

- Q.25 Explain need of voltage regulation in charging system. (CO3)
- Q.26 Differentiate between HT and LT cables.
- Q.27 Write necessity of color coding in wiring system of car. (CO2)
- Q.28 Explain concept of immobilizer. (CO4)
- Q.29 Write a short note on boost charging. (CO5)
- Q.30 Explain concept of hybrid vehicle. (CO7)
- Q.31 Describe specific gravity testing of electrolyte by hydrometer. (CO3)
- Q.32 Write the names of sensors used MPFI system. (CO4)
- Q.33 Enlist various warning lights in automobile. (CO2)
- Q.34 Write advantages of alkaline battery over lead acid battery. (CO3)
- Q.35 Describe working of solenoid switch. (CO3)

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain principle, working and construction of lead acid battery in detail. (CO2)
- Q.37 Describe construction and working bendix drive with neat diagram. (CO6)
- Q.38 Explain various battery defects in detail. (CO3)

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5th Sem / Auto

Subject:- Auto Electrical And Electronics Systems

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Specific gravity of fully charged lead acid battery cell is
- a) 1.100 b) 1.280
- c) 2.180 d) 1.170
- Q.2 Electrolyte used for lead acid battery is
- a) KOH b) HCL
- c) H_2SO_4 d) NaCl
- Q.3 Odometer is used for measurement of
- a) RPM b) Distance
- c) Speed d) Fuel consumption
- Q.4 The capacity of battery is expressed in term of
- a) Volts b) Ampere
- c) Ampere Hour d) Weight

- Q.5 Number of cells in 12 V battery are
- a) 4 b) 5
c) 3 d) 6
- Q.6 The increases in number of plates in battery will
- a) Increase Voltage
b) Increase Current
c) Increase Ampere Hour
d) None
- Q.7 Dynamo generates
- a) Direct current b) Alternating current
c) Both A & B d) Power
- Q.8 Ignition coil is used to
- a) Step up current b) Step up voltage
c) Step down current d) Step up power
- Q.9 Chemical energy is converted to _____ energy by fuel cell
- a) Solar b) Potential
c) Mechanical d) Electrical
- Q.10 The function of alternator is
- a) Measure the current b) Discharge battery
c) Charge battery d) Measure voltage

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SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Write the full form of ECU.
- Q.12 In India negative earthing is adopted in automobile . (True/False)
- Q.13 Write full form of HT cable.
- Q.14 Write function of starting motor.
- Q.15 Write use of horn.
- Q.16 Cut out relay is the part of _____ system. (Charging / Starting / Ignition)
- Q.17 Define Rectifier.
- Q.18 Write full form of ORVM.
- Q.19 Write material for positive plate for leads acid battery.
- Q.20 Alkaline batteries are mostly used in electrical vehicles.(True/False)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Write the names and functions of various electrical systems of automobile. (CO5)
- Q.22 Describe charging reaction of lead acid battery. (CO3)
- Q.23 Draw circuit of charging system. (CO3)
- Q.24 Write function of head lamp and fog lamp. (CO5)

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