

## MODEL QUESTION PAPER

TED (15) 2051

Reg No. ....

Revision 2015

Signature.....

**SECOND SEMESTER DIPLOMA EXAMINATION IN AUTOMOBILE ENGINEERING – MONTH YEAR**

### AUTOMOBILE POWER PLANT

MAXIMUM MARKS: 100

TIME – 3 HOURS

#### PART A

(Maximum marks :10)

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

1. Define Clearance volume.
2. Identify F head engine .
3. State the Petroil lubrication system.
4. List four fuels that can be used in IC engines.
5. Identify Pre combustion chamber.

(5x2=10)

#### PART B

Maximum marks : 30

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

1. Explain the working of overhead valve operating mechanism.
2. Discuss the construction details of four stroke four cylinder cam shaft.
3. Demonstrate all speed governor.
4. List six classifications of IC engines.
5. Explain oil bath type Air cleaner.
6. State three advantages and disadvantages of Air cooling system.
7. Explain centrifugal type water pump used in water cooling system.

(5x6=30)

#### PART C

Maximum marks : 60

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

##### UNIT I

III. Demonstrate the working of a Two stroke petrol engine with neat sketch. 15

OR

IV. Discuss the constructional details of four cylinder four stroke petrol engine crankshaft with neat sketch. 15

##### UNIT II

V. Describe Petrol injection system and identify various components using line sketch. 15

OR

VI. Describe Solex carburetor . Explain any two carburetor circuits with neat sketch. 15

UNIT III

VII. Discuss the working of mechanical governor with the help of a neat sketch. 15

OR

VIII. Discuss the working of distributor type FIP with the help of a neat sketch. 15

UNIT IV

IX. Write notes on

i. Radiator cap

ii. Antifreeze solution

iii. Cooling fins

3x5=15

OR

X. Write notes on

i. Pressure relief valve in Oil pump

ii. Dry sump lubrication.

iii. Thermostat Valve

3x5=15