

TED (10)–4027

(REVISION—2010)

Reg. No.

Signature

SIXTH SEMESTER DIPLOMA EXAMINATION IN MECHANICAL
ENGINEERING—MARCH, 2013

AUTOMOBILE ENGINEERING

[Time : 3 hours

(Maximum marks : 100)

PART—A

(Maximum marks : 10)

Marks

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

1. State the function of a thermostat in cooling system.
2. What is carburetion ?
3. Identify the function of a clutch.
4. List any two type of rear axles.
5. What is brake bleeding ?

(5×2=10)

PART—B

(Maximum marks : 30)

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

1. State the purpose of lubrication in IC engines.
2. Explain any three noise reduction control techniques in an automobile.
3. Draw the elements of transmission system of an automobile.
4. Compare fluid flywheel with torque convertor.
5. State any six objectives of suspension system.
6. Write short note on MPFI (Gasoline injection system).
7. Explain the working of disc type brake.

(5×6=30)

PART—C

(Maximum marks : 60)

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

UNIT—I

- III (a) Compare battery ignition system and magneto ignition system. 8
- (b) With sketch explain the working of forced circulation system of water cooling. 7

OR

	Marks
IV (a) Draw a SU carburettor and label the parts.	8
(b) Explain the splash system of lubrication with a sketch.	7
UNIT—II	
V (a) Explain with sketch the working of a sliding mesh gear box.	8
(b) Explain the working of a torque convertor.	7
OR	
VI (a) With neat sketch explain the working of a centrifugal clutch.	8
(b) Illustrate the working of a differential unit.	7
UNIT—III	
VII (a) Sketch any four type of stub axle and show their parts.	8
(b) What is the purpose of camber? Explain the effect of incorrect camber.	7
OR	
VIII (a) With neat sketch explain the steering system of an automobile.	8
(b) Draw and explain three-quarter floating axle.	7
UNIT—IV	
IX (a) Explain the construction of a Disc wheel with figure.	8
(b) Explain the working of power window in an automobile.	7
OR	
X (a) With the help of a block diagram explain the working of a hydraulic brake system.	8
(b) Compare radial and bias-ply tyre.	7
