Name: Enrolment No:	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2023

Course: Production Planning & Control **Semester: II**
Program: MBA OM (II) **Time: 03 hrs.**
Course code: LSCM7010 **Max. Marks: 100**

Instructions: Allow simple calculator in the exam.

SECTION A
10Qx2M=20Marks

1. Instruction: Select the correct answer(s)/Answer in 1 line.

S. No.	Question	Marks	CO
Q1	Which of the following functions of Production Planning and Control is related to the timetable of activities? 1. Scheduling 2. Dispatching 3. Expediting 4. Routing	2	CO1
Q2	Which of the following processes is not a part of the Production Planning and Control system? 1. Integration of processes 2. Routing 3. Expediting and follow up. 4. All of the above	2	CO1
Q3	The objectives of Production Planning and Control are _____. 1. Timely delivery of goods and services 2. Improving customer satisfaction 3. Coordinating with multiple departments to ensure that the production process is on track. 4. All of the above	2	CO1
Q4	The correct sequence of operations in the Production Planning and Control process is _____. 1. Routing – Scheduling – Follow up – Dispatching. 2. Scheduling – Follow up – Dispatching – Routing 3. Routing – Scheduling – Dispatching – Follow up. 4. Dispatching – Routing – Scheduling – Follow up.	2	CO1
Q5	_____ involves anticipating bottlenecks in advance and identifying steps that will ensure a smooth flow of production. 1. Production planning 2. Production control 3. Production audit 4. None of the above	2	CO1

Q6	Regulating the production process to ensure an orderly flow of materials is the objective of _____. 1. Production planning 2. Production control 3. Production audit 4. None of the above	2	CO1
Q7	The following classes of costs are usually involved in inventory decisions except: 1. Cost of ordering 2. Carrying cost 3. Cost of shortages 4. Machining cost	2	CO1
Q8	'Buffer/safety stock' is the level of stock: 1. Half of the actual stock 2. At which the ordering process should start. 3. Minimum stock level below which actual stock should not fall. 4. Maximum stock in inventory	2	CO1
Q9	The functions of Material Requirement Planning include _____. 1. Schedule materials for future production 2. Looking at present orders to determine quantities of material required. 3. Determine the timing of material requirements, calculate purchase orders based on stock levels and place purchase orders automatically. 4. All of the above	2	CO1
Q10	Dispatching authorises the start of production operations by_____. 1. Releasing the material and components from stores to the first process 2. Issuing of drawing instruction sheets 3. Releasing the material from process to process 4. All of the above	2	CO1
SECTION B **4Qx5M= 20 Marks** 1. Instruction: Write short / brief notes (max. half page each)			
Q11	Your start-up company is planning to introduce a new hot breakfast product made from Millets that would require some minimal preparation by the consumer. This would be a completely new product for the new company. How would you propose forecasting demand for this product?	5	CO3
Q12	What are capacity considerations in a service setup e.g., Hotel vis a vis a manufacturing factory?	5	CO4

Q13	For a factory, assume that the April months' forecast was 1050 units. If 1000 were demanded, rather than 1050, calculate the forecast for May 2023. The smoothing constant alpha (α) is 5 per-cent.	5	CO2
Q14	The forecast for the next year (2023-24) demand is 1000 units. If it costs INR 5 every time an order is placed for more units, and the storage cost is INR 4 per unit per year. What optimum quantity should be ordered each time?	5	CO2
SECTION C **3Qx10M=30 Marks** 1. Instruction: Answer with brief explanation (max 1 page each)			
Q15	Discuss ways to use lean to improve one of the following: a pizza restaurant OR an auto dealership.	10	CO4
Q16	In a paragraph each, explain: Single period inventory model, a fixed-order quantity model, and a fixed-time period model. In what conditions, would you like to prefer an inventory control system model over the other.	10	CO3
Q17	Product M is made of two units of N and three of P. N is made of two units of R and four units of S. R is made of one unit of S and three units of T. P is made of two units of T and four units of U. 1. Show the bill of materials (product tree structure) 2. If 100 Ms are required, how many units of each component are needed?	10	CO2
SECTION D **2Qx15M= 30 Marks** 1. Instruction: Answer with explanation (max. 2 page each)			
Q18	Explain in one paragraph each: Chase strategy, Stable workforce – variable work hours, and the Level strategy. As a production planning and control manager, how would you choose appropriate among these three-production planning strategies for your manufacturing factory (assumed).	15	CO4
Q19	Explain how an ERP system can help improve both the performance as well as the analysis of performance metrics related to production and operations.	15	CO3