

Q.21 Write technical specification of a Maruti swift petrol car

Q.22 Explain the working of EGR

### SECTION-D

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

Q.23 Explain working of turbocharger with neat diagram and write its advantages also. (CO4)

Q.24 What are the causes and remedies of high oil consumption? (CO4)

Q.25 Explain the construction & working of Wankel Engine.

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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 What are the effects of knocking?

- a) Noise and roughness
- b) Mechanical damage
- c) Carbon deposits
- d) all of the mentioned

Q.2 Which type of control valve is used in the operation of the injector?

- a) Mechanical                      b) Electrical
- c) Pneumatic                      d) Hydraulic

Q.3 Compression ratio of Diesel engine is

- a) 2 to 3                                  b) 7 to 10
- c) 16 to 20                              d) 5 to 6

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- Q.4 What are the major pollutants emitted from the exhaust due to incomplete combustion?
- a) carbon monoxide    b) hydrocarbons  
c) oxide of nitrogen    d) all of the mentioned
- Q.5 \_\_\_\_\_ in supercharging pressure increases the tendency to detonate and pre-ignite.
- a) Decrease                      b) Increase  
c) unpredictable  
d) None of the mentioned
- Q.6 In a \_\_\_\_\_ governor the camshaft of the pump is fitted to two ball weights.
- a) pneumatic  
b) mechanical  
c) mechanical & pneumatic  
d) none of the mentioned

### SECTION-B

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

- Q.7 Full form of A:F ratio is \_\_\_\_\_ ratio.
- Q.8 Compression ratio of petrol engine is \_\_\_\_\_ than diesel engine?

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- Q.9 \_\_\_\_\_ reduces the effects of exhaust emission.
- Q.10 \_\_\_\_\_ get power with the help of exhaust gases.
- Q.11 Full form of OPOC is \_\_\_\_\_.
- Q.12 Full form of LPG is \_\_\_\_\_.

### SECTION-C

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

- Q.13 What are the phases of combustion in CI engines? (CO3)
- Q.14 Compare knocking and detonation? (CO4)
- Q.15 Explain the working of CRDI (CO3)
- Q.16 Explain working of fuel cell in 60 words with diagram? (CO3)
- Q.17 Draw and label the parts of hybrid system? (CO4)
- Q.18 What are the advantages of CNG engine over petrol engines? (CO3)
- Q.19 What are the effects of engine emission on human beings? (CO2)
- Q.20 How crank ventilation works? (CO4)

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