

Total No. of Questions : 8] [Total No. of Printed Pages : 2

Roll No. ....

**FT-3004 (CBGS)**

**B.E. III Semester**

Examination, December 2017

**Choice Based Grading System (CBGS)**  
**Heavy Vehicles and Automobile Engineering and**  
**Safety**

Time : Three Hours

Maximum Marks : 70

- Note:** i) Attempt any five questions.  
 ii) All questions carry equal marks.  
 iii) Make sketches where necessary.  
 iv) All parts of each question are to be attempted at one place.

1. a) Explain fuel feed system of CI engine with help of neat diagram.  
 b) Discuss the effect of supercharging and turbo charging on volumetric efficiency.
2. What is function of differential? Explain its working.
3. a) What are the major sources of air pollution?  
 b) Explain the working of lead acid battery.
4. Explain fire fighting boat with its construction and operation with help of neat sketch.

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5. a) What are the difference between battery ignition system and coil ignition system?  
 b) How anti-collision system of automobile work with the help of neat sketch.
6. What is the necessity of engine cooling system? Explain its type with over cooling.
7. Describe the different type of lubricating system.
8. How automobiles exhaust is responsible for air pollution? What are Euro norms of emissions? Enlist pollution control techniques.

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