

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Winter 2017 - 18 Examination

Semester: 1
Subject Code: 03206130
Subject Name: Automotive Engine System

Date: 04/01/2018
Time: 2:00 pm to 4:30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1** A) Discuss the role of lubrication system in IC Engine. (05)
B) Draw P-V Diagram of Supercharged engine and discuss in brief. (05)
C) Explain the phenomenon of back pressure. (05)

- Q.2 Answer the following questions.** (Attempt any three) (Each five mark) (15)
A) Describe the various components used for intake and exhaust system of IC engine.
B) Describe brief about air cleaning and silencing system of IC engine.
C) Explain construction & working of fuel injector.
D) Discuss MPFI System used for Gasoline Injection.

- Q.3** A) Write short note on limitations of SI & CI engine. (07)
B) Explain the desirable properties of good Lubricants. Discuss dry sump lubrication system in brief. (08)

OR

- B) Describe in brief various parameters which affect cooling system of IC engine. (08)

- Q.4** A) Discuss the various types nozzle used for injection system. (07)

OR

- A) Explain briefly the electronic fuel injection system used in some modern cars. (07)
B) Enlist various turbo charging methods used in IC engine. Discuss any one in detail. (08)