





2. Answer any five from the following questions

4×5 = 20

- (a) What type of carburetor is used in two-wheeler? Explain with a suitable diagram.
- (b) Draw the layout of a battery ignition system circuit.
- (c) What do you understand by advance or retard of the ignition system?
- (d) What is the function of thermostat valve in water cooling system? How does it work?
- (e) Explain the thermo-syphon system.
- (f) What are the different methods of cooling the engine? Why anti freeze solution is added in the liquid cooling system.

3. Answer any one from the following questions

8×1 = 8

- (a) Draw the layout of the diesel fuel feed system and name its various components. Describe with a neat figure the working of common rail injection system.
- (b) What is knocking in I.C. engine? State the causes of knocking. What is engine tuning? Explain it.

4. Answer any one from the following questions

10×1 = 10

- (a) Explain how a two-stroke petrol engine operate. Describe the operation of four-stroke cycle engine (petrol or diesel).
- (b) Describe how the cam shaft open the valve. Discuss in brief the function of air cleaner.