

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
Diploma Engineering, Mid semester Examination

Semester: 5TH

Subject Code: 03612301

Subject Name: Automobile Engine Testing and Diagnosis

Date: 05/08/2022

Time: (1hr: 30min)

Total Marks: 40

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

Q.1 Answer any six out of Ten. (2 Marks Each) (12)

1. What you mean by Blow by Gas.
2. Define in terms of IC engine: (a) I.H.P. (b) Mechanical Efficiency
3. Write full form of "OBD"
4. Refractometer is used to measure which property of coolant?
5. Why we do not have to open Radiator Pressure Cap while it is Hot?
6. What is use of Feeler gauge and Vernier gauge?
7. What you mean by Diagnosis and Testing?
8. Why compression test is carried out on engine
9. Necessity of lubrication system
10. Give two causes and remedies of piston seizure.

Q.2 A) List the different maintenance tools used in Automobile workshop. (03)

OR

A) How to remove the engine from vehicle? (03)

B) What are the reasons of engine overheating? (03)

OR

B) List the different special tools used in Automobile workshop. (03)

C) Explain upper and lower engine disassembly process. (04)

OR

C) Explain the procedure to remove the AC and Cooling system of vehicle. (04)

D) Which are the safety precaution required in the Automobile workshop? (04)

Q.3 A) Explain effect of excessive clearance between piston and cylinder (03)

OR

A) Explain servicing of oil pump and relief valve. (03)

B) Write down safety points to be observed while working in the engine shop. (03)

OR

B) Explain the causes and remedies for engine fail to start while cranking. (03)

C) Describe the procedure of testing thermostat valve (04)

OR

C) Explain the reason for using pressurize cooling system in IC engine. (04)

D) Find the Cubic Capacity-CC of the engine using the following details. (04)

Bore – 73.5 mm, Stroke – 73.5 mm, No. of Cylinder – 2

