

QP Code : 31637

(3 Hours)

[Total Marks : 80

NB.

- Note:
1. Question No. 01 is compulsory.
  2. Attempt any three questions from remaining five questions.
  3. Draw neat and labeled diagram wherever necessary.

- Q.01) Attempt any five questions out of six.
- a) Compare advantages & disadvantages of 2WD & 4WD vehicles. [04]
  - b) Write short note on cone clutch. [04]
  - c) Explain advantages & disadvantages of automatic transmission. [04]
  - d) Write short note on recirculating ball type steering gear. [04]
  - e) Write short note on working of master cylinder. [04]
  - f) Explain types of wheel. [04]
- Q.02) a) Explain functional requirements & working of multi plate clutch. [08]  
b) What is double declutching? How it is eliminated in synchromesh gear box. [08]  
c) Write short note on variable rate leaf spring. [04]
- Q.03) a) Explain gear shifting mechanism. [08]  
b) Explain factors affecting steering geometry. [08]  
c) Compare wishbone type suspension with McPherson strut type suspension. [04]
- Q.04) a) Explain types of tyres. [08]  
b) Explain necessity & working of differential. [08]  
c) Write short note on rack & pinion steering gear. [04]
- Q.05) a) Explain hotchkiss drive in detail. [08]  
b) Explain different types of brake. [08]  
c) Write short note on hydraulically operated clutch. [04]
- Q.06) a) What is brake bleeding? Also write short note on vacuum servo brake system. [08]  
b) What are the limitations of single plate clutch? Compare plate clutch with centrifugal clutch. [08]  
c) Explain working of transaxle. [04]