

# Galgotias College of Engineering & Technology

1, Knowledge Park II, Greater Noida - 201 306 (UP) INDIA

## **INNOVATIVE TEACHING AND LEARNING PRACTICES**

Title of Practice : Modern tool usages in enhancing the students learning

Class : B Tech – V Sem : Mechanical Engg (Section – A) : 2019–20

Course : IC Engines and Compressors (RME051)

Course Teacher : Dr Brijesh Singh, Professor, Dept of Mechanical Engg

#### **OBJECTIVES:**

1. Student should learn and practice basic ICT Tools, including MS Office.

- 2. Student should learn and practice the contents related to cycles of operation and performance of IC Engines.
- 3. Student should answer the questions orally in a competitive environment that will help them in enriching speaking skills.

#### **PRACTICES:**

- 1. Students were demonstrated to use MS Word and MS Excel (in Mid of August, 2019).
- 2. Students were asked to do an exercise to see the effect of Compression Ratio on Air Standard Efficiency of Otto Cycle and Diesel Cycle (keeping Cut-off Ratio and other variables as constant), using MS Excel (till the end of August, 2019).
- 3. Students were asked to submit their own Resume and p-V diagram of any two concerned thermodynamic cycles (Otto Cycle, Diesel Cycle, Dual Cycle, Carnot Cycle, Rankine Cycle, Stirling Cycle, Ericsson Cycle, Atkinson Cycle, Lenior Cycle etc.) in MS Word soft copy by email (till the mid of September, 2019).
- 4. Students will be demonstrated to compute various performance parameters (eg. Various Engine Powers) of IC Engines, using MS Excel and can check effect of various variables (changing value of one or two) on performance parameters. This is to be done in II week of November, 2019.

### **IMPACT:**

1. Impact will be analyzed through students' performance record and their feedback.

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