Technical Syllabus for Exam Group – Electronics & Allied Engineering

Below is the Syllabus for Electronics & Allied Engineering Exam Group:

- **Electronic Components & Materials–** Conductors, Semi conductor & Insulators; Magnetic materials; Jointing & Cleaning materials for U/G copper cable & OFC; Cells and Batteries (chargeable and non chargeable); Relays, Switches, MCB & Connectors.
- **Electronic Devices and circuits–** PN Junction diodes, thyristor; Diode and triode circuits; Junction Transistors; Amplifiers; Oscillator; Multivibrator, counters; Rectifiers; Inverter and UPS.
- **Digital Electronics**– Number System & Binary codes; Boolean Algebra & Logic gates; Combinational & Sequential logic circuits; A/D & D/A converter, counters; Memories.
- **Linear Integrated Circuit**– Introduction to operational Amplifier; Linear applications; Non Linear applications; Voltage regulators; Timers; Phase lock loop.
- **Microprocessor and Microcontroller**– Introduction to microprocessor, 8085 microprocessor working; Assembly Language programming; Peripherals & other microprocessors; Microcontrollers
- **Electronic Measurements**– Measuring systems; Basic principles of measurement; Range Extension methods; Cathode ray oscilloscope, LCD, LED panel; Transducers
- **Communication Engineering**– Introduction to communication; Modulation techniques; Multiplexing Techniques; Wave Propagation, Transmission line characteristics, OFC; Fundamentals of Public Address systems, Electronic exchange, Radar, Cellular and Satellite Communication.
- **Data communication and Network**– Introduction to data communication; Hardware and interface; Introduction to Networks and Networking devices; Local Area Network and Wide area network; Internet working.
- **Computer Programming**– Programming concepts; Fundamentals of 'C' and C ++; Operators in 'C' and C ++; Control Statements; Functions, Array String & Pointers, File Structure; Data Structure and DBMS
- **Basic Electrical Engg.**– DC Circuits; AC fundamentals; Magnetic, Thermal and Chemical effects of Electric current; Earthing – Installation, Maintenance, Testing.

****** End of Syllabus - Electronics & Allied Engineering ******