

Roll No

AU/ME-4004 (CBGS)

B.E. IV Semester

Examination, November 2019

Choice Based Grading System (CBGS)

Energy Conversion

Time : Three Hours

Maximum Marks: 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

iii) Draw neat sketch, if required

1. a) Write a short note on power balance for multi-cylinder engines. 7
b) Compare the performance characteristics of SI and CI engines. 7
2. a) What are the various factors affecting volumetric efficiency? 7
b) Discuss the salient features of various type combustion chambers. 7
3. a) What do you mean by pre-ignition? Discuss the causes and remedy of turbulence. 7
b) Draw the pressure-crank angle diagram and discuss its salient points. 7
4. a) What do you mean by cooling of S.I. Engines? 7
b) Discuss the effect of lubrication of C.I. Engines. 7

5. Discuss the importance of fuel pump. What is working principle of fuel pump? Explain. 14
6. What is the fuel injectors? Discuss the working principle of fuel injectors. 14
7. a) What is times base indicator diagram? Explain. 7
b) Discuss the various methods of super charging. 7
8. Write a short note on any four of following. 14
 - i) Diesel knock
 - ii) Carburetion
 - iii) Fuel metering
 - iv) Turbo charging
 - v) Mean effective pressure
 - vi) Solex carburetor
 - vii) Knock inhibitors
