

### Section-D

**Note: Long answer questions. Attempt any two question out of three Questions. (2x8=16)**

- Q.23 Explain working of supercharger with neat diagram and write its advantages also? (CO4)
- Q.24 What are the causes and remedies of engine over heating? (CO4)
- Q.25 Explain construction and working of CRDI engine? (CO3)

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### 5th Sem./ Automobile Subject : Auto Engine - II

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note: Multiple Choice Questions. All Questions are compulsory. (6x1=6)**

- Q.1 Which among the following tunes the fuel delivery to achieve the correct fuel ratio in CRDI engine?
- a) Float valve                      b) Temperature sensor  
c) Oxygen sensor                  d) ECU
- Q.2 How is the piston crown created in a direct injection to help a minimum of air and fuel before combustion?
- a) Scavenged                      b) Swirling vortex  
c) Plain                              d) Circle
- Q.3 Otto cycle is used in which engine?
- a) Petrol engine  
b) External combustion engine  
c) Diesel engine  
d) Steam Engine

- Q.4 What is the advantage of gaseous fuel?
- It can be stored easily
  - It can displace more air from the engine
  - It can mix easily with air
  - All of the mentioned
- Q.5 The purpose of a \_\_\_\_\_ is to provide automatic control of the idling and maximum speeds to the engine.
- Governor
  - Nozzle
  - Throttle
  - None of the mentioned
- Q.6 \_\_\_\_\_ sensor senses the amount of oxygen in the engine exhaust and calculates air-fuel ratio.
- Engine temperature
  - Exhaust gas
  - Air flow
  - Air inlet temperature

### Section-B

**Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)**

- Q.7 Diesel engine has lower compression ratio than petrol engine. (True/False)
- Q.8 Full form of CRDI is \_\_\_\_\_.
- Q.9 \_\_\_\_\_ cars produce zero emission.
- Q.10 Alto 800 has \_\_\_\_\_ cc engine.
- Q.11 Full form of CNC is \_\_\_\_\_.

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- Q.12 Detonation takes place in \_\_\_\_\_ engine. (Petrol/Diesel)

### Section-C

**Note: Short answer type Question. Attempt any eight questions out of Ten Questions. (8x4=32)**

- Q.13 What are the phases of combustion in CI engines? (CO3)
- Q.14 What are the methods of producing air movements? (CO3)
- Q.15 Briefly explain any two types of combustion chambers for diesel engines? (CO3)
- Q.16 What are the advantages of CRDI engine over diesel engine? (CO4)
- Q.17 Compare reciprocation engine and rotary engine? (CO4)
- Q.18 Mention any four causes and remedies of starting trouble of engine? (CO4)
- Q.19 What are the sources of emission? (CO2)
- Q.20 How catalytic convertor reduce emission? (CO4)
- Q.21 Write technical specification of a 4X4 (four wheel drive) car?
- Q.22 Compare BS VI and BS IV norms? (CO4)

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