

SYLLABUS

FOR WRITTEN EXAMINATION

FOR THE POST OF SCT PC (IT&CO)

Rc No. 39 / Rect. / Admn-1 / 2022 dated 25-04-2022

TECHNICAL PAPER (OBJECTIVE TYPE OMR BASED) **(200 Questions for 200 Marks)**

1. Electrical: Characteristic and Application of conductors, Insulators, Semiconductors; Construction of carbon, wire wound (linear logarithmic) resistors, thermistors potentiometers; Kirchhoff's law, Ohm's Law; principle of construction and special feature of simple meter, Moving iron/Moving coil meter, VTVM, Universal meter, Ohm meter and Ammeter; alternating current, A.C induced voltage, current; Faraday's principle; Lenz's law of self induction; A.C generators and Fleming's three finger rule, Frequency peak, average R.M.S values; Function and application of vibrators;

2. Electronics & Radio: Characteristics and Application of inductance in a tuned circuit; Coil- Concept of reactance, phase, power factor, Inductance and co-efficient of coupling; series and parallel connection of capacitor in A.C circuits, different types of capacitors and their application, basic elements of resonance circuit, parallel L.C circuit, Anti resonance circuit, tuning and current gain, construction of Transistors, Bi-polar junction devices, PNP & NPN transistors and dynamic curves, principle of FET transistors, uses of diodes as rectifiers, Half wave and Full wave rectifier circuit, Bridge rectifiers, effect of ripples, uses of filters, carrier modulation (AM and FM) Single side band, Band width, Fidelity and quality construction in the receiver, detectors, discriminators, Range of Audio and quality construction in the receiver, detectors, discriminators, Range of Audio Frequency, Necessity for amplifications like Class 'A' 'B' and 'C', push-pull voltage amplifier.

3. Basics of Computers: MS-Office (MS-word, EXCEL and Power point): Fundamentals of Computer Architecture, Mother board and peripherals, accessories, MS-DOS, Windows operating systems, PC assembly and software installation, networking & LAN, basics of WAN, Basic Concepts of Cyber Security.

4. Telephone System: Basics of PSTN telephone network, Telephone instruments, EPABX, FAX, Internet telephony, GSM and CDMA phone system.

Note: In case any dispute about any question or answer, the decision taken by the Subject Expert Committee shall be final. The Board does not prescribe any particular textbook or publication and is not bound by the material appearing in any book or publication.

SYLLABUS
FOR WRITTEN EXAMINATION
FOR THE POST OF SCT PC (MECHANIC)
Rc No. 39 / Rect. / Admn-1 / 2022 dated 25-04-2022
TECHNICAL PAPER (OBJECTIVE TYPE OMR BASED)
(200 Questions for 200 Marks)

Introduction to Automobiles, 4 and 2 Strokes Spark Ignition Engine, Compression Ignition, Engines and working principles, Petrol and Diesel Engine Components, Valve and operating Mechanism, Cooling System, Lubricating System, Fuel System in Petrol Engine, Ignition System Fuel Injection System in diesel engines. Intake and Exhaust System, Battery, Automotive Electricity, Alternator, Dynamo, Cut out, Fuses, Self Starter, Wiring and Electrical Accessories, Brakes Transmission Systems, Wheel Alignment, Steering, Suspension, Mechanic Tools, Work Shop Tools, Servicing of Vehicles, Check up of vehicles for Road Worthiness, Fleet Maintenance of vehicles, Safety Precautions.

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SYLLABUS

FOR WRITTEN EXAMINATION

FOR THE POST OF SCT PC (DRIVER)

Rc No. 39 / Rect. / Admn-1 / 2022 dated 25-04-2022

TECHNICAL PAPER (OBJECTIVE TYPE OMR BASED)

(200 Questions for 200 Marks)

Maintenance Responsibility, Drivers daily routine duty, Daily maintenance, Weekly Maintenance, Periodical Maintenance, Battery maintenance, its specific gravity, Tyres Maintenance and rotation, Fuel System, Ignition System, Lighting System, Brake System, Clutch & Transmission System, Fuel Accountability, Dash Board Instruments, Canopy and Seats Cleaning off Wind Screen and Wipers, Minor Repairs Viz. Fan Belt Replacements, Attending Wheel Punctures, Air Lock Removal, MV Act and Rules, Traffic Signals, First Aid Practice, Safety Precautions.

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