TED (15) 4022
(Revision - 2015)

N20 – 03781

Reg. No……
Signature …….

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2020

AUTOMOBILE ENGINEERING

[Maximum Marks: 75] [Time: 2.15 Hours]

PART-A

(Answer ***any three*** questions in one or two sentences. Each question carries 2 marks)

I. 1. What is brake bleeding?

2. What do you mean by stoichiometric air fuel ratio?

3. List any two functions of Gear Box.

4. State the function of a thermostat in cooling system.

5. What is the use of an intercooler? (3 x 2 = 6)

PART-B

(Answer ***any four*** of the following questions. Each question carries ***6*** marks)

II 1.What is governing? What are the types?

2. Differentiate between Battery and Magneto Ignition System.

3. List the requirements of a good clutch.

4. What is fluid flywheel?

5. Explain toe in, castor, kingpin inclination.

6. Explain rack and pinion steering mechanism.

7. Explain central locking system. (4 x 6 = 24)

PART-C

(Answer ***any of the three units*** from the following. Each full question carries 15 marks)

UNIT – I

III (a) Explain liquid cooling system with the help of a diagram. (8)

(b) Describe pressure feed lubrication system with the help of a diagram. (7)

OR

IV (a) Discuss AC mechanical fuel pump with the help of a diagram. (8)

(b) Explain the working of a carburetor with the help of a diagram. (7)

UNIT – II

V (a) Describe constant mesh gearbox with the help of a diagram. (8)

(b) Explain centrifugal clutch with the help of a diagram. (7)

OR

VI (a) Discuss differential gearbox with the help of a diagram. (8)

(b) Describe the rear axle with the help of a diagram. (7)

UNIT- III

VII (a) Explain leaf springs with the help of a diagram. (8)

(b) Describe conventional tubed tyre with the help of a diagram. (7)

OR

VIII (a) Discuss hydraulic brake system with the help of a diagram. (8)

(b) Explain yawing, pitching, rolling and bouncing. (7)

UNIT - IV

IX (a) Explain air suspension system with the help of a diagram. (8)

(b) Describe electronic ignition system with the help of a diagram. (7)

OR

X (a) Discuss emissions from an automobile. (8)

(b) Explain torque convertor with the help of a diagram. (7)
