

TED (10)–3005

Reg. No.

(REVISION—2010)

Signature

SECOND SEMESTER DIPLOMA EXAMINATION IN AUTOMOBILE
ENGINEERING—MARCH, 2013

AUTOMOBILE POWER PLANT

[Time : 3 hours

(Maximum marks : 100)

Marks

PART—A

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. List two functions of crank shaft.
2. State two functions of fly wheel.
3. What is petroil system of lubrication ?
4. State the functions of fuel injector.
5. List two functions of carburettor.

(5x2=10)

PART—B

II Answer *any five* questions. Each question carries 6 marks.

1. Draw the figure of an overhead valve operating mechanism with side cam shaft and mark the parts.
2. Compare the constructional details of dry liners and wet liners.
3. Illustrate the working of S U electrical pump.
4. Compare dry and wet type of air cleaners.
5. With the help of sketch explain mechanical type of governor used in F I P.
6. Write six properties of lubricating oil.
7. Explain Thermo syphon system of cooling.

(5x6=30)

PART—C

(Answer *one* full question from each unit. Each question carries 15 marks.)

UNIT – I

- III (a) Write any five functions of piston. 5
- (b) Explain valve timing diagram of a petrol engine. 10

OR

- IV Explain the constructional details of an air cooled engine cylinder block and cylinder head with suitable sketch. 15

UNIT – II

- V With the help of a neat sketch explain the working of a S U Carburettor. 15

OR

- VI Write notes on the following :

- (i) Ventury effect (ii) Choke (iii) Different fuel feed systems. (3x5=15)

UNIT – III

- VII With the help of sketch explain the working of Jerk type fuel injection pump. 15

OR

- VIII Describe Pneumatic governor used in F I P with neat sketch. 15

UNIT – IV

- IX (a) Discuss pressure feed lubrication system used in Automobiles. 10

- (b) Summarise the necessity of crank case ventilation. 5

OR

- X Write notes on :

- (i) Anti-freeze solution (ii) Pressure cap (iii) Lubricating oil rating. (3x5=15)