

Code No: R41037

R10**Set No. 1**

IV B.Tech I Semester Supplementary Examinations, February/March - 2018

AUTOMOBILE ENGINEERING**(Mechanical Engineering)****Time: 3 hours****Max. Marks: 75****Answer any FIVE Questions
All Questions carry equal marks**

- 1 a) Compare the front wheel drive and rear wheel drive. Discuss their advantages and drawbacks. [8]
b) Explain the splash type lubrication system with neat sketch. [7]
- 2 a) Discuss the working of Gear type and Vane type oil pumps with sketch. [8]
b) Explain the difference between Turbocharging and Supercharging. [7]
- 3 a) What are the merits of multiplate clutches over single plate clutches. [8]
b) Draw a sketch of 5 – speed constant mesh type gear box when the gear is in neutral position. [7]
- 4 a) List any five common brake troubles and discuss their causes and remedies. [8]
b) Explain the working of a Hotch kiss drive mechanism with diagram [7]
- 5 a) Sketch and explain the construction and working principle of the Recirculating Ball type steering gear [8]
b) Sketch and explain the construction and working of shock absorber in suspension system. [7]
- 6 a) Explain the construction and working of a wind screen wiper with a simple sketch [8]
b) Explain the importance and working of Electronic stability control system. [7]
- 7 a) Briefly discuss the function of catalytic converters. [8]
b) Explain the function and working of any 2 safety systems of Indian cars. [7]
- 8 a) Enumerate the servicing of piston connecting rod assembly. [8]
b) Discuss the general precautions to be observed during servicing of an engine. [7]