

D 70318

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Name.....

Reg. No.....

**FIFTH SEMESTER B.TECH. (ENGINEERING) [09 SCHEME] DEGREE
EXAMINATION, NOVEMBER 2014**

ME/PTME/AM 09 504—IC ENGINES AND GAS TURBINES

Time : Three Hours

Maximum : 70 Marks

Part A

Answer all questions.

Each question carries 2 marks.

1. What is two stroke engine ?
2. What is air fuel ratio ?
3. What is turbo charging ?
4. What is pre-ignition ?
5. What is meant by inter-cooling ?

(5 × 2 = 10 marks)

Part B

Answer any four questions.

Each question carries 5 marks.

6. What is valve timing diagram ? Give its importance.
7. Explain about spark ignition.
8. What is super charging ? Explain.
9. What is stratified charged engine ? Explain.
10. What are the problems created by exhaust emissions ? Explain.
11. Explain combustion efficiency.

(4 × 5 = 20 marks)

Part C

Answer all questions.

Each question carries 10 marks.

12. (a) Explain in detail about IC engines and engine classification.

Or

- (b) Explain (i) combustion reaction of common fuels ; (ii) exhaust gas.

Turn over

13. (a) Explain about automotive transmission system and its components.

Or

(b) Explain in brief (i) Heat balance test ; (ii) Morse test ; (iii) Retardation test.

14. (a) Explain about combustion process in a IC engine.

Or

(b) Explain combustion chambers of SI engine.

15. (a) Explain about efficiency and performance of gas turbines.

Or

(b) Explain about combustion chambers of gas turbines.

(4 × 10 = 40 marks)