

Estd. 1962 "A++" Accredited by NAAC(2021) With CGPA 3.52

Centre for Distance and Online Education Shivaji University, Kolhapur

M.B.A. THROUGH ONLINE MODE

NATURE OF QUESTION PAPER AND SAMPLE QUESTION PAPER

2. Semester End Evaluation (of 80 Marks) for each Course will consists of;

Nature of Question paper and Scheme of marking for all courses are as follows:

1	Nature of Examination	Proctored Online Examination through LMS
2	Nature of Questions	Multiple Choice Questions (MCQs)
3	Number of Questions	80 Multiple Choice Questions (MCQs)
4	Marks for Each Question	01 Mark
5	Marking Scheme	01 Mark for Every Correct Answer. No Negative Marking
6	Specific Nature of Questions	Multiple Choice Questions (MCQs) be asked in the form of- • Case Study followed by MCQs (Long Case followed by 05 MCQs) • Caselet followed by 01 MCQ
7	Difficulty Level	Question Paper must have — 30 MCQs- Easy Level-Covering Basic Conceptions 30 MCQs- Moderate Level- Covering Quick Decision-Making abilities 20 MCQs- Hard Level- Covering Analytical Thinking and its Applications
8	Time Duration	03 Hours (i.e., 180 Minutes)

MBA Through Online Mode

MBA -I, SEM-II

PAPER-XI

OPERATIONS MANAGEMENT

(Q. 1 to 5) Case study - SmartTech Manufacturing Pvt. Ltd. is a mid-sized company that produces a wide range of electronic devices. The company operates with two distinct production systems under one roof — an intermittent production system for customized items and a continuous production system for standardized products.

In the intermittent section, SmartTech handles customer-specific orders like customized IoT devices for industries. This section works based on job production, where machines are general-purpose, and the workforce is highly skilled and flexible. Here, production schedules change frequently based on order requirements. For example, last month, the plant produced 50 customized air quality sensors for a client in Delhi, and this month, they're producing industrial automation controllers for another.

On the other hand, the continuous production line produces SmartHome Wi-Fi routers, a standard product in high demand. This section uses dedicated machinery, with a fixed sequence of operations and continuous workflow, minimizing human intervention. Once the production starts, it rarely stops except for maintenance. The processes are highly automated, and workers mostly monitor operations.

Due to this dual-system setup, SmartTech has been able to serve both the mass market and custom orders, leveraging the flexibility of intermittent production and the efficiency of continuous production.

- 1. Which type of production system is used by SmartTech for customer-specific products like customized IoT devices?
 - A. Continuous Production
 - B. Mass Production
 - C. Intermittent Production
 - D. Batch Production
- 2. What kind of machinery is predominantly used in SmartTech's intermittent production section?

- A. Special-purpose machines
- B. General-purpose machines
- C. Fully automated machines
- D. Conveyor systems

3. In the continuous production system at SmartTech, which of the following is a key characteristic?

- A. Frequent changes in production schedule
- B. High flexibility in product type
- C. Fixed sequence of operations
- D. Skilled labor required for frequent setup

4. What advantage does SmartTech gain by using both intermittent and continuous systems?

- A. Increased dependency on labor
- B. Ability to produce both mass and custom products
- C. Reduced product range
- D. Lower product quality

5. What role do workers play in SmartTech's continuous production section?

- A. Perform all assembly by hand
- B. Regularly reprogram machinery
- C. Mostly monitor automated processes
- D. Design new products daily
- (Q. 6 to 10) Case study AutoX Gears Ltd. is a leading manufacturer of automobile gearboxes, supplying them to various global automobile brands. The company operates under a mass production system, manufacturing thousands of identical gearboxes monthly through highly specialized machinery and standardized processes.

Recently, the company faced a serious production issue. One of the specialized CNC machines, responsible for shaping gear teeth, malfunctioned due to overheating, halting the entire production line for two days. Since the entire system is interdependent and sequenced, no alternative routing was possible, and the assembly line came to a standstill. The delay led to missed shipment deadlines, costing the company a major client.

Furthermore, the quality control department reported a batch of gearboxes with dimensional errors, possibly due to a minor misalignment in one machine that went unnoticed for several hours. Since inspection is done post-production, the defect was detected only after hundreds of units were completed. This highlighted the lack of in-process checks, which are often deprioritized in mass production for the sake of speed.

Despite high efficiency during smooth operation, the system showed low flexibility, high dependency on machinery, and a high cost of downtime. The management has now decided to invest in real-time monitoring sensors and consider modular production practices to reduce risks.

6. What caused the complete halt in production at AutoX Gears Ltd.?

- A. Labor strike
- B. Software bug
- C. CNC machine overheating
- D. Material shortage

7. Why was AutoX unable to continue production after the machine breakdown?

- A. The company lacked raw materials
- B. The workers were untrained
- C. The system had no alternative routing due to high interdependence
- D. There was a cyber-attack on the control system

8. Which quality control issue did AutoX face due to delayed detection of faults?

- A. Software update error
- B. Dimensional defects in gearboxes
- C. Missing labels on units
- D. Excessive packaging material used

9. What major limitation of mass production systems was exposed in this case?

- A. Excess labor costs
- B. Inability to maintain product variety
- C. Low efficiency
- D. High cost of downtime and low flexibility

10. What improvement did AutoX decide to implement after the incident?

- A. Fully manual inspection
- B. Fewer machines to reduce complexity

- C. Real-time monitoring and modular production
- D. Outsourcing the entire production
- (Q. 11 to 15) Case study -FlexiTronics Ltd., a leading electronics assembler, faced increasing cycle time variation and idle time across its smartphone assembly line. While some workstations completed tasks in under 40 seconds, others exceeded the allowed cycle time of 60 seconds, leading to bottlenecks and inconsistent output. Management identified poor line balancing as the root issue.

Despite automation in sub-assembly tasks, human-dependent stations were not evenly loaded, and some workers had to wait for upstream processes. A detailed time study revealed that task assignments didn't align with task precedence, and certain tasks were over-clustered in midline stations.

To resolve this, FlexiTronics implemented a line balancing algorithm using software, optimizing task distribution and adjusting station workloads. This restructuring reduced idle time by 25% and increased line efficiency from 68% to 85%, without adding labor or machines.

However, implementing this required training supervisors in time-motion analysis and faced initial resistance due to reassignments and perceived workload increases.

11. What key problem did FlexiTronics identify in its smartphone assembly line?

- A. Defective raw materials
- B. Poor line balancing causing idle time and bottlenecks
- C. Unskilled labor at all stations
- D. Lack of power supply

12. What was the maximum allowed cycle time for any station in the line?

- A. 30 seconds
- B. 45 seconds
- C. 60 seconds
- D. 90 seconds

13. What strategy did the company use to improve line balancing?

- A. Increased number of workers per station
- B. Introduced new machines for all stations
- C. Applied software-based line balancing algorithm
- D. Outsourced the assembly process

14. What was a measurable outcome after balancing the line?

- A. Increase in defects
- B. Increase in manpower
- C. Reduced line efficiency
- D. Idle time reduced by 25% and efficiency rose to 85%

15. What resistance did FlexiTronics face during implementation?

- A. Union strike
- B. Lack of raw material
- C. Worker resistance due to reassignment and perceived workload
- D. Incompatibility of software
- 16. Ravi joined as a trainee at a textile factory and observed that production involved converting raw cotton into finished shirts through a structured process. His supervisor explained that production management ensures this process runs efficiently and meets demand.

What is the primary focus of production management as seen in the case?

- A. Hiring sales staff
- B. Converting raw materials into finished goods
- C. Advertising new products
- D. Analyzing customer complaints
- 17. At EcoTiles Ltd., the production manager redesigned the layout to minimize movement and improve output. The goal was to enhance coordination between machines and workers, ensuring consistent tile quality.

Which production management function is highlighted in this case?

- A. Quality assurance
- B. Market research
- C. Plant layout and workflow
- D. Inventory control
- **18.** An organic food company planned to expand its delivery across multiple cities. The operations manager coordinated with supply chain teams to ensure timely delivery, maintaining freshness and quality of products.

Which scope area of operations management is emphasized here?

- A. Strategic marketing
- B. Logistics and supply chain
- C. Human resource development
- D. Financial auditing
- 19. NovaComponents, a car parts manufacturer, analyzed machine downtime trends to improve productivity. They also tracked customer return rates and coordinated with design to reduce future defects—linking production with customer satisfaction.

Which aspect of operations management is demonstrated here?

- A. Only quality inspection
- B. Only product marketing
- C. Integrated approach to process improvement and customer feedback
- D. Outsourcing business functions
- 20. SpeedGear Industries adopted an **e-manufacturing system** where all machines were digitally connected to a central dashboard. Managers received real-time alerts on machine health, helping them schedule maintenance without halting production.

What key benefit of e-manufacturing is shown in this case?

- A. Outsourcing decision-making
- B. Reducing the need for raw materials
- C. Real-time monitoring and proactive maintenance
- D. Manual documentation of machine logs
- (Q. 21 to 25) Case study Zenith Appliances Ltd., a mid-sized home appliance company, recently expanded its product line to include smart washing machines. As demand surged, the production team struggled with stockouts of critical components and overproduction of low-demand models. The issue was traced back to improper production planning that didn't align with real-time sales data.

The planning team had been using last year's static forecasts, which failed to reflect the market shift. Production schedules were also not updated frequently, resulting in high inventory holding costs and frequent rescheduling on the shop floor. To fix this, Zenith adopted a dynamic production planning system using real-time sales analytics and supplier lead times. Within two months, inventory levels stabilized, and customer order fulfillment improved from 82% to 95%, reducing production cost per unit.

21. What was one major issue faced by Zenith due to poor production planning?

- A. Lack of marketing strategies
- B. Stockouts and overproduction
- C. Defective machinery
- D. Labor shortage

22. What caused Zenith's planning team to misalign with actual market demand?

- A. Lack of raw materials
- B. Relying on outdated forecast data
- C. Supplier strike
- D. Seasonal holidays

23. What was a consequence of not updating production schedules frequently?

- A. Increase in product prices
- B. Shortage of packaging materials
- C. High inventory costs and frequent rescheduling
- D. Improved supplier relationships

24. What solution did Zenith implement to improve its planning process?

- A. Cut down on variety of products
- B. Outsourced its production entirely
- C. Adopted a dynamic system using real-time sales and lead times
- D. Increased its advertising budget

25. What was one measurable benefit seen after implementing the new planning system?

- A. Customer fulfillment improved to 95%
- B. Workforce was reduced by 20%

- C. Production time doubled
- D. Product defects increased

(Q. 26 to 30) Case study - AeroDyn Components, a precision aerospace part manufacturer, faced frequent schedule disruptions despite having a well-laid production plan. A root cause analysis showed poor real-time control on the shop floor. Jobs were not being tracked accurately, and there were delays in reporting machine breakdowns and rework needs.

Supervisors lacked visibility into WIP (Work in Process), and updates were often manual and delayed. This resulted in cumulative delays, missed deadlines, and loss of client confidence. AeroDyn then implemented an automated production control system integrated with sensors and a real-time dashboard.

This system allowed instant updates on job status, bottlenecks, and machine utilization. Within three months, WIP reduced by 30%, and on-time delivery improved from 76% to 92%. However, the transition required retraining staff and redefining shop floor roles.

26. What was the key issue with production control at AeroDyn before improvement?

- A. Lack of production planning
- B. Inefficient raw material sourcing
- C. Delayed feedback and job tracking
- D. Poor product design

27. What critical visibility gap affected AeroDyn's ability to control WIP?

- A. Lack of marketing data
- B. Real-time updates on production status were missing
- C. Overqualified labor force
- D. Missing sales reports

28. Which technology helped AeroDyn regain control of its shop floor?

- A. ERP for HR management
- B. Manual logbooks
- C. Sensors and real-time dashboards
- D. Outsourcing to vendors

29. What was one measurable result of the improved production control system?

- A. Increased outsourcing
- B. WIP reduced by 30%

- C. More frequent equipment failures
- D. Decrease in workforce size

30. What challenge did AeroDyn face during the transition to a new control system?

- A. Shortage of raw materials
- B. Union strikes
- C. Need to retrain staff and redefine roles
- D. Client cancellations

(Q. 31 to 35) GreenBrew Beverages, a startup producing organic cold drinks, planned to set up its first manufacturing unit. The team considered three locations: one near a metro city, another near a source of raw fruits, and a third near the target market in southern India.

After evaluating options, they chose a site close to fruit farms, reducing transportation costs for raw materials. The area also had availability of skilled labor, affordable land, and access to water and electricity. This helped GreenBrew launch smoothly, meet demand, and keep production costs low.

31. What was the product being manufactured by GreenBrew?

- A. Packaged snacks
- B. Organic cold drinks
- C. Bottled water
- D. Processed meat

32. Which factor played a major role in selecting the final plant location?

- A. Proximity to banks
- B. Access to tourist spots
- C. Availability of raw materials
- D. Closeness to headquarters

33. What type of cost did GreenBrew save by locating near fruit farms?

- A. Marketing cost
- B. Legal cost
- C. Raw material transportation cost
- D. Insurance cost

34. Which of the following was NOT mentioned as a reason for selecting the plant site?

- A. Skilled labor
- B. Affordable land
- C. Luxury amenities
- D. Utilities like water and electricity
- 35. What was one positive outcome of the chosen plant location?
 - A. Increase in competitors
 - B. Delay in market entry
 - C. Smooth launch and cost control
 - D. Frequent power outages
- 36. At SwiftParts Ltd., the production supervisor sends instructions to the machine operators daily, including which jobs to start, what materials to use, and which machine to operate. This ensures every worker knows their task.

Which production function is being carried out by the supervisor?

- A. Maintenance
- B. Dispatching
- C. Planning
- D. Scheduling
- 37. In a textile plant, the manager reviews daily reports and finds that one batch of fabric is delayed due to **machine downtime**. He immediately follows up with the maintenance team and adjusts the delivery schedule.

Which function of production control is shown here?

- A. Designing
- B. Routing
- C. Follow-up
- D. Forecasting
- 38. At FreshBake Foods, all baking, cooling, and packaging machines are **arranged in a straight line** to support continuous flow. This saves time and avoids unnecessary movement of materials.

Which type of plant layout does FreshBake use?

- A. Fixed position layout
- B. Functional layout

- C. Product layout
- D. Cellular layout
- 39. A tool manufacturing company uses a layout where similar machines like **lathes**, **drills**, **and milling machines are grouped together** in separate sections. This provides flexibility but also increases material movement between departments.

What type of plant layout is used by this company?

- A. Process (functional) layout
- B. Product layout
- C. Fixed position layout
- D. Hybrid layout
- 40. AutoLine Ltd. uses a detailed PPC system that plans what to produce, when to produce, and how much to produce. It also controls daily activities, ensuring that the plan is executed correctly and deliveries are on time.

Which of the following best describes the role of PPC in AutoLine Ltd.?

- A. Only quality checking
- B. Managing marketing strategy
- C. Coordinating planning and execution of production
- D. Hiring shop floor workers
- (Q. 41 to 45) Case study Nova Electronics, a manufacturer of LED TVs, was losing market share due to inconsistent product performance and high warranty claims. Internal audits revealed that different departments followed different quality standards, and there was no uniform quality documentation.

The new Quality Manager introduced ISO 9001 standards, promoting standardized procedures, document control, and a customer-centric approach. Cross-functional teams were formed to identify root causes of defects using tools like Pareto Analysis and Cause-and-Effect Diagrams.

With regular audits and continuous feedback, product quality improved significantly. Within eight months, warranty claims dropped by 50%, and customer satisfaction scores rose from 72% to 89%. Nova also began training its suppliers to align with their quality goals, ensuring consistency across the supply chain.

41. What was one major issue Nova Electronics faced before quality improvement?

- A. Lack of skilled labor
- B. Uniform quality documentation
- C. Inconsistent product performance and high warranty claims
- D. High advertising costs

42. Which quality standard did Nova implement to improve consistency?

- A. TQM
- B. ISO 9001
- C. 5S
- D. Kaizen

43. Which quality tools were used by Nova's teams to find defect causes?

- A. Just-in-Time and MRP
- B. Flowcharts and Decision Trees
- C. Pareto Analysis and Cause-and-Effect Diagrams
- D. ERP and MIS

44. How did Nova involve external partners in quality improvement?

- A. By ignoring their issues
- B. By shifting production to them
- C. By training suppliers to meet Nova's quality goals
- D. By penalizing suppliers with poor performance

45. What was the result of these quality initiatives?

- A. Warranty claims increased
- B. Supplier costs rose
- C. Customer satisfaction improved and warranty claims dropped
- D. Production capacity reduced
- (Q. 46 to 50) Case study SkyServe Airlines had been receiving an increasing number of complaints related to in-flight service inconsistencies, such as meals not matching orders, delayed check-ins, and missing baggage updates. The management realized that although feedback was collected, there was no preventive system to ensure service quality remained consistent across all flights.

To improve, SkyServe launched a Quality Assurance initiative. SOPs were created for every service process—check-in, boarding, catering, and baggage handling. Staff were trained in quality standards, communication, and escalation protocols. In-process service audits were conducted weekly, and customer satisfaction surveys were analyzed for trends.

Within four months, service errors dropped by 35%, and passenger satisfaction scores rose by 22%. The airline earned a quality certification and became known for its reliable service delivery.

46. What was the main service issue faced by SkyServe Airlines?

- A. Aircraft maintenance problems
- B. In-flight service inconsistencies
- C. Poor fuel management
- D. Route planning errors

47. What was lacking in SkyServe's approach before the QA initiative?

- A. Employee uniforms
- B. Preventive systems and service process standardization
- C. More online marketing
- D. Automatic flight scheduling

48. What key tool was used to improve service consistency?

- A. Price discounts
- B. New aircraft purchases
- C. Standard Operating Procedures (SOPs)
- D. Final inspection reports

49. What result did SkyServe see after implementing QA measures?

- A. Flight cancellations increased
- B. Staff turnover rose
- C. Service errors reduced and satisfaction scores increased
- D. Check-in times worsened

50. What type of quality system did SkyServe implement?

- A. Quality Control (QC) only
- B. Quality Assurance (QA) with preventive audits and staff training
- C. Third-party quality checks
- D. Total Outsourcing of services

(Q. 51 to 55) Case study - Titan Gears Pvt. Ltd. manufactures automotive gear components using high-speed CNC machines. Over the past year, the company faced frequent unplanned breakdowns, especially during peak demand periods. This led to missed delivery deadlines and increased overtime costs.

A root cause analysis revealed that the company was following a reactive maintenance approach, fixing machines only after failure. The management then adopted a Preventive Maintenance (PM) strategy. Machines were now serviced based on usage hours and manufacturer guidelines, and a computerized maintenance management system (CMMS) was introduced to track schedules and log reports.

Technicians were trained in predictive tools like vibration analysis and infrared thermography to detect early signs of wear. Within six months, breakdowns reduced by 45%, production efficiency improved, and downtime costs fell significantly.

51. What was the main issue faced by Titan Gears Pvt. Ltd.?

- A. Labor shortages
- B. Unplanned machine breakdowns
- C. Inventory overflow
- D. Low customer demand

52. What type of maintenance was Titan using before improvement?

- A. Preventive Maintenance
- B. Predictive Maintenance
- C. Reactive Maintenance
- D. Condition-based Maintenance

53. What system was implemented to track and schedule maintenance tasks?

- A. ERP
- B. CMMS (Computerized Maintenance Management System)
- C. SCM
- D. CRM

54. Which advanced tools were introduced for predictive maintenance?

- A. Barcode scanners and laser cutters
- B. Infrared thermography and vibration analysis
- C. X-rays and CAD tools
- D. Drilling and welding machines

- 55. What was a major result of the new maintenance strategy?
 - A. Increase in overtime expenses
 - B. Rise in emergency repairs
 - C. Reduced breakdowns and improved production efficiency
 - D. More spare parts needed
- 56. At Sparkle Bottling Co., workers use a **go/no-go gauge** to check bottle caps. If the cap doesn't fit the gauge, it's immediately rejected. This simple check helps prevent defective products from reaching customers.

What type of quality tool is being used here?

- A. Control chart
- B. Pareto analysis
- C. Inspection
- D. Quality circle
- 57. In a garment factory, quality inspectors **record daily data on stitching defects** and use **control charts** to identify whether the process is stable or showing unusual

Which statistical tool is the factory using to monitor quality over time?

- A. Check sheet
- B. Scatter diagram
- C. Control chart
- D. Histogram
- 58. A mobile phone manufacturer maintains just enough inventory of chips and screens to meet one week of demand. This helps save storage space and reduce holding costs.

What type of inventory strategy is this?

- A. Bulk ordering
- B. Just-in-Time (JIT)
- C. Seasonal stockpiling
- D. Economic order quantity
- 59. A hospital pharmacy uses software that **automatically reorders medicines** when stock falls below a set minimum. This helps avoid shortages during emergencies.

Which materials management concept is applied here?

- A. Vendor rating
- B. Minimum order quantity
- C. Reorder level system
- D. Batch production
- 60. A precision tools manufacturer seeks global contracts and applies for **ISO 9001** certification. The audit team checks for consistent documentation, process standardization, and a customer-focused quality system before awarding the certification.

Which of the following is a primary focus of ISO 9001?

- A. Energy efficiency
- B. Environmental sustainability
- C. Quality management systems and customer satisfaction
- D. Employee welfare and safety
- (Q. 61 to 65) Case study Orion Appliances Ltd. manufactures home kitchen appliances. Recently, the company was facing rising production costs and delayed deliveries from suppliers. The purchasing manager conducted a review and discovered that the company lacked vendor evaluation, and orders were often placed based on price alone, not quality or reliability.

To fix this, Orion adopted a strategic purchasing approach. It introduced a vendor rating system, negotiated long-term contracts with reliable suppliers, and began tracking lead times and cost performance. The new purchasing process also included material requirement planning (MRP) integration to align orders with production needs.

Within a few months, Orion saw a 10% cost reduction, improved delivery timelines, and fewer production halts due to missing or poor-quality components. Purchasing was now seen as a key function contributing directly to operational efficiency.

61. What was one major issue Orion faced before improving purchasing?

- A. Overqualified suppliers
- B. Lack of vendor evaluation and quality consideration

- C. Too much automation in stores
- D. Too many product variants

62. What purchasing strategy did Orion adopt to improve procurement?

- A. Bulk seasonal buying
- B. Random supplier selection
- C. Strategic purchasing with long-term contracts
- D. Spot buying on daily rates

63. Which system helped align purchasing with production schedules?

- A. ERP for marketing
- B. Sales forecasting
- C. Material Requirement Planning (MRP)
- D. Just-in-Time billing

64. What was the result of Orion's improved purchasing process?

- A. Increased supplier complaints
- B. Higher rework rate
- C. Cost reduction and timely deliveries
- D. Delay in procurement approvals

65. What shift occurred in the perception of the purchasing function at Orion?

- A. Seen as a non-essential department
- B. Treated as a clerical function only
- C. Recognized as a key contributor to operations
- D. Merged with the HR department

(Q. 66 to 70) Case study - FlexiFurn Ltd., a modular furniture manufacturer, faced issues with stockouts of key components and overstocking of slow-moving items. This imbalance led to production delays and increased storage costs. The inventory manager realized that there was no real-time tracking and the team relied on manual stock counts.

To address this, the company implemented an ERP-based inventory management system. They categorized items using ABC analysis, automated reordering using reorder levels, and tracked usage patterns monthly. Real-time dashboards gave visibility into stock levels and helped avoid excess ordering.

As a result, inventory holding costs dropped by 20%, and on-time order fulfillment increased to 95%. The management now considered inventory a strategic asset, rather than just a stockpile.

66. What inventory issue was FlexiFurn initially facing?

- A. Too many product recalls
- B. Balanced inventory levels
- C. Stockouts and overstocking
- D. Low-quality raw materials

67. What was lacking in FlexiFurn's initial inventory system?

- A. Excessive use of automation
- B. Real-time tracking and digital control
- C. International suppliers
- D. Custom packaging solutions

68. Which technique was used to classify inventory based on importance?

- A. EOQ
- B. FIFO
- C. ABC Analysis
- D. FSN Analysis

69. What method helped automate inventory replenishment?

- A. Safety stock counting
- B. Annual physical verification
- C. Reorder level system
- D. Price benchmarking

70. What was a key result of FlexiFurn's inventory revamp?

- A. Reduced sales
- B. Increased storage costs
- C. Lower holding costs and improved order fulfillment
- D. Decline in supplier base
- 71. Delta Textiles used to let department heads make purchases. This led to inconsistencies in quality and cost. Now, a centralized purchasing system ensures better negotiation and supplier reliability.

Why is centralized purchasing important?

- A. Increases paperwork
- B. Reduces delivery time
- C. Helps negotiate better and standardize quality
- D. Promotes decentralization
- 72. At Nova Plastics, all purchases start with a **Purchase Requisition**, followed by approval and vendor selection. Final orders are placed only after comparing quotes and checking lead time.

Which step initiates the formal purchasing procedure?

- A. Goods Receipt Note
- B. Purchase Order
- C. Purchase Requisition
- D. Material Return Note
- 73. Omega Ltd. has a policy to buy only from **ISO-certified vendors** and ensure **two-level approval** for orders above ₹1 lakh.

What is the purpose of purchasing policy?

- A. Reduce staff
- B. Increase supplier base
- C. Ensure consistent, controlled buying
- D. Avoid digital records
- 74. The purchase manager at AeroTech ensures **supplier evaluation**, **contract negotiation**, and **cost optimization**. He also coordinates with stores and finance for seamless flow.

Which of the following is a key responsibility of a Purchase Manager?

- A. Supervising HR training
- B. Managing sales teams
- C. Negotiating with suppliers and ensuring timely delivery
- D. Designing product packaging
- 75. At SpiceWare Ltd., the storekeeper ensures **safe storage**, **accurate records**, and **timely issue of materials** to production lines.

Which is a primary objective of storekeeping?

- A. Hiring employees
- B. Reducing HR workload
- C. Safe and systematic storage
- D. Marketing coordination
- 76. A cluttered store at GreenLine Electronics caused delays and material mix-ups. A new layout with clear labeling and zones improved retrieval time and inventory accuracy.

Why is proper store layout important?

- A. Increases walking time
- B. Makes stores look fancy
- C. Speeds up material handling and reduces errors
- D. Helps in staff gossip
- 77. MaxTools shifted from periodic checks to a **perpetual inventory system** using barcode scanners. Now, stock levels update instantly during each transaction.

Which inventory system updates stock in real time?

- A. Periodic Inventory
- B. Annual Stock Count
- C. Perpetual Inventory
- D. Random Sampling
- 78. Sunbeam Lighting uses MRP to **plan raw material purchases** in sync with production schedules. It ensures components are available when needed without overstocking.

What is a key objective of MRP?

- A. Increase stock levels
- B. Delay production
- C. Synchronize material availability with production
- D. Create monthly sales plans

79. Zebra Paints uses **Fixed Order Quantity** for essential pigments, reordering when stock hits reorder level. For packaging materials, they use **Periodic Review System** every 15 days.

Which system orders at set time intervals, not based on stock level?

- A. EOQ
- B. Two-bin System
- C. Periodic Review System
- D. Perpetual Monitoring
- 80. MediEquip Ltd. uses **ABC Analysis** to focus on high-value surgical tools and **VED Analysis** to classify items based on their criticality (Vital, Essential, Desirable).

In ABC-VED Matrix, which category gets top priority for control?

- A. A-D
- В. С-Е
- C. A-V
- D. B-D

Answer Key -

- 1. C. Intermittent Production
- 2. B. General-purpose machines
- 3. C. Fixed sequence of operations
- 4. B. Ability to produce both mass and custom products
- 5. C. Mostly monitor automated processes
- 6. C. CNC machine overheating
- 7. C. The system had no alternative routing due to high interdependence
- 8. B. Dimensional defects in gearboxes
- 9. D. High cost of downtime and low flexibility
- 10. C. Real-time monitoring and modular production
- 11. B. Poor line balancing causing idle time and bottlenecks
- 12. C. 60 seconds
- 13. C. Applied software-based line balancing algorithm
- 14. D. Idle time reduced by 25% and efficiency rose to 85%
- 15. C. Worker resistance due to reassignment and perceived workload
- 16. B. Converting raw materials into finished goods
- 17. C. Plant layout and workflow
- 18. B. Logistics and supply chain
- 19. C. Integrated approach to process improvement and customer feedback
- 20. C. Real-time monitoring and proactive maintenance
- 21. B. Stockouts and overproduction
- 22. B. Relying on outdated forecast data
- 23. C. High inventory costs and frequent rescheduling
- 24. C. Adopted a dynamic system using real-time sales and lead times
- 25. A. Customer fulfillment improved to 95%
- 26. C. Delayed feedback and job tracking
- 27. B. Real-time updates on production status were missing
- 28. C. Sensors and real-time dashboards
- 29. B. WIP reduced by 30%
- 30. C. Need to retrain staff and redefine roles
- 31. B. Organic cold drinks
- 32. C. Availability of raw materials

- 33. C. Raw material transportation cost
- 34. C. Luxury amenities
- 35. C. Smooth launch and cost control
- 36. B. Dispatching
- 37. C. Follow-up
- 38. C. Product layout
- 39. A. Process (functional) layout
- 40. C. Coordinating planning and execution of production
- 41. C. Inconsistent product performance and high warranty claims
- 42. B. ISO 9001
- 43. C. Pareto Analysis and Cause-and-Effect Diagrams
- 44. C. By training suppliers to meet Nova's quality goals
- 45. C. Customer satisfaction improved and warranty claims dropped
- 46. B. In-flight service inconsistencies
- 47. B. Preventive systems and service process standardization
- 48. C. Standard Operating Procedures (SOPs)
- 49. C. Service errors reduced and satisfaction scores increased
- 50. B. Quality Assurance (QA) with preventive audits and staff training
- 51. B. Unplanned machine breakdowns
- 52. C. Reactive Maintenance
- 53. B. CMMS (Computerized Maintenance Management System)
- 54. B. Infrared thermography and vibration analysis
- 55. C. Reduced breakdowns and improved production efficiency
- 56. C. Inspection
- 57. C. Control chart
- 58. B. Just-in-Time (JIT)
- 59. C. Reorder level system
- 60. C. Quality management systems and customer satisfaction
- 61. B. Lack of vendor evaluation and quality consideration
- 62. C. Strategic purchasing with long-term contracts
- 63. C. Material Requirement Planning (MRP)
- 64. C. Cost reduction and timely deliveries
- 65. C. Recognized as a key contributor to operations
- 66. C. Stockouts and overstocking

- 67. B. Real-time tracking and digital control
- 68. C. ABC Analysis
- 69. C. Reorder level system
- 70. C. Lower holding costs and improved order fulfilment
- 71. C. Helps negotiate better and standardize quality
- 72. C. Purchase Requisition
- 73. C. Ensure consistent, controlled buying
- 74. C. Negotiating with suppliers and ensuring timely delivery
- 75. C. Safe and systematic storage
- 76. C. Speeds up material handling and reduces errors
- 77. C. Perpetual Inventory
- 78. C. Synchronize material availability with production
- 79. C. Periodic Review System
- 80. C. A-V