

QP Code : 6106

(3 Hours)

Marks: 80

- N.B. :**
- 1) Question No.1 is compulsory
 - 2) Attempt any three questions from remaining
 - 3) All questions carry equal marks
 - 4) Make suitable assumptions and mention same clearly
 - 5) Draw neat and clear diagrams wherever necessary

Q.1 Attempt any 4(four) from the following:

- a) Describe Pollutants from Automobile Exhaust
- b) What are different sources of Pollution?
- c) What is Smog? How it affects human beings?
- d) What is an EGR System?
- e) How LPG is advantageous over conventional Fuel?

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Q.2

- a) What is smoke? How smoke affects light? What is light absorption coefficient?
- b) Which are major sources of HC Emissions from S.I.Engines?

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Q.3

- a) List properties of CNG and explain CNG Fuel kit with neat diagram.
- b) What is F.I.D.Principle? Which pollutants are measures using F.I.D.technique? Explain with neat diagram.

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Q.4

- a) Explain working of Evaporative emission control system with proper sketch?
- b) Can alcohol be used in C.I..engine ? Explain.

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Q.5

- a) What is effect of different design parameters viz.valve timing ,ignition timing, Fuel Injection system on emission from S.I.Engine?
- b) Describe the working of Diesel Oxidation catalyst with neat sketch

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Contd.--.

Q.6 Write Short notes on (any four)

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- a) Thermal Reactor
- b) Global Warming
- c) Importance of Pollution Under Control Norms
- d) Fuel Additives
- e) Three Way Catalytic Converter
