

- Q25 Write down classification of vehicles.
- Q.26 What are different type of stub axle, explain any one of them.
- Q.27 Enlist four motorcycle and four car manufacturing companies in India.
- Q.28 Explain Ackerman steering mechanism.
- Q.29 Write down construction and working of transfer gear box.
- Q.30 Explain epicycle gear box with diagram.
- Q.31 Discusses common fault of transmission.
- Q.32 Write a short note on power steering.
- Q.33 Discusses universal joint and its application in automobile.
- Q.34 Explain body upholstery.
- Q.35 Draw a neat diagram of transmission system.

#### Section-D

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

- Q.36 Describe construction and working of single plate clutch.
- Q.37 Describe construction and working of Synchromesh gear box.
- Q.38 Give classification of automobile.

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#### **4th Sem. Branch: Auto. Sub : Chassis, Body & Transmission-I**

Time : 3 Hrs.

M.M. : 100

#### SECTION-A

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

- Q.1 What is an Automobile?
- a) Self-propelled vehicle
  - b) Used for carrying passengers and goods on the ground
  - c) Contains the power source for its propulsion
  - d) All of the mentioned
- Q.2 Which of the following is not a part of the transmission system?
- a) Clutch      b) Wheels
  - c) Gear Box      d) Axles
- Q.3 What is an IC engine?
- a) The fuel is ignited and burned inside the engine
  - b) The fuel is burned inside a combustion chamber
  - c) The fuel is ignited inside a combustion chamber
  - d) None of the above

- Q.4 If the front of the front wheels is inside and rear of front wheels are apart when the vehicle is at rest, then the configuration is called?
- a) Toe-in                      b) Toe-out  
c) Positive camber          d) Positive castor
- Q.5 Which of the following is the disadvantage of the open differential?
- a) High in cost  
b) Not reliable  
c) Complex design  
d) Sends most of the power to the wheel having less traction
- Q.6 Which types of gears are used in constant mesh gearbox?
- a) Spur gear                      b) Helical gear  
c) Bevel gear                      d) Worm gear
- Q.7 The following is not a Friction clutch
- a) Fluid clutch                      b) Centrifugal clutch  
c) Cone clutch                      d) Disc Clutch
- Q.8 Which of the following is not a part of differential assembly?
- a) Crown wheel                      b) Sun gear  
c) Pinion                              d) Universal joint
- Q.9 Which factor does not affect the torque transmission by clutch?
- a) Size of clutch plate  
b) Co-efficient of friction  
c) Number of clutch plates used  
d) Axial load on the clutch

- Q.10 Rotary motion of the steering is converted to a reciprocating motion by
- a) Track arm                      b) Track rod  
c) Stub axle                      d) Steering box

### Section-B

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

- Q.11 Presently \_\_\_\_\_ types of gear box is used in manual transmission cars.
- Q.12 Transfer box is necessary in \_\_\_\_\_.
- Q.13 Explain camber.
- Q.14 Define frame.
- Q.15 Write two different types of clutches.
- Q.16 VIN stands for.
- Q.17 Define steering ratio.
- Q.18 Explain Hotch kiss drive.
- Q.19 Give the function of lining material.
- Q.20 Centrifugal clutch is also known as \_\_\_\_\_.

### Section-C

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

- Q.21 Define constant mesh gear box.
- Q.22 Explain torque tube drive.
- Q.23 Draw conventional type of chassis frame.
- Q.24 Why wheel alignment is necessary and what is its procedure.