

Code :R7310302

R7

III B.Tech I Semester(R07) Supplementary Examinations, May 2011
AUTOMOBILE ENGINEERING
(Mechanical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

1. (a) Explain with neat sketches different types of automobile engines used in automobiles.
(b) Explain with neat sketch the working principle of pressure lubrication systems.
2. (a) Name the different methods of fuel injection system. Describe with neat sketches the different types of injection systems in C.I engines.
(b) Describe briefly the various system of supplying fuel from the fuel tank to the engine cylinder.
3. (a) Explain with neat sketch the working principle of pressure sealed cooling system.
(b) Explain briefly the electronic ignition system. What are its merits and demerits. Compare with the conventional battery ignition system.
4. (a) What is the cause of diesel smoke ? Discuss the ways by which diesel smoke can be controlled.
(b) What is diesel odour ? Explain the effects of different factors on the formation of odour in CI engines.
5. (a) Describe the working of solenoid switch used for starter motor.
(b) Explain briefly the over running clutch drive type starting mechanism with suitable diagram.
6. (a) What is torque converter ? How it differs from gear box?
(b) Illustrate the construction and working of multi plate clutch with neat diagram.
7. (a) What is the purpose of steering system ? Write the requirements of good steering system.
(b) What are the functions of steering system ?
8. (a) Describe the difference between drum and disc brakes.
(b) What are the different types of independent suspension systems ? Briefly explain them with suitable diagram.
