R22 Regulation *Subject code: D143PC1*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

MBA III Semester Regular Examinations, February 2024

Production & Operation Management

(MBA)

Maximum Marks: 60 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 10 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	(10x1M=10 Marks)		
1.a)	Define the Sustainability.	1	L1
b)	Write the Systems concept of production?	1	L1
c)	Define Product design.	2	L1
d)	Define Process planning.	2	L1
e)	Write the advantages of plant layout?	3	L1
f)	What is the Break-even analysis?	3	L1
g)	Define Scheduling.	4	L1
h)	Define Quality control.	4	L1
i)	Define MRP.	5	L1
j)	What is Green purchasing?	5	L1
	Part-B		
Answer All the following questions.	(5X10M=50Marks)		Bloom Tx level
2	Explain in detail generic competitive strategies. [10M]	1	L1
	OR		
3	Discuss the nature and scope of production and operations management. [10M]	1	L2
4	Define value engineering. Explain its role in production decisions. [10M]	2	L1
	OR		
5	Describe the steps involved in product design. [10M]	2	L2
6	What are the various factors influencing the plant location if you are setting up a paper production unit? [10M]	3	L6
	OR		
7	What are the advantages and limitations of plant layout? [10M]	3	L1
8	Explain quality control concepts and its application in quality maintenance. [10M]	4	L4

	OR		
9	Find the sequence of jobs on two machines to minimize the total time. [10M] The processing time on three machines is given in minutes.	4	L5

Job	J1	J2	J3	J4	J5
M1	4	6	9	6	3
M2	4	5	3	2	6
M3	6	9	11	8	7

10	Describe the importance of materials management and its components. [10M]	5	L2
	OR		
11	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

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