**DEPARTMENT OF MECHANICAL ENGINEERING**

Advanced Ic Engines (Cycle Test II)

**YEAR&SEM :** IV&VI  **DATE : .14/03/2017** **MARKS:** 50

**PART A (5X2=10 )**

1. What are the causes for hydrocarbon emission from S.I Engine?
2. Write a short note on carbon monoxide emissions
3. Why catalytic converter called as three way converters?
4. Why lean mixture is preferred in SI engine?
5. List the disadvantages of homogeneous charge compression ignition engine?

**PART B (4 X 10 = 40)**

6.With simple sketch, explain briefly the working principle of a particulate trap.

7.Explain the methods of measuring emissions.

8.Explain driving cycles and its types.

9.Explain about HCCI engine.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

SIR ISSAC NEWTON COLLEGE OF ENGINEERING & TECHNOLOGY

**DEPARTMENT OF MECHANICAL ENGINEERING**

Advanced Ic Engines (Cycle Test II)

**YEAR&SEM :** IV&VI  **DATE : .14/03/2017** **MARKS:** 50

**PART A (5X2=10 )**

1. What are the causes for hydrocarbon emission from S.I Engine?
2. Write a short note on carbon monoxide emissions
3. Why catalytic converter called as three way converters?
4. Why lean mixture is preferred in SI engine?
5. List the disadvantages of homogeneous charge compression ignition engine?

**PART B (4 X 10 = 40)**

6.With simple sketch, explain briefly the working principle of a particulate trap.

7.Explain the methods of measuring emissions.

8.Explain driving cycles and its types.

9.Explain about HCCI engine.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*