

- Q.26 Write a short note on Engine overheating and its remedies? (CO3)
- Q.27 What is Homogeneous charge compression ignition (HCCI) Engine. (CO2)
- Q.28 Write about EURO Norms for reducing pollution. (CO4)
- Q.29 What is function of Nozzle in Engine? How many types of nozzles are there? (CO2)
- Q.30 What is CRDI system in Engines? (CO4)
- Q.31 What are various types of Governors in Diesel Engines? (CO2)
- Q.32 Write a short note on Turbocharged Engines. (CO3)
- Q.33 What are Hybrid Vehicles? What are types of Hybrid vehicles? (CO2)
- Q.34 Explain working of four stroke Diesel Engine (CO1)
- Q.35 What is Effect of Exhaust Emission on Human Health ? (CO5)

#### **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 What are various methods of exhaust emission control in Engine? (CO5)
- Q.37 What are different combustion chambers of S.I Engine ? Explain them. (CO3)
- Q.38 Write a short note on  
a) CNG Engines  
b) Fuel Cell Car

**(Note:** Course outcome/CO is for office use only)

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

Time : 3Hrs. M.M. : 100

#### **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 The ignition quality of petrol is expressed by (CO1)  
a) Cetane Number b) Octane Number  
c) Calorific Value d) All of the above
- Q.2 The probability of knocking in diesel engines is increased by (CO2)  
a) High self ignition temperature  
b) Low Volatility  
c) Higher Viscosity  
d) All of the above
- Q.3 The maximum temperature in the I.C. engine cylinder is of the order of (CO2)  
a) 500-1000°C b) 1000-1500°C  
c) 1500-2000°C d) 2000-2500°C
- Q.4 The knocking in spark ignition engines can be reduced by (CO3)  
a) Retarding the spark  
b) Increasing the engine speed

- c) Both A and B
  - d) None of the above
- Q.5 The pressure at the end of compression, in Diesel Engines, is approximately (CO4)
- a) 10 bar                  b) 20 bar
  - c) 25 bar                  d) 35 bar
- Q.6 Engine Pistons are usually made of Aluminium alloy because it (CO1)
- a) is lighter              b) wear is less
  - c) Absorbs shocks        d) it is stronger
- Q.7 The reason for Supercharging in any engine is to (CO3)
- a) Increase efficiency
  - b) Increase power
  - c) Reduce weight and bulk for a given output
  - d) Effect fuel economy
- Q.8 The thermodynamic cycle on which Diesel Engine works is (CO3)
- a) Otto cycle              b) Diesel cycle
  - c) Dual cycle              d) Rankine cycle
- Q.9 The thermal efficiency of a petrol and gas Engines is about (CO2)
- a) 15%                    b) 30%
  - c) 50%                    d) 70%
- Q.10 A spark plug gap is kept from
- a) 0.3 to 0.7 mm        b) 0.2 to 0.8 mm
  - c) 0.4 to 0.9 mm        d) 0.6 to 1.0 mm

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## SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 What is the air fuel ratio of diesel Engine? (CO1)
  - Q.12 What is full form of CNG. (CO1)
  - Q.13 What is formula to calculate Indicated power of Engine? (CO2)
  - Q.14 How will you test Nozzles? (CO3)
  - Q.15 What is EGR in Engine. (CO4)
  - Q.16 How much cubic center capacity (CC) of Hyundai Venue 2021 model Car (CO5)
  - Q.17 Diesel Engine works on \_\_\_\_\_ Cycle. (CO1)
  - Q.18 What is knocking in Engine. (CO3)
  - Q.19 What is Cetane Number? (CO5)
  - Q.20 Write two causes of high fuel consumption of Car. (CO2)

## SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Write a note on Squish and swirl phenomenon in S.I Engine. (CO1)
  - Q.22 Explain the Phenomenon of Detonation in S.I Engines in detail. (CO2)
  - Q.23 Write short note on Opposed piston opposed cylinder Engine. (CO4)
  - Q.24 What are various causes of high oil consumption in Engine? (CO3)
  - Q.25 Write Engine specifications of Maruti Suzuki Baleno Car. (CO5)

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