

S.B. Roll No.....

AUTOMOBILE ENGINE-I
3rd/Auto/0934/May'16

Duration: 3hrs.

M. Marks=75

SECTION- A

Q1. Fill in the blanks: -

1x10=10

- a) The extent to which the charge in the cylinder is compressed is called _____.
- b) Power developed within engine cylinder is called _____.
- c) The diesel engine works on _____ cycle.
- d) The primary function of lubrication is to reduce _____.
- e) _____ engine has valveless construction.
- f) Crankshaft is generally made of _____.
- g) _____ reduces the fluctuation of crankshaft speed.
- h) The radiator core is made of _____.
- i) _____ air-fuel mixture is required for cruising.
- j) The ratio of brake power to indicated power is called _____.

SECTION- B

Q2. Short answer type. Attempt any FIVE: -

7x5=35

- a) Give classification of I.C. engine in detail.
- b) Explain briefly working principle of 2-stroke petrol engine.
- c) Explain briefly the multipoint fuel injection system.
- d) What is the necessity of I.C. engine testing?
- e) Explain briefly the working principle of battery ignition system.
- f) What is the necessity of cooling system? Explain briefly the pump circulating cooling system.
- g) Describe briefly the characteristics of lubricants required for automobile engine.

SECTION- C

Q3. Long answer type. Attempt any TWO: -

15x2=30

- a) Describe the constructional detail, function and material of **any three** of the following: -
 - i. Piston.
 - ii. Piston rings.
 - iii. Connecting rod.
 - iv. Crankshaft.
- b) Explain in detail the objective & procedure for Morse Test.
- c) Explain in detail the various type of lubrication system used in automobile engine.