Roll No. | | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (Automation & Robotics) (Sem.–5)

COMPUTER AIDED DESIGN AND MANUFACTURING

Subject Code : BTAR502-18

M.Code : 78216

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Answer briefly :

1) Define CIM.

2) What are conditions to be considered for a model to be called as geometric model?

3) Sketch Bezier curve.

4) What is the principle of material handling system?

5) Define part attributes in geometric modeling.

6) Define DNC system and where it can be used.

7) List the various data output devices.

8) Write the meaning of G81.

9) Define M code and M08, M09.

10) Write steps involved for doing process planning for making slot in rectangular workpiece.

SECTION-B

11) Define automation, and where it can be applied in the Indian industry.

12) Justify the statement "*Adaptive control machining system makes machines more intelligent*".

13) Explain the concept of drawing B-spline curve in CAD.

14) Differentiate between variant and generative process planning system.

15) Define fixed and floating zero concept in computer aided part programming.

SECTION-C

16) Define Automated guided vehicle system, their types and guiding system.

17) What are the part families? What are the different coding system used for making part families?

18) Write a short note on :

    a) Concatenation.

    b) Types of flexibility in FMS system.

    c) Advantages of parametric representation of curve.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.