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**BACHELOR OF VOCATION**  
**Automotive Manufacturing**  
**Subject: Computerised Numerical Control**  
**(CNC) Machines I**  
**Subject Code: BBME-213**  
**Semester: Third**  
**December 2021**  
**Theory (External): 35 Marks**  
**Time: 03 hours**

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**Instructions to the Students**

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 1 mark.
3. Section B comprises 8 essay type questions out of which students need to do any 5. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

Roll Number									

**SECTION –A (OBJECTIVE TYPE QUESTIONS)**  
(10x1=10 Marks)

- A Write any two Application of CNC machines.
- B Define pre-set tooling.
- C What is the Basic Principle of tool design?
- D Define Swarf removal.
- E In how many ways CNC machine tool systems can be classified?
- F Define Micro controller?
- G What do you mean by ATC?
- H Name special devices used in CNC Machines.
- I Differentiate NC and CNC
- J Feed is measured in units of \_\_\_\_\_

**SECTION –B (ESSAY TYPE QUESTIONS)**  
(5x5=25 Marks)

- Q1 Describe difference between Conventional and CNC machines.
- Q2 Discuss Programmable logic controllers with its different types?
- Q3 Discuss the factors considered in selecting the tooling for CNC Machines.
- Q4 Discuss the constructional details CNC Turning?
- Q5 Discuss the different stages of tool change?

- Q6 Classify CNC machines tools on the basis of:  
(a) Types of motion control (b) According to programming Method.
- Q7 Write the short note on:  
(a) Cutting tool (b) Tool holder
- Q8 Discuss Environmental control for CNC Machines.

====END OF PAPER====