Curriculum for CBT for Programme/Project Executive post

1. *Data structures:*

Notion of abstract data types, Stack, Queue, List, Set, String, Tree, Binary search tree, Heap, Graph

2. *Programming Methodology:*

C programming, Program control (iteration, recursion, Functions), Scope, Binding, Parameter passing, Elementary concepts of Object oriented, Functional and Logic Programming

3. *Algorithms for problem solving:*

Tree and graph traversals, Connected components, Spanning trees, Shortest paths; hashing, Sorting, Searching; Design techniques (Greedy, Dynamic Programming, Divide-and-conquer)

4. *Compiler Design:*

Lexical analysis, Parsing, Syntax directed translation, Runtime environment, Code generation, Linking (static and dynamic); Operating Systems: Classical concepts (concurrency, synchronization, deadlock), Processes, threads and Inter-process communication, CPU scheduling, Memory management, File systems, I/O systems, Protection and security.

5. *Computer Networks:*

ISO/OSI stack, sliding window protocol, LAN Technologies (Ethernet, Token ring), TCP/UDP, IP, Basic concepts of switches, gateways, and routers COMPUTER HARDWARE

6. *Digital Logic:*

Logic functions, Minimization, Design and synthesis of Combinational and Sequential circuits; Number representation and Computer Arithmetic (fixed and floating point)

7. *Computer Organization:*

Machine instructions and addressing modes, ALU and Data-path, hardwired and micro-programmed control, Memory interface, I/O interface (Interrupt and DMA mode), Serial communication interface, Instruction pipelining, Cache, main and secondary storage

8. *Databases:*

ER-model, Relational model (relational algebra, tuple calculus), Database design (integrity constraints, normal forms), Query languages (SQL), File structures (sequential files, indexing, B and B+ trees), Transactions and concurrency control

9. *Information Systems and Software Engineering:*

Information gathering, requirement and feasibility analysis, data flow diagrams, process specifications, input/output design, process life cycle, planning and managing the project, design, coding, testing, implementation, maintenance

Curriculum for CBT for Assistant Manager Post

1.   *General Intelligence & Reasoning*:

Questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, problem solving, analysis, judgment, decision making, visual memory, relationship concepts, arithmetical reasoning, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, etc.

2.   *General Awareness and Current Affairs:*

The test may also include questions relating to India and its neighbouring countries especially pertaining to Sports, History, Culture, Geography, Economic Environment, General Policy, Indian Constitution, Scientific Research and also relating to Energy Sector issues etc.

3.   *Numerical Aptitude:*

The test consists of questions on Addition, Multiplication, Division, Fractions, Percentage, Rate of Interest, Work and Time, Ratio and Proportion, Distance & Time, Profit & Loss, Geometry, etc.

4.   *Data Analysis and Sufficiency*:

This sub test is designed to test the ability of candidate to interpret and analyse the information and the data provided in the form of table, line graph, bar graphs, pie charts or combination of them. It also includes questions to test the ability to find out the sufficiency of data to answer the questions.

5.   *English Language:*

This sub-test is aimed to test candidate's ability to comprehend a situation from a given passage and testing the language ability of the candidates in day to day communication in English. It includes questions on synonyms, antonyms, words with corresponding meanings, singular, plural, one word substitutes, idioms and phrases, correct spellings, etc.

Curriculum for CBT for Accounts Officer post

Accountancy & Advanced Accountancy:

Basic concepts and conventions-accounting process upto and including preparation of financial accounts. Bank reconciliation statement, Bills of exchange, Preparation of trial balance, final statements of accounts, errors and their rectification, consignment, joint ventures, Depreciation, Provision and Reserves and Accounting Standards in India. Self-Balancing Ledgers, Royalties, Hire Purchases Instalment Systems, single-entry, non-trading concerns, Accounts from incomplete records, Accounts of non-trading concerns, Partnership Accounts (including admission, retirement, death and dissolution), Branch Accounts, Company accounts (Issues and forfeiture of Shares and Debentures-redemption of debentures-bonus shares and final accounts)–Accounting standards–liquidation of companies, Life Insurance Companies Bank Accounts, Amalgamation, absorption and re-construction, valuation of goodwill and shares and Ratio Analysis. C

Cost & Management Accounting:

Materials, Labour costs and Overheads, Methods of Costing: (a) Unit or output costing, (b) job and contract costing, (c) Operating costing (d) Process costing and Marginal Costing and Break even analysis, Standard costing and variance analysis, Budgetary Control, financial statement analysis –Ratio analysis –Working Capital Management - Funds flow and Cash Flow.

Auditing:

Fundamentals, Internal Check and control, Vouching and Verification, Audit of Companies, Divisible Profits and Auditing Standards of India.

Curriculum for CBT for Account Assistant post

General Intelligence Test :

The purpose of this is the ability to test the candidate's understanding of a new situation, analyse and identify its various elements. Questions in this test will be based on the Understanding and explore instructions, relationships, similarities, consistent, conclusions and actions etc.

General Knowledge :

This part of question paper is to assess the candidates' ability regarding general knowledge about his/her surroundings and about its use in society. In this test such a question which will be kept to check current events and everyday science and the facts of experience which may include historical and geographical facts. (Specially Related to India) and judged them to the knowledge of the scientific aspects, which can be expected of any educated person.

Book-keeping, Accounting Law & Arithmetic :

In this part question will be related to test the ability of candidates in knowledge of Fundamental Book-keeping and Accounting Law, in which basic principles of accounting, preparation of initial accounting books, Adjustments – Depreciation, Provision for Doubtful Debts, Outstanding and Prepaid, evaluation of Inventories, preparation of Final Accounts, Hire Purchase and Instalment Payment methods, Branch and departmental account, Insolvent Accounts, calculations of insurance claims, double entry system, Bank Reconciliation Statement, Internet Banking, Use of Computer in Budgetary Control, Introduction to Accounts of Indian Government, Internal Audit, knowledge of Financial Rules, R.T.G.S., knowledge of Stores purchase Rules, E-Banking, Taxation and Arithmetic related questions will include.

Curriculum for CBT for Office Assistant, Receptionist, Store Keeper posts

Reasoning:

Puzzles, Seating arrangements, Direction sense, Blood relation, Syllogism, Order and ranking, Coding decoding, Machine input and output, Inequalities, Alpha numerical- symbol series. Data sufficiency, Logical reasoning (passage inference, statement and assumption, statement and conclusion, argument and cause and effect, Common Sense Reasoning).

Quantitative Aptitude:

Data interpretation (bar graph, line chart, tabular, case let, radar/web, pie chart), Inequalities, Number series, Quadratic equations, Approximation and simplification, Data sufficiency, Miscellaneous Arithmetic problems (HCF and LCM, profit and loss, S.I and C.I, problem on ages, time and work, time and distance, probability, mensuration, permutation and combination, average, ratio and proportion, partnership, boats and streams, trains, allegation and mixture, pipe and cisterns)

Computer language:

Computer fundamentals, Software and Hardware, Fundamentals, Networking, MS Office, Database, History and Future of computers

General Knowledge Syllabus:

Current events and affairs of national and international importance, General Science and applications in daily life, Indian and world history, Indian and world's geography, Indian polity and Constitution including Governance in India, Economical and social developments, Scientific discoveries and technologies, Sports and general knowledge, Books and authors, Important days and dates, Awards and Prizes.