

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**

B.Tech S8 (Hons) Exam May 2020

**04ME6524-Computer Integrated Manufacturing**

Max. Marks: 60

Duration: 3 Hours

**PART A***Answer All Questions**Each question carries 3 marks*

1. Explain in detail about Work Station based system and micro-computer based systems.
2. Explain about scaling and rotation.
3. Explain about wire frame models.
4. What is B-Rep? Explain its significance.
5. Explain three types of CNC machine tools.
6. Explain Computer Aided Part Programming.
7. What is Supervisory computer control?
8. What is steady state optimal control?

**PART B***Each question carries 6 marks*

9. Discuss about various CAD hardware components with neat sketches.  
OR
10. Discuss about various Graphic displays used in CAD\CAM system.
11. Define transformation? Explain 2-D & 3- D transformation with examples??  
OR
12. Discuss about networking of CAD systems.
13. Explain the features of wireframe and solid models. List out their capabilities in geometric modeling.  
OR
14. Explain in detail about geometric modeling?
15. Give the parametric representation and characteristics of
  - a) Hermite cubic curve
  - b) Hermite Bi-cubic surface  
OR
16. Explain B-rep and CSG type solid models.
17. Differentiate between CNC and DNC. Explain DNC system with a neat sketch.  
OR
18. Explain the basic element of NC machine system with neat sketch.
19. Write in detail about the benefits of Group Technology.  
OR
20. Describe the generative type CAPP system with its various components.