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**4th Sem / Branch : Automobile Engineering**

**Subject:- Chassis Body And Transmission-I**

Time : 3Hrs.

M.M. : 100

**SECTION-A**

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

Q.1 Which one of the following is not a part of the chassis. (CO2)

- a) Wheels                      b) Rear axle
- c) Front axle                d) Seats

Q.2 The purpose of gear box in an automobile is to (CO5)

- a) Vary torque
- b) vary speed
- c) permanent speed reduction
- d) None of these

Q.3 Which one of the following is mounted between the engine and gear box. (CO5)

- a) Propeller shaft          b) Reduction fan
- c) Clutch                      d) Differential gear

Q.4 Which one of the following is not a part of transmission system. (CO3)

- a) Clutch                      b) Axle
- c) Propeller shaft          d) Differential

Q.5 The function of steering system is to (CO9)

- a) to stop vehicle
- b) vehicle direction control
- c) all of these
- d) none of these

Q.6 Clutch transmit \_\_\_\_\_ motion of shaft to another shaft. (CO6)

- a) Translatory                b) Rotary
- c) Both of these            d) None of these

Q.7 Fluid flywheel works on the principle of \_\_\_\_\_ action. (CO7)

- a) Centrifugal                b) Centripetal
- c) Both of these            d) None of these

Q.8 Camber is the tilt of the wheel at the top from the \_\_\_\_\_ position (CO6)

- a) Vertical                      b) Horizontal
- c) Both a & b                d) None of these

Q.9 In single plate clutch gear shifting is \_\_\_\_\_. (CO9)

- a) Easier                        b) Difficult
- c) Hard                         d) None of these

Q.10 The automobile's electrical system contains the following \_\_\_\_\_. (CO1)

- a) Battery                      b) Alternators
- c) Lighting system          d) a, b & c

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### SECTION-B

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

- Q.11 Define automobile. (CO1)
- Q.12 Write the function of seat belt. (CO2)
- Q.13 Write the materials used for the construction of Chassis frame. (CO2)
- Q.14 What is the friction clutch? (CO3)
- Q.15 Classify clutch linkages. (CO3)
- Q.16 What is tractive effort? (CO5)
- Q.17 Where is the transfer box used? (CO6)
- Q.18 Write the function of a universal joint. (CO5)
- Q.19 Name any two rear axle drives. (CO8)
- Q.20 Write the function of front axle. (CO8)

### SECTION-C

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

- Q.21 Write the requirements of a frame. (CO2)
- Q.22 Describe various types of glasses used for the car body. (CO2)
- Q.23 Write the causes of pulsation of clutch pedal & clutch pedal stiffness. (CO3)
- Q.24 How does cone clutch work? (CO3)
- Q.25 How does a semi-centrifugal clutch work? (CO3)
- Q.26 Write the causes of gear & Hard gear shifting. (CO4)
- Q.27 How does a freewheel unit work? (CO4)

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- Q.28 How does a selector mechanism work? (CO5)
- Q.29 Write the causes of shake in propeller shaft and its remedies. (CO6)
- Q.30 Explain semi-floating axle with neat sketch. (CO8)
- Q.31 Explain torque tube drive with neat sketch. (CO5)
- Q.32 Write the causes of tyre wear and vehicle wanders. (CO10)
- Q.33 Write the causes of vehicle pulls to one side and write its remedies. (CO9)
- Q.34 Describe toe-in and toe-out. (CO7)
- Q.35 Explain over steer and under steer. (CO9)

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain the construction and working of centrifugal clutch. (CO3)
- Q.37 Explain the function, principle, construction and working of differential. (CO4)
- Q.38 Describe various components of a steering system with the help of a neat diagram. (CO9)

**Note:** Course Outcome (CO) mentioned in the question paper is for official purpose only.

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