



অসম লোকসেৱা আয়োগ

ASSAM PUBLIC SERVICE COMMISSION

Jawaharnagar, Khanapara, Guwahati-781022.

S Y L L A B U S

**Junior Manager (IT) in Assam Power Generation Corporation Limited (APGCL)**  
**(ADVT. NO. 12/2023 dated 25<sup>th</sup> April, 2023)**

Paper-I

**Information Technology**

(Multiple Choice Question Type)

(Diploma Course Standard)

**Full Marks:** 100 Marks

**Time:** 2-00 hours

**Object Oriented Programming in C++:** Principles of Object Oriented Programming, Classes & objects, Functions, Constructors & Destructors, Inheritance, Polymorphism, Encapsulation, Pointers in C++, Array, String.

**Database Management System:** Database system concepts, Database Model, Types of Database, Relational Data Model, ER Diagram & Normalization, SQL, Query Processing & Transaction Processing, Concurrency, Lock Based Protocols.

**Operating System:** Introduction to Operating System, Evolution, Generations, Components & Services, Process Management, Scheduling Algorithms, Memory Management, I/O management, File System Management, Security & Protection.

**Data Structure:** Introduction to Data Structure, Principles of Programming & Analysis of Algorithms, Sorting & Searching Algorithms, Stacks, Linked Lists, Type of Lists, Queues, Trees, Tree Types & Traversal Methods, Graphs and Hashing.

**Microprocessor and Assembly Language Programming:** Basics of Microprocessor, 16 bit Microprocessor, Instruction set, Assembly language programming.

**Data Communication & Computer Networks:** Basic Network concepts, Network Topologies, Networking Devices, Transmission media, OSI Model, TCP/IP Fundamentals.

**Basics of Multimedia and Web Development:** Multimedia Basics, Audio Fundamentals, Image Fundamentals, Image and Graphics, World Wide Web & Its Evolution, HTML, CSS.

**Computer Organization and Architecture:** Software & Hardware Organization of Computers, Addressing Modes, CPU Design, Memory organization, I/O Organization, DMA Data Transfers.

**Basic Electronics:** Introduction to Digital Electronics, Number System, Logic Gates & Boolean Algebra, Flip-Flops, Memories, Semiconductors, Rectifiers & Filters, Transistors.

**Software Development:** Software Development Process, Analysis & Design Models, Software Testing Fundamentals.

**Computer Hardware and Maintenance:** Motherboard & its Components, Memory & Storage Devices, I/O Devices & Interface, Power Supply, Troubleshooting & Maintenance.



Controller of Examinations  
Assam Public Service Commission  
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## SYLLABUS

Recruitment to the post of Junior Manager (Electrical / Mechanical / IT / Instrumentation) under Assam Power Generation Corporation Limited (APGCL)

(Advt. No. 12/2023 dated 25/04/2023)

**PAPER – II**  
**GENERAL STUDIES**  
(Multiple Choice Question Type)

Full Marks: 100 Marks

Time: 2-00 hours

Subject	Topics	No. of Questions	Marks
General English	Sentence Completion, sentence improvement, ordering of words in a sentence, spotting errors, synonyms and antonyms, Idioms and phrases, fill in the blanks, word groups etc.	25	25
General Aptitude & Emotional Intelligence	Time and distance; Series, Analogy, Statement, Direction; Verbal and non-verbal reasoning etc. Understanding Emotional Intelligence, Personality and EQ, The Ability Model of EI, The Trait Model of EI, The Mixed Model of Emotional Intelligence, The Bar-On Model of Emotional Social Intelligence and the Genos Model, Criticism of the Theoretical Foundation and Measures of Assessment of Emotional Intelligence, Emotional Intelligence, Personality Disorders, and Individuals on the Autism Spectrum, EQ and Personal Relationships, Emotional Intelligence in the Workplace, Improving your Emotional Intelligence.	50	50
General Knowledge	Current Affairs (National and International); Who's Who; Sports; Books and Authors; Awards and Honours; Science – Inventions and Discoveries; Abbreviations; Important Days etc.	25	25

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