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Roll No

ME - 604**B.E. VI Semester**

Examination, December 2015

Internal Combustion Engines**Time : Three Hours****Maximum Marks : 70**

Note : Attempt five questions, one questions (including-all parts) from each unit. All questions carry equal marks. Assume suitable data or dimensions if necessary, clearly mentioned it. **rgpvonline.com**

1. a) Discuss the difference between theoretical and actual valve timing diagrams of a diesel engine.
- b) Draw and explain the performance characteristics of SI engine.

Or

2. a) Discuss the factors which affecting the volumetric efficiency of IC engine.
- b) Compare the relative advantages and disadvantages of four stroke and two stroke cycle engines.

3. a) Explain briefly combustion phenomenon in SI engines.
- b) What is ignition lag? Discuss the effect of engine variables on ignition lag.

Or

4. a) Write the difference between pre-ignition, auto-ignition and detonation.
- b) Explain the phenomenon of knocking in SI engines. What are the different factors which influence the knocking.

5. a) Discuss the various factors which affects combustion in CI engines.
- b) Discuss salient features of various types of combustion chambers.

Or

6. a) Explain the phenomenon of knock in CI engines and compare it with SI engine knock.
- b) Explain briefly various phases of CI engine combustion.

7. a) Give the classification of engine.
- b) What are the differences between direct injection and indirect injection.

Or

8. a) What do you mean by 'air injection' and 'solid injection'?
- b) State the advantages and disadvantages of hydrogen as IC engine fuel.

9. a) What are the basic types of carburetors? Explain in brief.
- b) Explain briefly supercharging of CI-engines.

Or

10. a) Discuss the low and high pressure super-charging.
- b) Explain briefly the types of super charging arrangements.

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