## **BACHELOR OF VOCATION**

**Automotive Manufacturing** 

**Subject: Internal Combustion Engines** 

**Subject Code: BBME-210** 

Semester: Fourth September 2020

Theory (External): 35 Marks

Time: 03 hours

## **INSTRUCTIONS TO THE STUDENTS**

- 1. Read the questions carefully and write the answers in the answer sheets.
- 2. Wherever necessary, the diagram drawn should be neat and properly labelled.
- 3. This questions paper comprises of 6 questions out of which student need to attempt any 3 questions.
- 4. All questions carry equal marks.
- 5. The time allotted will be 3 hours for examinations including time of downloading of question paper to emailing of answer books to the concerned Dean/IC.

## **ESSAY TYPE QUESTIONS**

- 1. Differentiate between Otto, Diesel and Dual cycle with neat and clean diagram.
- 2. Describe the construction and working of four stroke engine with neat diagram along with applications related to industries.
- 3. Explain the effect of operating variables with suitable applications and examples.
- 4. Describe the types of injection systems in CI engine with neat and clean diagram along with applications related to manufacturing industries.
- 5. Describe the factors affecting knocking and detonation.
- 6. Explain the working of catalytic convertor with suitable industrial example.

\*\*\*\*\*END OF PAPER\*\*\*\*