



**SIDDHARTH GROUP OF INSTITUTIONS:: PUTTUR
(AUTONOMOUS)**

Siddharth Nagar, Narayanavanam Road - 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code: IEM (18ME0330)

Course & Branch: B.Tech - MECH

Regulation: R18

Year & Sem: III-B.Tech & II-Sem

UNIT - I

CONCEPTS OF MANAGEMENT

1	a	Define Management and Administration	[L1] [CO1]	[2M]
	b	Compare Theory X and Theory Y	[L2] [CO1]	[2M]
	c	What are the basic dissimilarities between Authority and Power	[L1] [CO1]	[2M]
	d	Construct the Organizational chart of your college.	[L3] [CO2]	[2M]
	e	How an accountability is important for an Organization	[L1] [CO2]	[2M]
2	a	Summarize the important characteristics of management.	[L2] [CO1]	[5M]
	b	Name and describe the various levels of management with their functions.	[L1] [CO1]	[5M]
3	a	State and explain the Taylor's principles of scientific management.	[L2] [CO1]	[5M]
	b	State and explain the Fayol's principles of management.	[L2] [CO1]	[5M]
4	a	State and explain the Douglas Mc-Gregor's Theory X and Theory Y.	[L2] [CO1]	[5M]
	b	Discuss about the Hertzberg's Two factor theory of motivation.	[L6] [CO1]	[5M]
5	a	Explain the Mayo's Hawthorne experiments.	[L2] [CO1]	[5M]
	b	Explain the Maslow's Hierarchy of human needs.	[L2] [CO1]	[5M]
6	a	"Management is the art of getting things done through and with the people", Interpret	[L2] [CO1]	[5M]
	b	Discuss the systems approach to management.	[L6] [CO1]	[5M]
7		Explain the process of organization.	[L2] [CO2]	[10M]
8	a	Explain the principles of Organization.	[L2] [CO2]	[5M]
	b	Discuss in detail about the organizational structures.	[L6] [CO2]	[5M]
9		Classify the organizations and write its merits and demerits.	[L4] [CO2]	[10M]
10	a	Discuss about departmentation with their merits and demerits	[L2] [CO2]	[5M]

	b	Discuss about the decentralization and their merits and demerits.	[L2] [CO2]	[5M]
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UNIT - II

PLANT LOCATION & PLANT LAYOUT

1	a	Define Material Handling system	[L1] [CO2]	[2M]																									
	b	Why the material handling systems are important in industries?	[L1] [CO2]	[2M]																									
	c	Summarize the incentives given by Government agencies for setting up a plant.	[L2] [CO2]	[2M]																									
	d	Name the industries in which product layout is used.	[L1] [CO2]	[2M]																									
	e	List the types of plant layout.	[L1] [CO2]	[2M]																									
2		What are the factors governing the plant location. Explain with any one specific industry.	[L1 & L2] [CO2]	[10M]]																									
3		Determine the minimax location for the new equipment installation for the company which is interested in locating a new costly fire fighting equipment in the foundry. In foundry, there are seven shops whose coordinates are summarized in the following table shown below.	[L5] [CO2]	[10M]]																									
		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Sl. No</th> <th>Existing facility</th> <th>Coordinates of Centroid</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Sand Plant</td> <td>10, 20</td> </tr> <tr> <td>2</td> <td>Moulding Shop</td> <td>30, 40</td> </tr> <tr> <td>3</td> <td>Pattern Shop</td> <td>10, 120</td> </tr> <tr> <td>4</td> <td>Melting Shop</td> <td>10, 60</td> </tr> <tr> <td>5</td> <td>Fetling Shop</td> <td>30, 100</td> </tr> <tr> <td>6</td> <td>Gouging Shop</td> <td>30, 140</td> </tr> <tr> <td>7</td> <td>Annealing Shop</td> <td>20, 190</td> </tr> </tbody> </table>	Sl. No	Existing facility	Coordinates of Centroid	1	Sand Plant	10, 20	2	Moulding Shop	30, 40	3	Pattern Shop	10, 120	4	Melting Shop	10, 60	5	Fetling Shop	30, 100	6	Gouging Shop	30, 140	7	Annealing Shop	20, 190			
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4		What are advantages and disadvantages of urban and suburban locations for a plant? Compare rural and urban sites for the location of the plant	[L1 & L2] [CO2]	[10M]]																									
5	a	Determine the best location using factor rating method. The factor rating and location score for location alternatives for three locations A, B & C are shown below.	[L5] [CO2]	[5M]																									
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	b	Determine the location for a warehouse which will minimize the total distance to supply the four cities. with volume of demand and (x, y) coordinates are given	[L5] [CO2]	[5M]																									

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Chicago	200													
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6	Classify the different types of plant layout. Explain the process layout and product layout with its merits and demerits	[L2] [CO2]	[10M] 											
7	Discuss in detail the basic requirements and procedure for CRAFT technique.	[L6] [CO2]	[10M] 											
8	Discuss in detail the basic requirements and procedure for ALDEP technique.	[L6] [CO2]	[10M] 											
9	What are the various data analyzing forms in plant layout? Explain them in detail.	[L1 & L5] [CO2]	[10M] 											
10	Explain the importance of travel chart in effective layout of a production plant. Prepare a travel chart for a hypothetical engineering concern with 4 functional departments, i.e. foundry, machining, welding and inspection.	[L5] [CO2]	[10M] 											

UNIT - III
WORK STUDY & WORK MEASUREMENT

1	a	What is work study?	[L1] [CO4]	[2M]
	b	What is time study?	[L1] [CO4]	[2M]
	c	List objectives of method study.	[L1] [CO4]	[2M]
	d	What is the purpose of Templates and Models?	[L1] [CO4]	[2M]
	e	What are the benefits of Work Measurement?	[L1] [CO4]	[2M]
2		Define Work Study. State its objectives. Compare Method Study and Work Measurement	[L1 & L2] [CO4]	[10M]
3		State and explain the steps involved in method study procedure.	[L1 & L2] [CO4]	[10M]
4	a	Explain the various method study symbols in detail.	[L2] [CO4]	[5M]
	b	Compare outline process chart and flow process chart	[L2] [CO4]	[5M]
5		Explain the various types of charts available for recording the data in detail.	[L2] [CO4]	[10M]
6	a	What are the typical questions used in operation analysis with respect to material shape, equipment, tool, and other aspects of the operation and elements of operation?	[L1] [CO4]	[5M]
	b	What is the purpose of string diagram and explain it with an example	[L1 & L2] [CO4]	[5M]
7	a	Discuss the SIMO chart with an example.	[L6] [CO4]	[5M]
	b	What is therblings? List the table with details.	[L1] [CO4]	[5M]
8		Discuss various methods or techniques of work measurement	[L6] [CO4]	[5M]
9		What measurements are to be done in a stop watch time study? Discuss briefly how they are done?	[L1 & L6] [CO4]	[10M]
10		What is performance rating? Discuss about various methods of performance rating	[L1 & L6] [CO4]	[10M]

UNIT - IV
MANAGERIAL ECONOMICS & MARKETING

1	a	Explain the concepts of Managerial Economics.	[L2] [CO5]	[2M]
	b	What is meant by Demand Analysis?	[L1] [CO5]	[2M]
	c	Define Law of Demand.	[L2] [CO5]	[2M]
	d	What are the exceptions to the law of Demand?	[L1] [CO5]	[2M]
	e	Define Elasticity of demand.	[L1] [CO5]	[2M]
	f	What are the types of Elasticity of demand?	[L1] [CO5]	[2M]
	g	Define Demand Forecasting.	[L1] [CO5]	[2M]
	h	Classify the types Markets?	[L2] [CO5]	[2M]
	i	Define perfect competition.	[L1] [CO5]	[2M]
	j	Define imperfect competition.	[L1] [CO5]	[2M]
2		What do you mean by elasticity of demand? What are the factors governing the elasticity of demand:	[L1] [CO5]	[10M]
3		Explain briefly the following opinion survey methods of forecasting: (i) Consumers' opinion survey (ii) Delphi method	[L5] [CO5]	[10M]
4		Explain briefly the following opinion survey methods of forecasting: (i) Sales force opinion survey method (ii) End-use method.	[L5] [CO5]	[10M]
5		Explain briefly statistical methods of forecasting. (i) Moving average method (ii) Leading indicators method	[L5] [CO5]	[10M]
6		Explain briefly statistical methods of forecasting. (i) Regression method (ii) Trend projection method	[L5] [CO5]	[10M]
7		Classify and explain the types of markets.	[L2] [CO5]	[10M]
8		Summarize the features of perfect and imperfect competition?	[L2] [CO5]	[10M]
9		Classify and explain the pricing methods in detail.	[L4] [CO5]	[10M]
10		Discuss in detail about the pricing strategies.	[L6] [CO5]	[10M]

UNIT - V

CAPITAL & CAPITAL BUDGETING AND FINANCIAL ACCOUNTING & ANALYSIS

1	a	Define Capital.	[L1] [CO6]	[2M]							
	b	Define Capital Budgeting.	[L1] [CO6]	[2M]							
	c	Summarize the demerits of Accounting Rate of Return method.	[L2] [CO6]	[2M]							
	d	List out any two merits and demerits of Net Present Value method	[L1] [CO6]	[2M]							
	e	Summarize the merits of Internal Rate of Return	[L2] [CO6]	[2M]							
	f	Determine the pay-back period for the project requires Rs. 20,000 as initial investment and will give in general an annual cash inflows (CIF's) of Rs.5000 for 10 years.	[L5] [CO6]	[2M]							
	g	Define accounting.	[L1] [CO6]	[2M]							
	h	Define Journal.	[L1] [CO6]	[2M]							
	i	Define Ledger	[L1] [CO6]	[2M]							
	j	Define trial balance	[L1] [CO6]	[2M]							
2		Classify and explain the various types of working capital.	[L2] [CO6]	[10M]]							
3	a	Explain the need of working capital	[L2] [CO6]	[4M]							
	b	Explain the internal rate of return method. Write its advantages and disadvantages.	[L5] [CO6]	[6M]							
4	a	Discuss about net present value method along with merits and demerits.	[L6] [CO6]	[6M]							
	b	Determine the NPV of the project for Beetron castings Ltd. Hyderabad wishes to install machinery in rented premises for the production of a component. The demand for is expected to last for only 5 years. <table border="1"> <tbody> <tr> <td>Initial outlay will be :</td> <td>Rs.</td> </tr> <tr> <td>Plant and machinery</td> <td>270000</td> </tr> <tr> <td>Working capital</td> <td>40000</td> </tr> <tr> <td>Total</td> <td>310000</td> </tr> </tbody> </table> <p>The working capital will be fully realized at the end of 5th year is Rs.5000 The expected cash inflows from business operations and PV factor at 15% (cost or capital) are given.</p>	Initial outlay will be :	Rs.	Plant and machinery	270000	Working capital	40000	Total	310000	[L5] [CO6]
Initial outlay will be :	Rs.										
Plant and machinery	270000										
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Total	310000										
5	a	Discuss in detail about accounting rate of return method. Also list its merits and demerits	[L6] [CO6]	[6M]							
	b	Determine the average rate of return on investment for a project requires an investment of Rs. 5,00,000 and has a scrap value of Rs. 20,000 after 5 years. It is expected to yield profit after depreciation and taxes during the five years amounting Rs. 40,000, Rs. 60,000, Rs. 70,000, Rs. 50,000, Rs. 20,000..	[L5] [CO6]	[4M]							

6	a	Explain the traditional payback period method. Also list out its merits and demerits.	[L2] [CO6]	[6M]																		
	b	Determine the pay-back period for the project whose cost is 8,00,000 yields a profit of Rs. 80,000 after depreciation at 12% per annum but before tax of 40%.	[L5] [CO6]	[4M]																		
7		Determine the net present value of the two projects and suggest which of the two projects should be accepted assuming a discount rate of 10%. Initial investment Rs. 80,000 Rs.60,000 Estimated 5 years 5 years Scrap value Rs. 1,000 Nil The profits before depreciation and after taxes are as follows: <table border="1"> <thead> <tr> <th>Year</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr> <td>Project X</td> <td>16,000</td> <td>20,000</td> <td>10,000</td> <td>15,000</td> <td>12,000</td> </tr> <tr> <td>Project Y</td> <td>50,000</td> <td>35,000</td> <td>45,000</td> <td>55,000</td> <td>70,000</td> </tr> </tbody> </table>	Year	1	2	3	4	5	Project X	16,000	20,000	10,000	15,000	12,000	Project Y	50,000	35,000	45,000	55,000	70,000	[L5] [CO6]	[10M]]
Year	1	2	3	4	5																	
Project X	16,000	20,000	10,000	15,000	12,000																	
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8	a	Explain the trading account and prepare a sample format for trading account with suitable examples.	[L5] [CO6]	[6M]																		
	b	Explain the steps involved in ledger posting.	[L2] [CO6]	[4M]																		
9		Define balance sheet and prepare a sample format for balance sheet with suitable example.	[L5] [CO6]	[10M]]																		
10		Define profit and loss account and prepare the format for profit and loss account with suitable example.	[L5] [CO6]	[10M]]																		

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Assis. Professor/MECH