



Expected Syllabus for **Materials Management** discipline of SAIL Management Trainee (Administration) for Paper 2 for 2022-23 exam

Paper 1 (Domain Knowledge) will be from the subject areas (HR or Materials Management or Finance). It will be for 40 minutes with 100 marks. Although the number of questions have not been disclosed by the SAIL, it is likely that this section will have 100 questions.

## **Syllabus for Materials Management**

### 1. Materials Management

Introduction and Scope of Materials Management, Integrated Materials Management

### 2. Supply Chain Management

Management of Supply Chain, Technology in SCM, Recent Trends in Supply Chains

### 3. Outsourcing and Make or Buy Decision

Outsourcing, Make or Buy, Breakeven Analysis, Value Analysis

### 4. Indian Contract Act, 1872, Sale of Goods Act, 1930, Negotiable Instruments, Competition Act, 2002, Companies Act, 2013, Arbitration and Conciliation Act, 1996

### 5. Goods and Service Tax

Objectives & Benefits of GST, Working of Dual GST, Implementation Mechanism, Framework of GST, GST Procedure

### 6. Partnership Form of Business

Partnership Deed, Registration of a Firm, Types of Partners, Types of Partnerships, LLPs,

### 7. Arbitration and Conciliation Act, 1996

### 8. Indian Patent Law

### 9. Digital Signature

Information Technology Act 2000, Digital Signature

### 10. Elements of General Management

Concept of Management, Managerial Functions, Levels and Skills Managers, Managerial Roles

### 11. Tabulation of Data in Charts and Graphs

Data, Scales of Measurement, Types of Data, Summarizing Categorical Data, Summarizing Quantitative Data, Histogram, Cumulative Frequency Distributions, Ogive, Exploratory Data Analysis, Crosstabulations, Scatter Diagram and Trendline

### 12. Forecasting Techniques

Forecasting Methods, Qualitative Forecasts, Time Series Forecasting, Simple Linear Regression, Multiple Regression, Accuracy of Forecast



13. Imports Exports Documentation

Key Documents, Letter of Credit, Process of Exports and Imports, Factoring, Post-Shipment Credit, Pre-Shipment Credit, Countertrade, INCOTERMS, Foreign Bank Accounts, Tariff and non-Tariff Barriers, Foreign Trade Policy,

14. Business Correspondence

Dak Management, File Management System, Records Management, Knowledge Management Forms, Procedures and Channels of Communication, Correspondence, File Noting, Functional Approach to Noting

15. Inventory Management

Need for Inventory, Costs of Inventory, Economic Order Quantity, Production Quantity Model, Lead Time Analysis, Periodic Inventory System, Single Period Inventory Model, ABC Analysis

16. Quality Management

Six Sigma, Kaizen, Lean Production, Cost of Quality, ISO standards, Tools of Quality Management, Statistical Process Control, Process Capability, Acceptance Sampling

17. Aggregate Planning

Aggregate Production Planning, Production Planning Process, Capacity Planning, Strategies for Meeting Demand, Available to Promise & Capable to Promise

18. Production Planning and Control

Routing, Scheduling, Loading, Sequencing, Dispatching, Expediting or Monitoring

19. Materials Requirements Planning

MRP Modules, MRP Process

20. Process Planning

Production Process, Process Selection, Process Analysis, Measuring Process Performance

21. Maintenance and Waste Management

Maintenance, Waste Management, Replacement

22. Enterprise Resource Planning

ERP Modules, Implementation Plan, Implementation Process

23. Purchase Management

Elements of Purchasing, Purchasing Organization, Materials Purchasing System, Considerations while making order, Purchase Cycle, Supplier Evaluation, Vendor Rating, Vendor Analysis, Ethics in Purchasing, Applications of Computers in Purchasing, e-Procurement

24. Transportation Management

Functions of Transportation, Responsibilities of Stakeholders, Principles of Transportation, Types of Carriers, Selection of Carriers, Transportation Costs, Terms of Sale



25. Stores Management

Store Functions, Types of Stores, Preservation and Safety, Stores System and Procedure, Stores Records, Inspection of Stores, Stock Verification, Disposal of items, Spare Parts Inventory

26. Materials Handling

Palletized Storage System, Non-Palletized Storage System, Order Picking

27. Store Inventory Accounting

Inventory Valuation, Inventory Record Systems, Methods to determine Cost of Inventory

28. Codification and Standardization

Materials Specifications, Materials Codification, Materials Standardization

29. GFR 2017

Procurement of Goods, Procurement of Services, Inventory Management

**Computer Knowledge**

1. Computer Systems

Types of Computers, Working of Computer, Input Devices, Secondary Storage, Output Devices, Central Processing Unit, Computer Memory

2. Software

Systems Software, Applications Software, Programming Languages, Open Systems

3. Computer Network

Computer Communication, Components of Network, Types of Network, OSI model, Topology of Network, Network Protocols  
Distributed Systems

4. How Internet works

Introduction, Internet Protocol, e-Business

5. System Development Life Cycle

Software Development Life Cycle, Models of Software Development, Programming Errors, Software Testing, CMMI

6. Securing Information Systems

Introduction, Malware, Network Attacks, Encryption, Cyber Security

7. Data Management

Database Approach, Database Management Systems, Data Warehouse, Data Mining

8. Important Abbreviations in ICT



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humanperitus

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9. Number System

Conversion from one base to another

10. ICT and Governance

e-Governance, Data Governance

11. Computer Shortcut Keys

12. Emerging Technologies

Cloud Computing, Artificial Intelligence, Expert Systems, Fuzzy Logic, Neural Network, Big Data, Blockchain and Bitcoins, Trends in Information Technology