

Code: ME8T3B

IV B.Tech-II Semester–Regular/Supplementary Examinations–April 2017

**AUTOMOBILE ENGINEERING
(MECHANICAL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) With a neat sketch explain the splash lubrication system. 7 M

b) What is the function of oil pumps. Explain any one type of oil pump with a neat sketch. 7 M

2. a) With a neat sketch explain fuel supply system of S.I.engine. 7 M

b) With a neat sketch explain the common rail fuel injection system. 7 M

3. a) With a neat sketch explain Air cooling system and write the advantages and disadvantages of Air cooling system. 7 M

b) What are the requirements if an Ignition system? Explain in detail. 7 M

4. a) What are the advantages and disadvantages of LPG over the usage of fuel in an automobile. 7 M
- b) Explain the Air injection system in petrol engines to reduce the percentage of pollutants. 7 M
5. a) With a neat sketch explain solenoid switch. 7 M
- b) With a neat sketch explain about lighting system. 7 M
6. a) With a neat sketch explain Hotch kiss drive in an automobile transmission system. 7 M
- b) With a neat sketch explain Synchro mesh gear box. 7 M
7. a) With a neat sketch explain Davis steering mechanism. 7 M
- b) With a neat sketch explain the worm and wheel steering gear. 7 M
8. a) What are the objects of suspension system. With a neat sketch explain about torsion bar in suspension system. 7 M
- b) Explain the requirement of Brake fluid in a braking system. 7 M