

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

POST GRADUATE DIPLOMA IN MANAGEMENT (2024-25) END TERM EXAMINATION (TERM -II)

Subject Name: **Production and Operations Management**Sub. Code: **PG24**Time: **02.00 hrs**Max Marks: **40**

Note: All questions are compulsory. Section A carries 12 marks: 6 questions of 2 marks each, Section B carries 18 marks having 3 questions (with internal choice question in each) of 6 marks each and Section C carries 10 marks one Case Study having 2 questions of 5 marks each.

SECTION - A		
Attempt all questions. All questions are compulsory. $2 \times 6 = 1$	2 Marl	KS
Questions	CO	Bloom's Level
Q. 1: (A). What is the Economic Order Quantity (EOQ) model, and how is it used to optimize inventory management?	CO1	L1
Q. 1: (B). What are the main objectives of Supply Chain Management (SCM)?		
Q. 1: (C). What is the difference between design capacity and effective capacity?		
Q. 1: (D). How does data play a critical role in modern Production & Operations Management?	CO2	L2
Q. 1: (E). How does the Product Life Cycle (PLC) impact decisions in production and operations management?		
Q. 1: (F). What are the key types of layout planning in manufacturing and how do they differ?		
(Three questions each from CO1 & CO2)		
<u>SECTION – B</u>		
All questions are compulsory (Each question has an internal choice. Attempt anyone from the internal choice) $6 \times 3 =$		
Questions	CO	Bloom's
Questions		Level
Q. 2: (A). How should organizations address issues like supply chain disruptions and environmental sustainability in their operations?	СОЗ	L3
\mathbf{Or}		
Q. 2: (B). Discuss the key challenges organizations face when using target costing to control production costs? How does target costing help organizations to achieve cost control during product development?		
Q. 3: (A). Analyze that the rise of digital technologies and flexible manufacturing systems influenced the shift from mass production to mass customization, further discuss how mass production differ from mass customization in terms of operations, cost, and flexibility?		
	1	1

Q. 3: (B). Let us assume that a new medical facility i.e. health care is to be located in Mumbai. The location factors, weights and scores (1= Poor, 5=

_	l score for these sites. A sighted factor rating M	ethod.				
S. No	Location factor	Weights	Score	Score	1	
2			Location 1	Location 2		
1	Facility Utilization	25	3	5		
2	Total patients Km per Month	25	4	3		
3	Avg Time per Emergency Trip	25	3	3		
4	Land and construction Cost	15	1	2		
5	Employee Preferences	10	5	3		
		Or			CO5	L5
	riscuss the difference be nning? How does ERP nning?	tween MRP-I a software integr	ate inventory m			L5
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The Constant value of A=0.729, B=0, C=2.282 for evaluating the Control limits

Questions:

Q. 5: (**A**). Develop X Bar Chart and Range chart limits for the above Data Set. Plot X Bar Chart and Range chart.

Q. 5: (B). Analyze the Charts for the manufacturing process control. Also suggest to the management about the process deficiencies which need to be addressed.

Kindly fill the total marks allocated to each CO's in the table below:

COs	Question No.	Marks Allocated
CO1	1	6
CO2	2	6
CO3	3	6
CO4	4	6
CO5	5	6
CO6	6	10

(Please ensure the conformity of the CO wise marks allocation as per your TLEP.)

Blooms Taxonomy Levels given below for your ready reference:

L1= Remembering

L2= Understanding

L3= Apply

L4= Analyze

L5= Evaluate

L6= Create