

ANURAG GROUP OF INSTITUTIONS
SCHOOL OF BUSINESS MANAGEMENT
COURSE FILE
2019-2021

Course Name : MANAGERIAL (MICRO) ECONOMICS

Course Number: A91001

Credits : 4

Course Coordinator

A.RAMBABU

I MBA – I Semester
(2019-2020)

Name of Faculty	Academic Year/Regulation	Section
A. RAMBABU	R18	A & B

SYLLABUS

Unit-I	Introduction to Economics: Definition of Economics, Nature and Scope of Managerial Economics, Economics Relation with Other Subjects, Role and Responsibilities of Managerial Economist.
Unit – II	Demand Analysis: Definition, Determinants of Demand, Law of Demand, and Exceptions, Elasticity of Demand, Types and Significance. Demand Forecasting, Methods and Techniques.
Unit – III	Estimation Production: Definition, Factors of Production, Production Function, Law of Variable Proportion, Iso quant, Iso cost, Laws of Returns to Scale, Economies of Scale.
Unit – IV	Cost & Profit Maximization: Concepts of Cost, Types of Cost, Cost Output Relationship on Short run and Long run, Definition of Profit Maximization, Theories of Profit maximization.
Unit – V	Market Structure: Concepts of Markets, Perfect Competition, Monopoly, Oligopoly, Cartel, Advanced Pricing, Game Theory and Asymmetric Information.

Text Books:

1. Dominck Salvatore, Managerial Economics, Oxford, 7/e, 2012.
2. Atmanand, Managerial Economics, Excel.

References:

1. P.L Mehta, Managerial Economics Sultan Chand & Sons, 2012.
2. D.M.Mithani, Managerial Economics, HPH, 2012.
3. H.L.Ahuja, Managerial Economics, S.Chand, 2012
4. W.Bruce Allen, Managerial Economics Theory, Applications, and Cases, Viva, 7/e, 2011.
5. Sumitrapal, Managerial Economics Cases & Concepts, Macmillan, 2011.
6. Geetika, Managerial Economics, TMH, 2/e, 2012.
7. G S Gupta, Managerial Economics, TMH, 2/e, 2012.
8. A, R.Aryasri, Managerial Economics and Financial Analysis, McGraw-Hill, 2011.
9. H Kaushal & L Palsreve, Managerial Economics, Macmillan, 2012.
10. H. L. Ahuja, Managerial Economics, S. Chand, 2012

11. D.N. Dwivedi, Managerial Economics, Vikas, 2012.
12. D.M.Mithani, Managerial Economics, HPH, 2012.

Course Objective: To enable student's possess basic economic concepts and tools that has Direct Managerial Applications.

Course Outcomes: At the end of the course students will be able to

1. Explain the concepts of Managerial Economics & Responsibilities of Managerial Economist.
2. Analyze the Demand Elasticity's of products & apply Demand Forecast Techniques.
3. Interpret Production concept and their impact on organization.
4. Analyze Cost and Profit Theories for Production
5. Distinguish Market concepts and Design Pricing Structures.

MBA PROGRAM EDUCATIONAL OBJECTIVES (PEO's):

1. To teach the fundamentals of the key elements of a business organization.
2. To provide a critical perspective on theoretical knowledge and practical approach to various functional areas of management and decision making.
3. To develop analytical skills to identify the link between the management practices in the functional areas of an organization and business environment.
4. To establish and realize a creative research culture among the student community.
5. To provide insights on latest technology, business communication, management concepts and to build team work and leadership skills within them.
6. To inculcate the habit of inquisitiveness and creativeness aimed at self-actualization and realization of ethical practices.

PROGRAM LEARNING OUTCOMES (PO's):

The learning outcomes specify the knowledge, skills, values and attitudes students are expected to attain in courses or in a program.

1. **Business Environment and Domain Knowledge:** Graduates are able to improve their awareness and knowledge about functioning of local and global business environment and society.
2. **Critical thinking, Business Analysis, Problem Solving and Innovative Solutions:** Graduates are expected to develop skills on analyzing the business data, application of relevant analysis, and problem solving in other functional areas such as marketing, business strategy and human resources.
3. **Global Exposure and Cross-Cultural Understanding:** Demonstrate a global outlook with the ability to identify aspects of the global business and Cross Cultural Understanding.
4. **Social Responsiveness and Ethics:** Graduates are expected to identify the contemporary social problems, exploring the opportunities for social entrepreneurship, designing business solutions and demonstrate ethical standards in organizational decision making.

5. **Effective Communication:** Graduates are expected to develop effective oral and written communication especially in business applications, with the use of appropriate technology.
6. **Leadership and Teamwork:** Graduates are expected to collaborate and lead teams across organizational boundaries and demonstrate leadership qualities, maximize the usage of diverse skills of team members in the related context.

Blooms Taxonomy

Definitions	I. Remembering	II. Understanding	III. Applying	IV. Analyzing	V. Evaluating	VI. Creating
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 description	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 solutions.
Verbs	<ul style="list-style-type: none"> • Choose • Define • Find • How • Label • List • Match • Name • Omit • Recall • Relate • Select • Show • Spell • Tell • What • When • Where • Which • Who • Why 	<ul style="list-style-type: none"> • Classify • Compare • Contrast • Demonstrate • Explain • Extend • Illustrate • Infer • Interpret • Outline • Relate • Rephrase • Show • Summarize • Translate 	<ul style="list-style-type: none"> • Apply • Build • Choose • Construct • Develop • Experiment with • Identify • Interview • Make use of • Model • Organize • Plan • Select • Solve • Utilize 	<ul style="list-style-type: none"> • Analyze • Assume • Categorize • Classify • Compare • Conclusion • Contrast • Discover • Dissect • Distinguish • Divide • Examine • Function • Inference • Inspect • List • Motive • Relationships • Simplify • Survey • Take part in • Test for • Theme 	<ul style="list-style-type: none"> • Agree • Appraise • Assess • Award • Choose • Compare • Conclude • Criteria • Criticize • Decide • Deduct • Defend • Determine • Disprove • Estimate • Evaluate • Explain • Importance • Influence • Interpret • Judge • Justify • Mark • Measure • Opinion • Perceive • Prioritize • Prove • Rate 	<ul style="list-style-type: none"> • Adapt • Build • Change • Choose • Combine • Compile • Compose • Construct • Create • Delete • Design • Develop • Discuss • Elaborate • Estimate • Formulate • Happen • Imagine • Improve • Invent • Make up • Maximize • Minimize • Modify • Original • Originate • Plan • Predict • Propose

MAPPING OF COURSE OUTCOMES WITH LO's

Course Outcomes	LO's
CO1	1,2,4
CO2	1,2,3,5
CO3	2,3,5
CO4	1,2,3,4,5
CO5	2,3,4,5

Articulation matrix of Course outcomes with LO's

	LO 1	LO 2	LO 3	LO 4	LO 5
CO1	3	2	1	-	-
CO2	2	3	3	1	-
CO3	3	3	2	2	1
CO4	2	3	3	2	-
CO5	2	2	3	3	2

Course Schedule

Distribution of Hours in Unit – Wise

Unit	Topic	Book 1	Total No. of Hours
I	Introduction to Economics		6
II	Demand Analysis		12
III	Estimation Production		10
IV	Cost & Profit Maximization		8
V	Market Structure		10
Total Contact Classes for Syllabus Coverage			46
Tutorial Classes : 1 per week			

Lecture Plan: MANAGERIAL (MICRO) ECONOMICS

S. No.	Topic	No of Lecture Hours	Teaching Learning Process
UNIT-1 INTRODUCTION			
1	Definition and Features of ME	1	Chalk & Board
2	Nature and Scope of ME	1	Chalk & Board
S3	ME relation with other Disciplines	2	Discussion
4	Roles and Responsibilities of Managerial Economist	2	Chalk & Talk
UNIT-2 DEMAND ANALYSIS			
1	Introduction to the Demand and its Definition	1	Chalk & Board
2	Determinants of Demand	1	Collaborating
3	Law of Demand and its exceptions	2	Chalk & Talk
4	Elasticity of Demand and its significance	1	Case Study
5	Types of Elasticity of Demand	4	Chalk & Board
6	Demand Forecasting Methods	2	Discussion
7	Demand Forecasting Techniques	1	PPT
UNIT-3 ESTIMATION PRODUCTION			
1	Definition of Production and Factors of Production-Introduction	1	Chalk & Board
2	Production Function	1	Chalk & Board
3	Law of Variable Proportions	2	Discussion
4	Iso quants	2	Chalk & Board
5	Iso cost	1	Chalk & Board
6	Law of Returns to Scale	1	PPT

7	Economies of Scale	2	Classroom Discussion
Unit-IV Cost & Profit Maximization			
1	Concepts of Cost and Types of Costs	2	Chalk & Board
2	Cost-Output relationship in Short-run	2	Activity
3	Cost-Output relationship in Long-run	2	Activity
4	Profit maximization and its Theories	2	Chalk & Board
UNIT-5 MARKET STRUCTURE			
1	Definition, Concept and types of Markets	1	PPT
2	Perfect Competition- Features, Price and Output determination	2	Chalk & Board
3	Monopoly- Features and Price-Output determination	2	PPT
4	Oligopoly	1	Chalk & Board
5	Cartel, Advanced Pricing	2	Class room Discussion
6	Game Theory and Asymmetric Information	2	Chalk & Board
Total contact classes for Syllabus coverage : 46			

Minutes of Course Review Meeting

Details of Meeting No -	
Date of Meeting	
Member's Present	
Signature of Member's	
Remarks	
Details of Meeting No -	
Date of Meeting	
Member's Present	
Signature of Member's	
Remarks	
Details of Meeting No -	
Date of Meeting	
Member's Present	
Signature of Member's	
Remarks	

MANAGERIAL ECONOMICS

QUESTIONS

UNIT – I INTRODUCTION:

Short Type

1. Define managerial Economics? (L1,CO1)
2. Explain Nature of Managerial economics (L1,CO1)
3. Distinguish between Positive v/s Normative Approach (L4,CO1)
4. What is Micro Economics? (L1,CO1)
5. What is Macro Economics? (L1,CO1)
6. Discuss the Role of Managerial Economist. (L6,CO1)

Essay questions

1. Distinguish between micro economics, macro economics and managerial economics. (L4, CO1)
2. What is managerial economics? Why does study managerial economics? (L1, CO1)
3. Describe the circular flow of economic activity of India. (L5, CO1)
4. Discuss the nature of the firm. (L6, CO1)
5. List out the major objectives of the firm. (L1, CO1)
6. How does managerial economics relate with other disciplines for propounding its theories? (L1, CO1)
7. Identify the areas of decision making where managerial economics prescribes specific solutions to business problems. (L3, CO1)
8. Discuss the role and responsibilities of a managerial economist. (L6, CO1)

UNIT – II THEORY OF DEMAND:

Short Type

1. What is Demand? (L1,CO2)
2. Explain the concept of Demand Function. (L1,CO2)
3. Elaborate the concept of Cross Elasticity of Demand. (L6,CO2)
4. Define Price Elasticity of Demand. (L1,CO2)
5. Relationship between income and demand in Income Elasticity of Demand(L4,CO2)
6. List out Demand determinants (L4,CO2)
7. Define Law of demand (L1,CO2)
8. Importance of Giffen Paradox (L5,CO2)
9. Outline the concept of Veblen effect (L2,CO2)
10. What is mean by Elasticity of demand (L1,CO2)
11. Define Demand Forecasting (L1,CO2)

12. Explain the concept of Delphi method (L5,CO2)

Essay Type

1. Define demand. (L1, CO2)
2. State the law of demand. (L1, CO2)
3. Prepare a demand schedule for an apple i-pad in the Indian market. (L1, CO2)
4. Distinguish between shift in demand and a movement along a demand curve. (L4, CO2)
5. List out the factors which determine market demand for a commodity of your choice. (L1, CO2)
6. Categorize the types of demand with proper examples. (L4, CO2)
7. What is meant by industry demand and company demand? (L1, CO2)
8. Explain perfectly elastic demand and perfectly in elastic demand with a suitable example. (L1, CO2)
9. Explain the concept of cross elasticity of demand with an example. (L1, CO2)
10. Explain the concept of income elasticity of demand and discuss the importance of income elasticity of demand for a business firm. (L1, CO2)
11. What are the different types of price elasticity of demand? (L1, CO2)
12. Explain the slope of income demand curve for a superior and inferior good. (L1, CO2)
13. Discuss the cross elasticity of demand with an example. (L6, CO2)
14. List out the significance of elasticity of demand in managerial decision making. (L6, CO2)
15. What is meant by demand forecasting? Why is it important for the managers of business firm? (L1, CO2)
16. Why do business entities have to forecast demand? (L1, CO2)
17. What are the quantitative and qualitative methods of demand forecasting? (L1, CO2)
18. Discuss the steps to be followed during demand forecast. (L6, CO2)
19. Mention the major criteria to choose a suitable forecasting method. (L5, CO2)
20. Explain the consumer survey method and discuss the merits and demerits of complete enumeration method and sample survey method. (L5, CO2)

UNIT – III PRODUCTION ANALYSIS:

Short Type

1. Define Production Function. (L1,CO3)
2. Importance of Cobb- Douglas Production Function. (L5,CO3)
3. What is Iso – Cost. (L1,CO3)
4. Define Iso – Quant. (L1,CO3)
5. Classify Returns to Scale. (L1,CO3)
6. Abbreviate MRTS. (L2,CO3)
7. Categorize Internal Economies. (L4,CO3)
8. Categorize External Economies. (L4,CO3)

Essay Type

1. Define Production Function? And distinguish between short run and long run production? (L1,CO3)
2. Explain the theory of Production Function with One Variable? (L1,CO3)
3. Explain the theory of Production Function with Two Variables? (L5,CO3)
4. Explain the theory of Production Function with All Variables? (L5,CO3)
5. What are economies of Scale? Explain different types of Economies? (L1,CO3)
6. List out the major factors of production (input factors used) in a cement factory (L3, CO3)
7. Define production function and Cobb-Douglas production function. (L1, CO3)
8. Write short notes on Marginal Product and Average product. (L1, CO3)
9. Briefly discuss the concept Returns to scale (L1, CO3)
10. What do you mean by an expansion path? (L1, CO3)
11. Discuss the managerial uses of production function. (L6, CO3)

UNIT – IV COST THEORY AND ESTIMATION

Short Type

1. What is Marginal Cost? (L1,CO4)
2. Define Opportunity Cost(L1,CO4)
3. Distinguish between Fixed cost & variable cost. (L4,CO4)
4. Importance of Break Even Analysis. (L5,CO4)
5. Distinguish between Short Run & Long run Cost (L4,CO4)
6. Define Average Cost. (L1,CO4)
7. Determine Profit Maximization(L5,CO4)

Essay Type

1. What is cost? Explain Cost Output Relationship in Short Run? (L1,CO4)
2. What is cost? Explain Cost – Output Relation in Long Run? (L1,CO4)
3. Explain the theories of profit Maximization? (L5,CO4)
4. What is Marginal cost? State its significance in cost analysis. (L1,CO4)
5. Define opportunity cost and give an example. (L1,CO4)
6. Explain the concepts: AFC, AVC, ATC and MC. (L2,CO4)
7. Explain briefly the various types of costs with suitable examples. (L5,CO4)
8. Discuss the short run cost output relationship with the graph. (L6,CO4)
9. Derive long run total cost curve. (L2,CO4)
10. What is the relationship between AC and MC? (L1,CO4)
11. Give reasons for the U shape of long run AC curve. (L2,CO4)
12. Distinguish between economies of scale and diseconomies of scale with a graph. (L4,CO4)
13. List out the factors that cause economies and diseconomies of scale. (L6,CO4)

UNIT – V MARKET STRUCTURE AND PRICING PRACTICE

Short Type

1. Classification of Market(L1,CO5)
2. Define Perfect Competition. (L1,CO5)
3. What is Monopoly.(L1,CO5)
4. Define Duopoly. (L1,CO5)
5. Discuss the features of Monopolistic Competition. (L6,CO5)
6. List out the features of Oligopoly. (L1,CO5)
7. Importance Price Rigidity in Oligopoly. (L5,CO5)
8. What is Penetration Pricing.(L1,CO5)
9. What is Mark up Pricing? (L1,CO5)
10. Discuss the concept of Price discrimination (L4,CO5)
11. Construct the Rules of game theory (L3,CO5)
12. Define Cartel (L1,CO5)
13. Construct Kinked demand curve (L3,CO5)

Essay Type

1. Explain the features of perfect competition? How the Price Determination Under this market? (L5,CO5)
2. Define Monopoly? How the Price Determination under this Market? (L1,CO5)
3. What is Monopolistic Market? How the Price Determination under this Market? (L1,CO5)
4. When price Discrimination is possible in Monopoly market? Explain Types of Price Discrimination? (L1,CO5)
5. Outline the features of this Market? (L2,CO5)
6. What is Duopoly? Explain the features of this Market? (L1,CO5)
7. Explain various pricing strategies in market structure? (L5,CO5)
8. Define the market and market structure. (L1,CO5)
9. Explain various types of markets with suitable examples. (L2,CO5)
10. Distinguish between perfect and imperfect market. (L4,CO5)
11. List out the major characteristic features of a perfect market. (L6,CO5)
12. Show graphically how an individual firm attains equilibrium under perfect competition. (L1,CO5)
13. Explain how the price and output is determined in perfect competition. (L5,CO5)

14. Is it possible to earn profit in the perfect competition? Justify. (L5,CO5)
15. What do you mean by shut down point? Explain why a firm suffering from losses. (L1,CO5)

CASE STUDYS

The demand for gas

The freezing cold spell at the beginning of 2015 not only increased demand for road salt, but it increased demand for gas in the UK. Usage reached 454 cubic meters; the previous record was 449m set in January 2013. The National Grid which is responsible for energy in the UK issued several warnings in a matter of days that demand could outstrip supply and asked supplier to increase the supply. The National Grid also told major gas users, such as power plants, to reduce demand. Big generators, such as Eon, have both gas-fired and coal-fired power stations and are able to choose between the two. In total, 27 large gas users were asked to switch - 12 in the East Midlands and 15 in the North West.

Questions

1. Illustrate the effect of the cold spell on the demand for gas using a demand curve diagram.
2. Illustrate the effect of the National Grid instructing major gas users to reduce their demand.
3. Analyse two other factors that you think influence demand for gas.
4. Do you think demand for gas is price elastic or price inelastic? Explain your reasoning.

PRODUCTION

Firms in India are losing productivity because of Face book. Office staffs are spending too long on the social networking site. According to The Associated Chambers of Commerce and Industry (Assoc ham) employees use Orkut, Face book, MySpace, and LinkedIn for "romancing" and other purposes. On average, employees spend an hour a day on sites like Face book. This reduces productivity by 12.5%. Nearly half of office employees accessed Face book during work time. Some 83% saw nothing wrong in surfing at work during office hours. In September 2009 Portsmouth City Council in England banned staff from accessing Face book on its computers when it was discovered that they spent, on average, 400 hours on the site every month.

Questions:

1. What is meant by productivity?
2. Analyze the impact on a fall in productivity on costs.
3. Analyze the possible consequences for businesses in India of banning access to Facebook and other social networking sites.
4. Do you think access should be denied?

Monopolies

Many European governments are reluctant to allow online betting in an attempt to protect their national gambling businesses. A recent study found that seven countries out of the 27 in the European Union banned online gambling. Of the other 20 only 13 have opened their markets to competition; in the rest gambling is dominated by monopolies owned or licensed by the government. In the Netherlands, for example, residents can only place online bets with a state monopoly: De Lotto. The Ministry of Justice even warned banks in the country that they could be prosecuted if they transferred money to online gambling companies. Other countries have ordered online betting companies to block access to their sites. Their governments argue that this is to protect people from gambling excessively. However the revenue they gain from their own monopolies should not be ignored as a possible motive.

Questions

1. If governments believe that gambling is bad for their citizens then in economic terms how would you classify this service?
2. Why might governments want to protect their own monopolies in the gambling sector?
3. What might be the effect of greater competition in the gambling industry in these countries?

Increased prices for drinks

In 2010 the government's main medical adviser drew up plans for a minimum price for alcohol intended to double the cost of some drinks.

Under the proposal no drinks could be sold for less than 50 pence per unit of alcohol they contain. This would mean most bottles of wine could not be sold for under £4.50. The proposal is aimed at reducing alcohol abuse. A spokesman for an opposition party said that it was more important to deal with peoples' attitudes and not just the price of alcohol.

The Portman Group, set up by drinks manufacturers to promote sensible drinking, argues that it would damage the majority of drinkers who behave responsibly in terms of their consumption.

The NHS bill for alcohol abuse is an estimated £ 2.7bn a year. Recent figures show hospital admissions linked to alcohol use have more than doubled in England since 1995. Alcohol was the main or secondary cause of 207,800 NHS admissions in 2006/7, compared to 93,500 in 1995/96. The number of alcohol-related deaths in England has doubled since the early 1990s to nearly 9,000 a year.

Questions

1. What sort of product is alcohol in economic terms if the government wants to restrict consumption of it?
2. Analyze the social costs of alcohol consumption.
3. Analyze the factors that would determine the impact of a price increase on the consumption of alcohol
4. Is introducing a minimum price a better way of reducing consumption than trying to change peoples' attitudes?

Subject Code: R15E11MB04

ANURAG GROUP OF INSTITUTIONS

(Autonomous)

School of Business Management

I-M.B.A-I-Semester End Examinations, January - 2018

Subject: Managerial Economics

Time: 3 Hours

Max.Marks:60

Section – A (Short Answer type questions)

(5X4=20 Marks)

Answer all the following:

1. Write brief note on Opportunity Cost and Discounting Principle
2. Write short note on Income Demand and Cross Demand.
3. Write short note on Cobb-Douglas Production Function.
4. Distinguish between Average cost and Marginal cost
5. Discuss the criteria on the basis of which markets can be classified.

Section – B (Essay Type Questions)

Answer all the questions.

(5x8=40 Marks)

6. A) Define Managerial Economics? Discuss its Scope?
OR
B) Explain the relationship of Managerial Economics with other disciplines.
7. A) Define Demand. What is Law of Demand? Explain the determinants and exceptions to law of demand.
OR
B) What is meant by Elasticity of demand? How do you measure it?
8. A) Explain the relationship of MRTS, Isoquants and Isocost to production function with two variables.
OR
B) Explain the Internal and External Economies of scale?
9. A) Explain Cost Output Relationship in the Short run and Long run?
OR
B) Explain the utility of Break Even Analysis in managerial decision making.
10. A) Define Monopoly. Explain the Price output determination in Monopoly
OR

B) Define Perfect Competition. How to determine price under Perfect Competition? Illustrate.

Tutorial Sheet

Unit-I Topics Revised
Topic Name
Unit-I Topics Revised
Topic Name
Unit-III Topics Revised
Topic Name
Unit-IV Topics Revised

Topic Name
Unit-V Topics Revised
Topic Name

Course Assessment Report

Batch: 2019 - 2020

Academic Year/Sem: 2019

Course Name: MANAGRIAL ECONOMICS

Course Number:

Course Attainment (75% of Direct + 25% of Indirect) on a scale of 1 to 3

Remarks and suggestions:

Course Coordinator

Direct Course Assessment Sheet (As per IonCudos)

a) Internal Examination

Course assessment sheet Ass1

Hall Ticket No	S1	S2	TOT
1			
2			
3			

Course assessment sheet Mid1

Hall Ticket No	S1	S2	S3	S4	S5	L1	L2	L3	L4	L5	TOT
1											
2											
3											

Course assessment sheet Ass2

Hall Ticket No	S1	S2	TOT
1			
2			
3			

Course assessment sheet Mid2

Hall Ticket No	S1	S2	S3	S4	S5	L1	L2	L3	L4	L5	TOT
1											
2											
3											

b) External Examination

Hall Ticket No	Total Marks

CSP Rubric		
S.No.	Criteria	LEVEL (Level: 3-Excellent Level: 2-Good Level: 1-Poor)
1	Oral Communication	3 Student speaks in phase with the given topic confidently using Audio-Visual aids. Vocabulary is good
		2 Student speaking without proper planning, fair usage of Audio-Visual aids. Vocabulary is not good
		1 Student speaks vaguely not in phase with the given topic. No synchronization among the talk and Visual Aids
2	Writing Skills	3 Proper structuring of the document with relevant subtitles, readability of document is high with correct use of grammar. Work is genuine and not published anywhere else
		2 Information is gathered without continuity of topic, sentences were not framed properly. Few topics are copied from other documents
		1 Information gathered was not relevant to the given task, vague collection of sentences. Content is copied from other documents
3	Social and Ethical Awareness	3 Student identifies most potential ethical or societal issues and tries to provide solutions for them discussing with peers
		2 Student identifies the societal and ethical issues but fails to provide any solutions discussing with peers
		1 Student makes no attempt in identifying the societal and ethical issues
4	Content Knowledge	3 Student uses appropriate methods, techniques to model and solve the problem accurately
		2 Student tries to model the problem but fails to solve the problem
		1 Student fails to model the problem and also fails to solve the problem
5	Student Participation	3 Listens carefully to the class and tries to answer questions confidently
		2 Listens carefully to the lecture but doesn't attempt to answer the questions
		1 Student neither listens to the class nor attempts to answer the questions
6	Tec hni cal	3 The program structure is well organized with appropriate use of technologies and methodology. Code is easy to read and well documented. Student is able

			to implement the algorithm producing accurate results
		2	Program structure is well organized with appropriate use of technologies and methodology. Code is quite difficult to read and not properly documented. Student is able to implement the algorithm providing accurate results.
		1	Program structure is not well organized with mistakes in usage of appropriate technologies and methodology. Code is difficult to read and student is not able to execute the program
7	Practical Knowledge	3	Independently able to write programs to strengthen the concepts covered in theory
		2	Independently able to write programs but not able to strengthen the concepts learned in theory
		1	Not able to write programs and not able to strengthen the concepts learned in theory
8	Understanding of Engineering core	3	Student uses appropriate methods, techniques to model and solve the problem accurately in the context of multidisciplinary projects
		2	Student tries to model the problem but fails to solve the problem in the context of multidisciplinary projects
		1	Student fails to model the problem and also fails to solve the problem in the context of multidisciplinary projects

Indirect Course Assessment Sheet

Tools:

a) Case Study

S.No.	Hall Ticket Number	Rubric Assessment
1		
2		
3		

b) Course End Survey Report

Add-on (Guest Lecture/Video Lecture/Certification/Training Program/Poster Presentation.... etc.)

1. Poster Presentation
2. Rank Sheet Certification

Unit Wise PPT's & Lecture Notes