

- 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

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)