



R20 Regulation **Subject code: C143PC1**
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
 (Autonomous, Accredited by NAAC with 'A+' Grade)
MBA III Semester Supplementary Examinations, February 2024
Production & Operations Management
 (MBA)

Maximum Marks: 70

Date: 15.02.2024 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A		CO	Bloom Tx																								
All the following questions carry equal marks (5X4M=20 Marks)																											
1	Explain the production concept.	1	L1																								
2	What are the responsibilities of process planning engineer?	2	L1																								
3	Explain Break even Analysis.	3	L2																								
4	Define Scheduling, list out types of schedules	4	L2																								
5	Write the selective inventory control techniques?	5	L1																								
Part-B																											
Answer All the following questions. (5X10M=50Marks)																											
6	Explain in detail generic competitive strategies. [10M]	1	L1																								
OR																											
7	Discuss the nature and scope of production and operations management. [10M]	1	L2																								
8	Define value engineering. Explain its role in production decisions. [10M]	2	L1																								
OR																											
9	Describe the steps involved in product design. [10M]	2	L2																								
10	What are the various factors influencing the plant location if you are setting up a paper production unit? [10M]	3	L6																								
OR																											
11	What are the advantages and limitations of plant layout? [10M]	3	L1																								
12	Explain quality control concepts and its application in quality maintenance. [10M]	4	L4																								
OR																											
13	Find the sequence of jobs on two machines to minimize the total time. [10M]	4	L5																								
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th>Job</th> <th>J1</th> <th>J2</th> <th>J3</th> <th>J4</th> <th>J5</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td style="text-align: center;">4</td> <td style="text-align: center;">6</td> <td style="text-align: center;">9</td> <td style="text-align: center;">6</td> <td style="text-align: center;">3</td> </tr> <tr> <td>M2</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">6</td> </tr> <tr> <td>M3</td> <td style="text-align: center;">6</td> <td style="text-align: center;">9</td> <td style="text-align: center;">11</td> <td style="text-align: center;">8</td> <td style="text-align: center;">7</td> </tr> </tbody> </table>				Job	J1	J2	J3	J4	J5	M1	4	6	9	6	3	M2	4	5	3	2	6	M3	6	9	11	8	7
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The processing time on three machines is given in minutes.																											

14	Describe the importance of materials management and its components. [10M]	5	L2																								
OR																											
15	The annual sales and cost per unit of different products are as given below. Perform ABC analysis tool on the given data. [10M]	5	L5																								
	<table border="1"> <thead> <tr> <th>Product</th> <th>Annual Sales (units)</th> <th>Cost per unit(₹/unit)</th> <th>Annual usage value(₹)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>5000</td> <td>10</td> <td>50,000</td> </tr> <tr> <td>B</td> <td>4000</td> <td>20</td> <td>80,000</td> </tr> <tr> <td>C</td> <td>3000</td> <td>15</td> <td>45,000</td> </tr> <tr> <td>D</td> <td>2000</td> <td>25</td> <td>50,000</td> </tr> <tr> <td>E</td> <td>1000</td> <td>30</td> <td>30,000</td> </tr> </tbody> </table>	Product	Annual Sales (units)	Cost per unit(₹/unit)	Annual usage value(₹)	A	5000	10	50,000	B	4000	20	80,000	C	3000	15	45,000	D	2000	25	50,000	E	1000	30	30,000		
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