S.B. Roll No.....

## CNC MACHINES AND AUTOMATION 6<sup>th</sup> Exam/MECH/5380/Jan'2022 (For Batch 2018 onwards)

Duration: 1.15Hrs. M.Marks:25 SECTION-A

## Q1. Attempt any three questions.

3x5=15

- i. How do you identify Z-axis in a CNC machine?
- ii. What are the various applications of CNC machines?
- iii. Write a short note on ATC (Automatic Tool Changer).
- iv. How many types of MCU's are there? Show them diagrammatically.
- v. What are the tool materials that are used for NC/CNC machining?
- vi. Differentiate between open loop and closed loop control system?
- vii. Write short note on G and M codes.

## **SECTION-B**

## Q2. Attempt any one question.

1x10=10

- a. List any five G or M codes and their functions.
- b. Explain the FMS and its components.
- c. Explain in detail the various functions of a DNC system.
- d. Discuss the advantages and disadvantages of CNC machines