

- 9) Purpose of double declutching when changing down is to (01)
 (a) Speed up layshaft (b) slow down layshaft
 (c) Speed up main shaft (d) Slow down main shaft
- 10) The crown wheel and pinion is called (01)
 (a) Differential (b) Rear axle (c) Final drive (d) Rear drive
- 11) Type of hub used in heavy vehicles is (01)
 (a) Fully floating (b) Semi- floating (c) Three quarter floating (d) Quarter
- 12) Which of one following frame section offers highest resistance to torsion? (01)
 (a) Flat (b) Box (c) Tubular (d) channel
- 13) On a beam axle, the stab axle pivots about a (01)
 (a) King pin (b) Ball joint (c) Track rod (d) Stub axle
- 14) Function of stabilizer in automobile is to decrease tendency to (01)
 (a) Roll (b) Pitch (c) Dip (d) Yaw

Attempt any four questions from Q-2 to Q-8

- Q-2 Attempt all questions (14)**
 (a) Give the classification of Auto Vehicles? (07)
 (b) Draw the layout of conventional Chassis and explain about various parts on it? (07)
- Q-3 Attempt all questions (14)**
 (a) Describe centrifugal and semi centrifugal clutch. (07)
 (b) Describe construction and explain working of fluid flywheel. (07)
- Q-4 Attempt all questions (14)**
 (a) Mention types of manual gear box. Explain working and construction of constant mesh gear box with sketch. (07)
 (b) Write a brief note on Continuously Variable Transmission (CVT). (07)
- Q-5 Attempt all questions (14)**
 (a) Explain rear axle shaft supporting of 1. Semi floating 2. Three quarter floating. (07)
 (b) Draw a complete assembly of steering system and explain how a steering system works. (07)
- Q-6 Attempt all questions (14)**
 (a) Explain following terms: Toe-in and Toe-out, King pin inclination (04)
 (b) Write in brief steering gear box. (05)
 (c) Explain with neat sketch telescopic shock absorber (05)



- Q-7** **Attempt all questions** **(14)**
- (a) Explain with neat sketch Drum brake **(07)**
 - (b) What is ABS? Explain working of ABS with neat sketch. **(07)**
- Q-8** **Attempt all questions** **(14)**
- (a) Explain construction feature of tubeless tyre and give advantages of tube less tyre over convention tyre. **(07)**
 - (b) Discuss in brief factors effecting tyre life, **(07)**

