

## **Indicative Syllabus for CBT/Written Examination** **(Advertisement No. 03/2022 dated 03.09.2022)**

### **Scheme of examination:**

Exam Format – CBT/Written Test will be of 120 minutes duration with 120 objective type questions.

	<b>Name of the Test</b>	<b>No. of Qs.</b>	<b>Max. Marks</b>	<b>Version</b>	<b>Time</b>
1	Professional Knowledge	60	90	Hindi & English language except English language section	Composite time of 120 Minutes
2	General Awareness	15	15		
3	English Language	15	15		
4	Logical Reasoning	15	15		
5	Quantitative Aptitude	15	15		
	<b>Total</b>	<b>120</b>	<b>150</b>		

### **1. Discipline: Human Resource**

- Human Resource Planning
- Recruitment & Selection
- Human Resource Development: Strategies and Systems
- Performance Management & Appraisal
- Competency Mapping
- Training and Development
- Management of Compensations and Benefits
- Rewards & Recognition
- Organizational Structure Design and Change
- Organizational Behavior
- Management of Change and Organization Effectiveness
- Managing Interpersonal Relations and Group Processes
- Emotional Intelligence and Managerial Effectiveness
- Transactional Analysis
- Industrial Relations & Trade Unions
- Labour Laws
- Conflict Management
- Collective Bargaining and Negotiations process
- Grievance Management
- Management Science
- Business Policy and Strategic Analysis
- Corporate Evolution and Strategic Management
- Cross Cultural and Global Management
- International Business Environment
- Business Ethics, Corporate Governance & Social Responsibility
- Understanding Society and Social Structure

- Managerial Economics
- Assessment & Development Centre
- Financial Management and Accounting
- Marketing Management
- Quantitative Methods & Research Methodology
- Production and Operations Management
- Marketing Research
- Computer Applications in Business
- Management Information Systems
- Human Resource Information System
- Total Quality Management

## **2. Discipline: Materials**

- Production Function
- Micro Economics, applied to plant and industrial undertaking
- Process Planning
- Manufacturing Schedule
- Replacement Analysis
- Purchasing or Procurement
- Purchase Organization
- Buying Techniques
- Quantity and Quality Standards
- The Purchasing Procedure
- Accounting
- Stores, Material Control & Scrap Disposal
- Receipts and Issue of Materials
- Store Records
- Codification of Material
- Physical Verification of Stores
- Inventory Control
- Inventory Classification
- Inventory Management
- Objectives of Inventory Control
- Functions of Inventories
- Economic Order Quantity
- Inventory Models
- ABC Analysis
- Material Requirements Planning
- Manufacturing Resources Planning
- Operation Cycle

## **3. Discipline: Legal**

- Companies Act, 2013
- The arbitration and Conciliation Act of 1996 along with the Arbitration and Conciliation Amendment Act, 2015
- The Indian Contract Act, 1872
- Transfer of Property Act, 1882
- The Code of Civil Procedure, 1908
- The Constitution of India
- The Industrial Disputes Act, 1947
- The factories Act, 1948
- The Payment of Wages Act, 1936

- The Minimum Wages Act, 1948
- The Contract Labour (Regulation & Abolition) Act, 1970
- The Employees Provident Fund & Miscellaneous Provisions Act, 1952
- The Employees compensation Act, 1923
- The Employees state Insurance Act, 1948
- Maternity benefit Act, 1961
- The Payment of Gratuity Act, 1972
- The payment of Bonus Act, 1965
- Rules of Drafting and Convincing
- The Arbitration and Conciliation Act, 1996 with major amendments
- The Trade Union Act, 1926
- Industrial Employment (Standing Orders) Act, 1946
- Micro, Small and Medium Enterprises Development Act, 2006
- The Administrative Tribunals Act, 1985
- Consumer Protection Act, 2019

#### **4. Discipline: Environment**

- Chemistry for Environmental Engineering
- Sewage Treatment Plants
- Air Pollution Control Technologies
- Waste Management (Solid Waste, Hazardous waste, E-waste, Biomedical Waste, Plastic waste and used Batteries waste)
- Industrial Wastewater Treatment (Design of ETPs/CETPs etc.)
- Sewerage and Water Supply Engineering
- Noise Pollution & Control
- Soil Contamination & Remediation
- Water & Air Quality sampling
- Industrial Pollution Control (Thermal Power Plant, Tanneries, Dairy, Steel and Oil Refineries)
- Sensors & Transducers, Measurement techniques used in GC/ GC-MS/NDIR / Spectrophotometer/ HPLC/AAS/ICP/ERY/ED-ERF/ Flame photometer/FTIR/ Etc.
- Continuous Emission Monitoring Systems
- Units and Standards. Measurement of current, Voltage, Power

#### **5. Discipline: Civil**

- Civil Engineering Building Materials
- Estimating
- Costing and Valuation
- Surveying
- Soil Mechanics
- Hydraulics
- Irrigation Engineering
- Transportation Engineering
- Environmental Engineering
- Structural Engineering: theory of Structures, Concrete Technology, RCC Design, Steel Design
- Building planning & drawing
- Construction management
- Foundation engineering
- Design and drawing of steel structures

**6. Discipline: Marketing**

- Marketing Management
- Marketing Research
- Marketing Planning & Strategies
- Marketing Types
- Product Management
- Pricing Decisions
- Distribution strategies
- Promotion Mix and Sales
- Brand Management
- Consumer Behavior
- Services/Digital Marketing
- Advanced Marketing Techniques
- Marketing Awareness
- Financial Awareness
- Customer Insights
- Retailing and wholesaling
- Marketing Channels
- Communications Strategy
- Advertising and PR
- Personal Selling
- Direct Customer Relationships
- Digital Marketing
- Business Markets (b2b buying process)
- Customer Driven Strategy- Market Segmentation, Market Targeting, Micromarketing, differentiation and positioning
- Product Life Cycle - New Product Development
- Pricing Strategies

**7. Discipline: IT**

- Operating System
- Data Structure
- Object Oriented Programming
- Database Management Systems
- Compiler Design/language Processor
- Computer Organization
- Microprocessor and Computer Hardware
- Computer Network
- Software Engineering
- Web Technology
- Data Warehousing and Data Mining
- Computer and Network Security

**8. Discipline: Finance & Accounts**

<b>Subject</b>	<b>Syllabus</b>
Basic Accounting Concept & Standards	Conceptual clarity on basic Accounting concepts like Going concern, Accrual etc. Good understanding of Ind As.
Preparation of Accounts , Costing & Budgetary Control	Preparation of Accounts in computerized environment and analysis of financial statement including ratio analysis
	Understanding of Costing Techniques like Marginal Costing, absorption costing etc. Cost Audit of Companies
Banking/Treasury Management & Capital Budgeting	Understanding of various Investment avenues available in market
	Method of raising Debt from market including Working Capital Management
	Various Capital Budgeting Techniques used for evaluation of projects
Taxation	Income Tax including the filing of the return, TDS, Advance Tax etc.
	Goods & Services Tax
Auditing	Auditing concepts and methods including new areas like Risk based Audit
	Internal & External Audit of Companies (Statutory Audit , C&AG Audit , Internal Audit ,Cost Audit)
Commercial Laws/Mercantile Law	The Indian Contract Act,1872
	Companies Act,2013
	The Sale of Goods Act,1930
	Negotiable Instrument Act,1881
	Payment of Gratuity Act , Bonus Act etc.
	Understanding of changes in New Labour code