



2018 VI 11

1430

Seat No. :

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Time : 2 Hours

AUTOMOBILE ENGINEERING – II

Subject Code

V	3	2	2
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Total No. of Questions : 5

(Printed Pages : 2)

Maximum Marks : 50

- INSTRUCTIONS:** 1) **All the questions are compulsory.**
2) Answer **each** question on a **fresh** page.
3) Figures to the **right** indicate **full** marks.
4) Illustrate your answer with **neat** labelled diagrams **wherever** necessary.
5) Write the numbers of questions and sub-questions **clearly**.

1. A) Answer the following questions in **one** sentence :
- i) Why are baffle plates provided in the fuel tank ? [1]
 - ii) How is the automobile air-conditioning compressor engaged with the engine ? [1]
 - iii) What is the function of a fuel feed pump used in the diesel fuel supply system ? [1]
 - iv) State any two advantages of an electrical fuel pump. [1]
 - v) How is the turbine of a turbo charger driven ? [1]
 - vi) Why is a condenser used in an automobile air conditioning system ? [1]
- B) Explain the construction and working of a rotor pump used in the lubrication system. [4]
2. A) Answer the following questions :
- i) Explain the working of the positive crank case ventilation system. [2]
 - ii) List any four types of petrol engine fuel feed systems. [2]
 - iii) Describe the constructional features of a catalytic converter. [2]
- B) i) Draw a neat labelled diagram of a wax type thermostat valve. [2]
ii) State any four requirements of anti-freeze solutions. [2]



3. A) Answer the following questions :
- i) Write a short note on the working of LPG fuel system. [2]
 - ii) What do the following flame colours indicate in a flame leak detector used in testing of refrigerant in the air conditioning system.
 - a) Bright yellow flame. [1]
 - b) Violet flame. [1]
 - iii) Explain the working of a simple carburettor. [2]
- B) Write the construction and working of vapour recovery system used to minimise emissions. [4]
4. A) Answer the following questions :
- i) Explain the working of an automobile air-conditioning system. [2]
 - ii) State any four characteristics of CNG. [2]
 - iii) Give any four points of comparison between MPFI and carburettor fuel systems. [2]
- B) With a neat labelled sketch, explain the working of a pneumatic governor. [4]
5. A) Answer the following questions :
- i) State the four requirements of diesel fuel injection system. [2]
 - ii) Define :
 - a) Viscosity of a lubricating oil. [1]
 - b) Flash point of a lubricating oil. [1]
 - iii) Explain the necessity of a thermostat valve in the water cooling system. [2]
- B) i) Write any four disadvantages of petrol injection system. [2]
- ii) Draw a neat labelled sketch of multi-point port injection system. [2]
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