## **BACHELOR OF VOCATION**

**Automotive Mechatronics** 

**Subject: Computer Numerical Control Machines (CNC)** 

**Subject Code: ABME-206** 

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 Conventional and DNC machines with applications related to manufacturing industries.
- 2. Describe the Factors considered in selecting the tooling for CNC Machines with examples.
- 3. What is part programming? Explain the need and Basic concepts of part programming with suitable example.
- 4. Describe the Methods of writing a part program with suitable example.
- 5. What is Computer aided part programming. Describe the APT Programming sequence with suitable examples.
- 6. Discuss the properties of high carbon tools steels (HCS) and its application related to manufacturing industry.

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