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PRESIDENCY UNIVERSITY

Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956
Approved by AICTE, New Delhi | Approved By BCI
Bengaluru

Even Semester Mid Term, March 2026

Date: 11/03/2026

Time: 02:00 PM - 03:30 PM

Course Code: MBA3143

Course Name: Digital Operations Management

Semester: Fourth Semester

Max. Marks: 50

Weightage: 50%

CO - Levels	CO1	CO2
Marks	29	41

Part A: Answer Following Questions. 15 M

Qn.No	Questions	M	CO	BT
1	A hospital is facing long patient waiting times. Illustrate the process view of operations to suggest how digitization can improve service delivery.	3	CO1	BT3
2	A manufacturing plant has a long production cycle because quality inspection occurs only at the end of the process. Examine the concept of speeding-up critical path activities using digitization.	3	CO2	BT4
3	A warehouse reports that one packing station is consistently overloaded while others remain idle. Analyse this using bottleneck management principles and suggest a digital solution.	3	CO2	BT4
4	A company replaces manual reporting with a real-time digital dashboard for monitoring production performance. Apply the digital framework perspective to explain how this improves operational control.	3	CO1	BT3
5	A firm integrates its finance and operations systems through ERP. Illustrate the concept of linking operational metrics with financial performance to explain the benefits.	3	CO1	BT3

Part B: Answer Any 1 Following Questions. 10 M

Qn.No	Questions	M	CO	BT
6	A mid-sized manufacturing company has invested in advanced digital tools such as ERP, real-time performance dashboards, and cloud-based data sharing. However, despite these	10	CO1	BT3

	investments, the company continues to face delays in delivery, high inventory levels, and fluctuating profit margins. Senior management is questioning whether digital investments alone can improve operational excellence. Illustrate the role of a digital operations framework in improving operational and financial performance. Discuss why digitization without strategic alignment may fail to deliver expected results.			
7	A consumer electronics company wants to differentiate itself through faster delivery and superior customer experience. Apply the two perspectives of the digital operations framework (internal and external) to design an operational plan.	10	CO1	BT3

Part C: Answer Any 1 Following Questions. 10 M

Qn.No	Questions	M	CO	BT
8	A pharmaceutical distribution center faces frequent delays because temperature monitoring is manual and corrective actions are slow. Examine the use of quality digitization and throughput improvement to recommend a solution.	10	CO2	BT4
9	<p>A food processing company has three sequential production stages:</p> <ul style="list-style-type: none"> • Stage A capacity = 500 units per day • Stage B capacity = 350 units per day • Stage C capacity = 450 units per day <p>Customer demand is 480 units per day.</p> <p>Despite having sufficient total installed capacity, the company consistently fails to meet customer demand and experiences long waiting time between stages.</p> <p>Question:</p> <p>Analyse the impact of bottlenecks on capacity and throughput in this system. Recommend how the firm should manage its bottleneck to improve operational performance.</p>	10	CO2	BT4

Part D: Answer Following Questions. 15 M

Qn.No	Questions	M	CO	BT
10	Zenith Precision Components Pvt. Ltd. manufactures automotive brake assemblies for OEM customers. Over the	15	CO2	BT4

last 18 months, demand has grown rapidly due to expansion in the electric vehicle market.

However, operational performance has weakened.

Current Production System:

The manufacturing process has three stages:

Stage	Capacity (units/day)
Machining	1,000
Quality Inspection	620
Final Assembly	900

Daily customer demand = **850 units**

Additional Information:

- Work-in-process (WIP) inventory has increased by 55%
- Lead time has increased from 3 days to 6 days
- Defect rates are rising at inspection stage
- Finance department reports increased working capital blockage
- Operations and finance systems are not integrated
- Production planning is spreadsheet-based

The board has approved budget for **one major digital initiative** this year.

Proposed Alternatives:

Alternative A: AI-based smart scheduling & real-time dashboard system

Alternative B: Automation of Quality Inspection using machine vision

Alternative C: Integrated Digital Operations & Finance ERP platform

Using a structured decision framework, analyse the situation and recommend the most suitable digital strategy.