

TED (15) – 2051

Reg. No.....

(REVISION — 2015)

Signature

SECOND SEMESTER DIPLOMA EXAMINATION IN AUTOMOBILE ENGINEERING — MARCH, 2016

AUTOMOBILE POWER PLANT

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. Define Swept volume.
2. Write two functions of oil control rings.
3. State gravity feed system on petrol engine.
4. State use of heater plug in diesel engine.
5. State two functions of oil pump.

(5×2=10)

PART — B

(Maximum marks : 30)

II Answer any five of the following questions. Each question carries 6 marks.

1. Prepare a neat sketch and label the parts of over head valve operating system.
2. Define valve lead, valve lag and valve overlap.
3. Discuss petrol lubrication system.
4. Describe MPFI system.
5. Illustrate constructional details of fuel injector.
6. Demonstrate the working of oil cooler.
7. Write notes on types of radiator cores.

(5×6=30)

PART — C

(Maximum marks : 60)

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

UNIT — I

III Write notes on the following :

- | | |
|----------------------|-----------------------|
| (a) Bore | (d) Total volume |
| (b) Stroke Volume | (e) Compression Ratio |
| (c) Clearance volume | |

15

OR

IV Write ten comparisons between two stroke engine and four stroke engine.

15

UNIT — II

V Explain the working of a simple carburetor with neat sketch.

15

OR

VI Demonstrate constructional details of any three types of Mufflers.

15

UNIT — III

VII Describe with the aid of the line sketch working of Distributor type fuel pump.

15

OR

VIII Write short notes on :

(a) Fuel filter

(b) Air Cleaner

(c) Fuel feed pump.

15

UNIT — IV

IX (a) Specify any four properties of lubricating oil.

8

(b) Write notes on Lobe type oil pump.

7

OR

X (a) Describe the working of radiator cap with the help of a simple sketch.

8

(b) Discuss three factors affecting heat dissipation in air cooled engines.

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