

- Q.18 Write a short note on brake drum. (CO4)
- Q.19 Explain, in brief, master cylinder with the help of neat sketch. (CO4)
- Q.20 Write the function of suspension system. (CO3)
- Q.21 Explain the principle of differential. (CO2)
- Q.22 Explain, in brief, different method of battery charging. (CO5)

#### SECTION-D

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

- Q.23 Explain the construction and working of single plate clutch with the help of neat sketch. (CO2)
- Q.24 Explain Ackerman steering mechanism with the help of neat sketch. (CO3)
- Q.25 Explain with neat sketch, the principle, construction and working of hydraulic brakes. (CO4)

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**6th Sem / Mechanical Engg. (Tool & Die Design)**

**Subject : Automobile Engineering**

Time : 3 Hrs.

M.M. : 60

#### SECTION-A

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

- Q.1 Which of these were or are used in automobiles to provide suspension? (CO3)
- a) Coil springs                      b) Torsion bars
- c) Leaf springs                      d) All of the mentioned
- Q.2 Which of the following is found in an automobile's electrical system? (CO1)
- a) Lighting system                      b) Battery
- c) Alternators                      d) All of the mentioned

Q.3 Which of the following parts does not include an automobile chassis ? (CO1)

- a) Differential                      b) Brakes
- c) Steering system                d) Shock absorber

Q.4 Which of the following is a classification of IC Engine? (CO6)

- a) Otto cycle engine                b) Four-stroke engine
- c) S.I. engine                        d) None of the above

Q.5 Which of the following material is used to make connecting rod ? (CO2)

- a) Cast iron                          b) Mild Steel
- c) Forged steel                      d) Tool steel

Q.6 Which of the following provides passages for the flow of cooling water ? (CO2)

- a) Crankcase                        b) Cylinder block
- c) Piston                              d) Cylinder head

## SECTION-B

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

Q.7 Write the function of camshaft. (CO2)

Q.8 Define chassis of an automobile. (CO1)

Q.9 What is the value of caster angle ? (CO3)

Q.10 What is the function of parking brakes. (CO4)

Q.11 Name two type of wheel balance. (CO3)

Q.12 Define battery capacity . (CO5)

## SECTION-C

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

Q.13 Write a short note on hybrid electric vehicle . (CO1)

Q.14 Explain, in brief, working of camshaft. (CO2)

Q.15 Write the advantages of multi plate clutch. (CO2)

Q.16 Write the function of transmission system. (CO2)

Q.17 Name different types of rear axle . (CO3)