: 6.3
40	Short-run Cost Analysis	CO3	T1: 6.3
41	Long-run Cost Analysis	CO3	T1: 6.4
42	Average Cost Curves & Break-even Analysis	CO3	R1: 6.5 / R2: 6.6
43	Classification of Market Structures	CO4	T1: 7.1
44	Perfect Competition – Features	CO4	R1: 7.2
45	Perfect Competition – Short-run Equilibrium	CO4	R1: 7.2
46	Perfect Competition – Long-run Equilibrium	CO4	R1: 7.2
47	Monopoly – Short-run Price & Output	CO4	T1: 7.3
48	Monopoly – Long-run Equilibrium	CO4	T1: 7.3
49	Monopolistic Competition – Features	CO4	R2: 7.4
50	Monopolistic Competition – Equilibrium	CO4	R2: 7.4
51	Oligopoly – Features	CO4	T1: 7.5
52	Oligopoly – Pricing Models	CO4	R1: 7.6
53	Comparative Analysis of Markets	CO4	T1: 7.1
54	Unit IV Review	CO4	R1: 7.6
55	Pricing Policy – Introduction	CO5	T1: 8.1
56	Price Discrimination	CO5	T1: 8.2
57	Cost Plus Pricing	CO5	R1: 8.3
58	Pricing of Multiple Products	CO5	R2: 8.4
59	Transfer Pricing	CO5	T1: 8.5
60	Pricing over Product Life Cycle	CO5	R1: 8.6
61	Theory of the Firm	CO5	T1: 9.1

62	Managerial Theories of the Firm	CO5	R1: 9.2
63	Behavioural Theories of the Firm	CO5	R2: 9.3
64	International Price Discrimination & Dumping	CO5	T1: 9.4 / R2: 9.5 / T1: 9.6

III. RELEVANCE TO SUSTAINABILITY GOALS:

Management and Organizational Behaviour (MOB) can be mapped to several SDGs because the subject develops leadership, ethical decision-making, teamwork, and strategic thinking, all of which influence sustainable business practices.

✓	1		Employability skills develop effective communication abilities that help learners express ideas clearly and collaborate confidently in professional environments.
x	2		
✓	3		ICT skills develop digital competency by enabling learners to use computers, online tools, and workplace software responsibly, supporting efficiency and technological adaptability.
✓	4		Digital literacy skills equip learners to use technology effectively and responsibly, improving productivity and adaptability in modern organizational settings.
X	5		

✓	6		Effective communication and active listening improve teamwork and collaboration, enabling learners to work harmoniously in diverse professional environments.
X	7		
✓	8		Decent Work & Economic Growth, Industry, Innovation & Infrastructure
✓	9		Decent Work & Economic Growth, Industry, Innovation & Infrastructure
X	10		
X	11		
✓	12		Demand elasticity, cost, resource efficiency

X	13		
✓	14		Effective communication and active listening improve teamwork and collaboration, enabling learners to work harmoniously in diverse professional environments.
X	15		
✓	16		Promotes ethical trade and global collaboration
✓	17		International pricing, global trade

Signature of Course Coordinator HOD-MBA

Name & Designation