

B.Tech III Year II Semester (R09) Supplementary Examinations May/June 2016

AUTOMOBILE ENGINEERING

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain with neat sketch the working principle of pressure lubrication systems.
(b) What are the different methods of repairing the engine that has worn cylinder walls.
- 2 (a) What is the purpose of control rod in a diesel pump? How does it vary the fuel supply to the injector?
(b) Draw the layout of Diesel fuel feed system with Jerk type pump for a 4-cylinder engine.
- 3 (a) State the applications, advantages and disadvantages of air – cooling system.
(b) Explain with a sketch the forced circulation system. State its merits and demerits.
- 4 (a) Explain briefly the operation of the Bosch smoke meter.
(b) Explain briefly the mechanism of formation of nitric oxide.
- 5 Discuss with neat sketch, various types of Bendix drives in automobile engineering.
- 6 With the help of a neat sketch, explain the construction and operation of a sliding mesh gear box.
- 7 Describe with the help of a simple diagram the general arrangement of the steering system.
- 8 What are the various types of power brakes? Discuss their merits and demerits
