Syllabus- Officer (Contracts)

Question may be asked from the following topics:

1- Electrical Engineering:
   i. The Electric Current & Ohm’s Law
   ii. Work, Power and Energy
   iii. Electromagnetic Induction
   iv. Basics of Electrical Instruments and Measurement
   v. Introduction to Electrical Energy Generation
   vi. Laws of Thermodynamics-Basics
   vii. Type of Storage cells

Reference Book- Basic Electrical Engineering (Electrical Technology Vol. 1) - Author: BL Thereja.

2- Mechanical Engineering:
   i. Heat engine/cycles
   ii. C-C cycle/Phase diagram
   iii. Basic metallurgy
   iv. Basic fluid mechanics
   v. Machine Design
   vi. Theory of Mechanics
   vii. Refrigerator and Air conditioning

Reference Book- Any Basic text book on Mechanical Engineering

3- Solar Energy - Principles of Thermal Collection and Storage - Authors: SP Sukhatme & JK Nayak. The Topics are as follows:
   i. Type of Instruments for measuring Solar Radiation and Sunshine
   ii. Transmissivity Based on Reflection-Refraction
   iii. Solar Street Light
   iv. Various Angles used in Solar Calculations
   v. Snell's Law

4- Purchase Management
   i. Purchase of Goods and Services
   ii. Fundamental Principles of Public Buying
   iii. Purchase of Goods under Rate Contract
   iv. Purchase of goods by Purchasing committee
Purchase of Goods by Obtaining Bids
Advertised Tender Enquiry
Limited Tender Enquiry
Two-Stage Bidding
Single Tender Enquiry
Electronic Reverse Auction
E-Publishing
E-Procurement
Government E-Market Place (GeM)
Registration of Suppliers
Contents of binding document
Maintenance Contract
Bid Security and Performance Security
Efficiency, Economy and Accountability in Public Procurement System
Buy-Back Offer

5- Inventory Management

Types of Inventory
Cost of associates with inventories
Replenishment of Inventory
Inventory Management System
Spare Parts Inventories
Ware House and Inventory Operations Systems
Receipt of Goods and materials from private suppliers
Receipt/Issue of goods and materials from internal divisions of the same organization
Customs clearance of goods and materials
Procedure of Physical verification and Consumables and Assets
Buffer Stock
Disposal of goods and Modes of disposals
Total Quality Management

6- Inventory Management

Objectives of Logistics
Supply Chain Management
Ware House Management
Material Handling system
Storage Systems

7- Packaging and Distribution

Introductions to Packaging
Packaging Material
Forms of Packaging
Bar Codes and RFID Packaging
Syllabus - Asst. Officer (Contracts)

1- Question may be asked from the following topics:

**Electrical Engineering:**

i. The Electric Current & Ohm’s Law  
ii. Work, Power and Energy  
iii. Electromagnetic Induction  
iv. Basics of Electrical Instruments and Measurement  
v. Introduction to Electrical Energy Generation  
vi. Laws of Thermodynamics-Basics  
vii. Type of Storage cells

Reference Book: Basic Electrical Engineering (Electrical Technology Vol. 1) - Author: BL Thereja.

2- **Mechanical Engineering:**

i. Heat engine/cycles  
ii. C-C cycle/Phase diagram  
iii. Basic metallurgy  
iv. Basic fluid mechanics  
v. Machine Design  
vi. Theory of Mechanics  
vii. Refrigerator and Air conditioning

Reference Book: Any Basic text book on Mechanical Engineering

3- **Solar Energy** - Principles of Thermal Collection and Storage - Authors: SP Sukhatme & JK Nayak. The Topics are as follows:

i. Type of Instruments for measuring Solar Radiation and Sunshine  
ii. Transmissivity Based on Reflection-Refraction  
iii. Solar Street Light  
iv. Various Angles used in Solar Calculations  
v. Snell's Law
4- **Purchase Management**

i. Purchase of Goods and Services  
ii. Fundamental Principles of Public Buying  
iii. Purchase of Goods under Rate Contract  
iv. Purchase of Goods by Obtaining Bids  
   a) Advertised Tender Enquiry  
   b) Limited Tender Enquiry  
   c) Two-Stage Bidding  
   d) Single Tender Enquiry  
   e) Electronic Reverse Auction  

v. E-Publishing  
vi. E-Procurement  

vii. Registration of Suppliers  
viii. Contents of binding document  
ix. Bid Security and Performance Security

5- **Inventory Management**

i. Types of Inventory  

ii. Receipt of Goods and materials from private suppliers  

iii. Receipt/Issue of goods and materials from internal divisions of the same organization  

iv. Procedure of Physical verification and Consumables and Assets  

v. Buffer Stock  

vi. Disposal of goods and Modes of disposals

6- **Inventory Management**

i. Objectives of Logistics  

ii. Supply Chain Management  

iii. Warehouse Management  

iv. Material Handling system  

v. Storage Systems

7- **Packaging and Distribution**

i. Introductions to Packaging  

ii. Packaging Material  

iii. Forms of Packaging  

iv. Bar Codes and RFID Packaging