

## **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain the various types of drives used in automobiles . Give their advantages and disadvantages also. (CO5)

Q.24 With the help of neat sketches, explain any ten types of mandatory/cautionary/ informative signs. (CO5)

Q.25 Explain the major components of an IC engine. (CO3)

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220314

## **1st Sem. / Automobile**

### **Subject : Basics of Automobile Engineering**

Time : 3 Hrs.

M.M. : 60

## **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 What is an Automobile ? (CO1)
- a) Self-propelled vehicle
  - b) Used for carrying passenger and goods on the ground
  - c) Contains the power source for its propulsion
  - d) All of these

- Q.2 Which of the following fuels cannot be used in automobiles (CO2)
- a) Kerosene
  - b) Diesel
  - c) Gasoline
  - d) Coal

- Q.3 The axle that transmits power is called (CO3)
- a) Live axle
  - b) Dead axle
  - c) Double axle
  - d) Main axle

Q.4 Universal joint is used to connect two shafts that are \_\_\_\_\_ to each other. (CO4)

- a) Inclined at an angle
- b) Parallel
- c) perpendicular
- d) In straight line

Q.5 The type of glass used in front windshield is known as \_\_\_\_\_ (CO3)

- a) Tempered glass
- b) Laminated glass
- c) Clear Glass
- d) Plain Glass

Q.6 In 4-cylinder Compression-ignition engines you find (CO4)

- a) 2 spark plugs
- b) 4 spark plugs
- c) 4 fuel injectors
- d) 3 fuel injectors

## SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 The full form of IC Engine is \_\_\_\_\_ (CO4)

Q.8 We should always overtake a vehicle from \_\_\_\_\_ side of it. (CO5)

Q.9 The inner diameter of cylinder known as \_\_\_\_\_ (CO4)

Q.10 Full form of SUV is \_\_\_\_\_ (CO1)

Q.11 Define Chassis. (CO1)

Q.12 Write full form of HMV & LMV. (CO5)

## SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Write five applications of Automobile. (CO5)

Q.14 Enumerate the functions of electrical system of a vehicle. (CO2)

Q.15 Classify automobile bodies. (CO1)

Q.16 Draw a line diagram of a four stroke IC engine and name the four strokes. (CO4)

Q.17 With the help of a sketch, explain traffic light system. (CO5)

Q.18 Write the need of vehicle safety system. (CO3)

Q.19 Write the material and function of piston. (CO3)

Q.20 Describe the layout of two-wheeler. (CO1)

Q.21 Describe concept of clearance volume, swept volume and compression ratio. (CO4)

Q.22 Differentiate between integral and semi integral frame. (CO1)