



MIDTERM EXAM IN INTECH 312: MATERIAL TECHNOLOGY MANAGEMENT

GENERAL INSTRUCTIONS:

1. Read the instructions carefully before answering.
2. **SHADE** your best choice of answer in the given **ANSWER SHEET**.
3. **CHEATING** is **STRICTLY PROHIBITED!**
4. If you have clarification and confusions, **ASK** your proctor, not your classmates.

TEST I – MULTIPLE CHOICE

INSTRUCTION: Choose the correct letter of your answer.

1. What is the main goal of materials management?
 - a. To minimize cost and ensure materials are available when needed
 - b. To increase production speed only
 - c. To reduce manpower
 - d. To avoid using inventories
2. Which of the following best defines materials management?
 - a. Planning, organizing, and controlling materials from purchase to use
 - b. Buying only the cheapest materials
 - c. Storing finished goods in warehouses
 - d. Selling unused items for profit
3. Which of the following is a function of materials management?
 - a. Inventory control
 - b. Employee payroll
 - c. Machine design
 - d. Marketing strategy
4. What is the term used for goods stored for future use?
 - a. Inventory
 - b. Asset depreciation
 - c. Finished product
 - d. Supply chain
5. In materials management, what is the role of purchasing?
 - a. To sell excess goods
 - b. To buy the right materials in the right quantity and quality at the right time
 - c. To train employees
 - d. To design the product
6. Which department is usually responsible for checking material quality upon delivery?
7. Which document is issued by the supplier as proof of materials delivered?
 - a. Purchase order
 - b. Delivery receipt
 - c. Requisition form
 - d. Balance sheet
8. What is the process of keeping the right amount of stock to avoid shortages or excess?
 - a. Inventory control
 - b. Production scheduling
 - c. Human resource planning
 - d. Cost accounting
9. Which of the following is considered a direct material in manufacturing furniture?
 - a. Wood
 - b. Lubricants
 - c. Glue for machines
 - d. Cleaning supplies
10. Materials management is important in production because it ensures:
 - a. Continuous flow of materials without delay
 - b. Workers get higher salaries
 - c. Faster marketing promotions
 - d. Customers design the product
11. Why is forecasting important in production planning?
 - a. It helps predict future demand to plan production accordingly
 - b. It reduces worker salaries

- c. It avoids hiring new employees
d. It eliminates marketing needs
12. A company uses routing in its production system. What is the purpose of routing?
a. To establish the exact path and sequence of operations for materials
b. To reduce the number of workers
c. To promote products
d. To calculate profit
13. How does scheduling contribute to production planning?
a. It sets the time frame for each production activity
b. It provides training for workers
c. It controls company expenses
d. It decides where to sell products
14. Dispatching is a step in production planning. What does it ensure?
a. That production orders are released to start work at the right time
b. That workers get additional incentives
c. That all products are delivered to customers
d. That machines are replaced regularly
15. Why is follow-up necessary in production planning?
a. To check if the actual progress matches the planned schedule
b. To design the product
c. To order raw materials only
d. To compute salaries
16. A production manager emphasizes the use of MRP (Material Requirements Planning). What is the main benefit?
a. Ensures materials are available when needed for uninterrupted production
b. Reduces the number of products sold
c. Eliminates the need for workers
d. Guarantees higher profit automatically
17. Why is a Master Production Schedule (MPS) important?
a. It provides details on what to produce, in what quantity, and when
b. It identifies the suppliers for materials
c. It calculates the exact cost of labor
d. It organizes the marketing strategy
18. A company shifts from job production to batch production. What does this mean?
a. They now produce goods in groups or sets instead of one at a time
b. They will only produce one product type
c. They no longer need materials planning
d. They will only create customized items
19. Why is coordination between materials management and production planning necessary?
a. To avoid delays and shortages in production
b. To reduce the quality of products
c. To lessen the need for supervision
d. To increase advertising budgets
20. What is the overall importance of production planning in a manufacturing company?
a. It ensures efficient use of resources, time, and materials to meet customer demand
b. It focuses only on employee hiring
c. It helps reduce taxation
d. It promotes company slogans
21. A furniture company plans to produce 500 chairs in October. The sales forecast shows only 300 units, but 200 units are already back-ordered. How should the Master Production Schedule (MPS) reflect this?
a. Schedule 200 chairs
b. Schedule 300 chairs
c. Schedule 500 chairs
d. Schedule 700 chairs
22. If a bakery expects demand of 1,000 loaves weekly but has 200 in inventory, how many loaves should be scheduled for production in the MPS?
a. 800
b. 1,000
c. 1,200
d. 200
23. A car manufacturer uses MPS to plan production. Customer orders require 200 units in January, while forecasts predict 150 units. What should be entered in the MPS?
a. 150 units
b. 200 units
c. 350 units
d. None
24. A company schedules too many items in the MPS beyond its capacity. What should the planner do?

- a. Ignore it since demand is high
b. Revise the schedule to match available resources
c. Stop production altogether
d. Hire more marketing staff
25. A laptop factory forecasts 500 units for December, but actual confirmed orders are 600 units. What should the MPS reflect?
a. 500 units
b. 600 units
c. 1,100 units
d. 100 units
26. A shoe company has 50 pairs in stock. The MPS shows demand of 300 pairs for the next month. How many pairs should be scheduled for production?
a. 250
b. 300
c. 50
d. 350
27. A company wants to minimize excess inventory. How should the MPS be adjusted if forecasts are consistently higher than actual orders?
a. Reduce scheduled production quantities closer to actual orders
b. Keep scheduling the forecasted amount
c. Stop forecasting
d. Produce only half of the forecast
28. A manufacturer receives an urgent large order not included in the forecast. How should the MPS be modified?
a. Ignore the new order
b. Adjust the MPS to accommodate the urgent demand if capacity allows
c. Cancel all current schedules
d. Increase prices instead of production
29. A company has a production capacity of 1,000 units per week but the forecast shows 1,500 units. How should the MPS apply this situation?
a. Schedule 1,500 units
b. Schedule 1,000 units and adjust delivery commitments
c. Cancel the forecast
d. Reduce workforce
30. A factory producing refrigerators uses MPS to plan monthly output. If January requires 400 units and February requires 600 units, how should the planner apply MPS?
a. Spread production evenly across months
b. Schedule 400 in January and 600 in February as required
c. Produce all 1,000 units in January
d. Produce only half in each month
31. A company needs 200 bicycles. Each bicycle requires 2 wheels, 1 frame, and 1 handlebar. How many wheels must be included in the MRP?
a. 200
b. 300
c. 400
d. 600
32. An MRP run shows that 500 bolts are needed for assembly in Week 4. Current inventory is 200 bolts, and scheduled receipts are 100 bolts in Week 3. What is the net requirement in Week 4?
a. 500
b. 300
c. 200
d. 400
33. A factory produces desks. Each desk requires 4 legs. If the MPS schedules 150 desks, but inventory already has 100 legs, how many more legs should the MRP plan for?
a. 600
b. 500
c. 400
d. 350
34. A product requires a component with a 2-week lead time. Customer demand is due in Week 6. By what week should the order be released in MRP?
a. Week 2
b. Week 4
c. Week 6
d. Week 8
35. Analyzing an MRP record shows frequent stockouts despite having enough planned orders. What is the most likely reason?
a. Lead times are too short or inaccurate
b. Forecast demand is too low
c. Too much safety stock
d. Bills of materials are unnecessary
36. An item requires 3 subcomponents. If the forecast for the parent item increases, what

happens to demand for the subcomponents in MRP?

- a. It stays the same
- b. It increases proportionally
- c. It decreases proportionally
- d. It becomes zero

37. A company finds that MRP schedules large lot sizes, creating excess inventory. Which factor in the MRP system should be analyzed?

- a. Lead times
- b. Lot sizing rules
- c. Safety stock
- d. Order release timing

38. A planner notices that actual production is delayed, but MRP schedules continue as if everything is on time. What key weakness does this illustrate?

- a. MRP depends heavily on accurate data inputs
- b. MRP ignores customer demand
- c. MRP cannot calculate component needs
- d. MRP eliminates forecasts

39. Analyzing MRP output shows that orders for raw materials are consistently released late, causing delays. What should the planner adjust?

- a. Forecast
- b. Bill of materials
- c. Lead times
- d. Product design

40. A manufacturer needs 1,000 units of a component in Week 10. The supplier lead time is 4 weeks. Based on MRP logic, when should the order be released?

- a. Week 6
- b. Week 8
- c. Week 10
- d. Week 12

41. A company invests in new machines but keeps the same outdated production layout. How should this decision be evaluated?

- a. Good decision since new machines alone increase capacity
- b. Poor decision; layout inefficiency can still limit true capacity
- c. Acceptable because labor is not affected
- d. Acceptable as long as costs are controlled

42. A shoe factory faces seasonal demand spikes. Management considers building a new permanent facility. How should this be judged?

- a. Acceptable since demand will always grow
- b. Risky, since seasonal demand may not justify permanent expansion
- c. Acceptable only if new machines are also bought
- d. Acceptable as long as workers agree

43. A plant schedules overtime every week to meet normal demand. How should this capacity strategy be evaluated?

- a. Poor long-term practice; overtime should be temporary, not permanent
- b. Acceptable since it always increases capacity
- c. Acceptable if workers agree to it
- d. Good practice because it reduces machine costs

44. A company outsources production during peak season to meet customer orders. How should this decision be judged?

- a. Acceptable as a flexible short-term capacity solution
- b. Unacceptable because outsourcing always increases costs
- c. Acceptable only if quality is ignored
- d. Poor decision since it reduces permanent capacity

45. A manufacturer purchases more raw materials than needed to ensure smooth operations. Evaluate this practice.

- a. Acceptable since it prevents shortages
- b. Risky; excess inventory ties up capital and hides capacity issues
- c. Always good because customers are satisfied
- d. Acceptable only in small businesses

46. A factory often experiences machine breakdowns, reducing available capacity. Management proposes preventive maintenance programs. How should this be evaluated?

- a. Excellent decision, as maintenance ensures reliable capacity
- b. Poor choice since it increases costs

44. A firm's strategic plan focuses on cost-cutting while neglecting product quality. How should this be judged?
- Weak, as long-term competitiveness will decline without quality focus
 - Strong, because lower costs guarantee higher profits
 - Acceptable if competitors also reduce quality
 - Neutral, since customers only care about price
45. An organization integrates quality assurance, ethical practices, and CSR into its strategy. How should this be evaluated?
- Strong, since it builds trust, reputation, and long-term competitiveness
 - Weak, because CSR slows profit growth
 - Neutral, because ethics are unrelated to quality
 - Acceptable only in highly regulated industries
46. A company invests heavily in marketing but ignores feedback about defective products. How should this be judged?
- Weak, as neglecting product quality undermines marketing efforts
 - Strong, because marketing attracts more customers
 - Neutral, since defects can be hidden through advertising
 - Acceptable if competitors do the same
47. A firm adopts benchmarking against world-class competitors as part of its planning process. What is the best evaluation of this move?
- Strong, since benchmarking drives improvement and competitiveness
 - Weak, because benchmarking copies other companies
 - Neutral, because it adds little value to quality assurance
 - Risky, as it reduces originality
48. Management sets short-term profits as the only strategic objective, ignoring continuous improvement. How should this strategy be evaluated?
- Weak, since it sacrifices sustainable competitiveness
 - Strong, as profit is the main business goal
 - Neutral, as improvement takes time
 - Acceptable if profits are very high
49. A company evaluates whether to adopt ISO 9001 certification. What is the best decision from a competitive advantage perspective?
- Adopt certification, as it enhances credibility and global access
 - Avoid certification to save costs
 - Neutral, since certification has no impact on customers
 - Acceptable only if required by law
50. A strategic review shows that employees are not aligned with the company's quality vision. How should management act?
- Invest in culture change, communication, and involvement to align people with strategy
 - Focus only on technology improvements
 - Ignore employees and focus on management decisions
 - Accept low alignment if profits remain stable

TEST II – Essay

INSTRUCTION: React concisely with the following questions. (5 pts. each)
Rubrics for rating.

5	Composition is outstanding. Statements/ideas are precise and concise with correct usage of grammar.
4	Composition is very satisfactory. Statements/ideas are precise and concise with slight problems in grammar.
3	Composition is satisfactory. Statements/ideas are not precise and concise with slight problems in grammar.
2	Composition is poor. Statements/ideas are slightly irrelevant with poor usage of grammar.
0	No composition at all.

51-55. Discuss how partnering with competitors or industry peers can drive innovation and enhance quality assurance practices across the industry.

56-60. Explain how effective communication between management and employees contributes to maintaining quality control and assurance in an organization.

ANSWER SHEET

Name: _____

Year/ Section: _____

1	A	B	C	D	16	A	B	C	D	31	A	B	C	D	46	A	B	C	D
2	A	B	C	D	17	A	B	C	D	32	A	B	C	D	47	A	B	C	D
3	A	B	C	D	18	A	B	C	D	33	A	B	C	D	48	A	B	C	D
4	A	B	C	D	19	A	B	C	D	34	A	B	C	D	49	A	B	C	D
5	A	B	C	D	20	A	B	C	D	35	A	B	C	D	50	A	B	C	D
6	A	B	C	D	21	A	B	C	D	36	A	B	C	D					
7	A	B	C	D	22	A	B	C	D	37	A	B	C	D					
8	A	B	C	D	23	A	B	C	D	38	A	B	C	D					
9	A	B	C	D	24	A	B	C	D	39	A	B	C	D					
10	A	B	C	D	25	A	B	C	D	40	A	B	C	D					
11	A	B	C	D	26	A	B	C	D	41	A	B	C	D					
12	A	B	C	D	27	A	B	C	D	42	A	B	C	D					
13	A	B	C	D	28	A	B	C	D	43	A	B	C	D					
14	A	B	C	D	29	A	B	C	D	44	A	B	C	D					
15	A	B	C	D	30	A	B	C	D	45	A	B	C	D					

GOOD LUCK!!

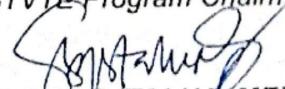


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