

- Q.22 Write short note on Group technology  
 Q.23 Explain the concept of sequencing of FMS  
 Q.24 Differentiate between CNC and DNC systems.  
 Q.25 Explain integrated Process Planning systems.  
 Q.26 Write short note on CAPP.  
 Q.27 What are the design aspects of flexible manufacturing?  
 Q.28 Write short note on combined DNC/ CNC systems  
 Q.29 Differentiate between ACO and ACC systems.  
 Q.30 Explain part program to command signal.  
 Q.31 Write short note on computer aided scheduling.  
 Q.32 Differentiate between CNC and DNC systems  
 Q.33 What do you understand by manufacturing flexibility?  
 Q.34 Explain the problems with conventional NC systems  
 Q.35 Write short note on software for FMS

#### **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain the Group Technology concept. How the grouping methods are done for the products?  
 Q.37 Draw a neat sketch of DNC systems showing their components. Explain its types.  
 Q.38 Explain any one transducer in NC systems giving its merits and demerits.

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**Mech. Engg. (Fabrication Tech.)**  
**Subject:- Computer Aided Manufacturing**

Time : 3Hrs. M.M. : 100

#### **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 What is the full form of CAPP?  
 a) Computer Aided progress planning  
 b) Computerised Aided process planning  
 c) Computer Aided process planning  
 d) Computerised Aided progress planning  
 Q.2 Which is not the advantage of CNC?  
 a) High initial cost  
 b) Skilled CNC personnel  
 c) High maintenance  
 d) All of the above  
 Q.3 NC machines use two types of codes  
 a) EIA, ISO                  b) SPM, ISO  
 c) Photocell, binary          d) Binary, EIA  
 Q.4 Expand DNC  
 a) Directing numerical control

- b) Directing number control
- c) Direct numerical control
- d) Direction number control

Q.5 Full form of FMS?

- a) Flexible machine system
- b) Flexible machine source
- c) Flexible manufacturing source
- d) Flexible manufacturing system

Q.6 Which one is the NC motion control classification?

- a) Paraxial                  b) PTP
- c) Contouring                d) All of the above

Q.7 The L-type motion control of NC system

- a) Cut along one major axis
- b) On more than one axis
- c) Control the speed with movement
- d) None of the above

Q.8 \_\_\_\_\_ is not a transducer for NC?

- a) Encoder                  b) LVDT
- c) Opto interrupter         d) MCU

Q.9 What is OPITZ in group technology

- a) Inventor                b) Classification
- c) Coding system            d) None of the above

Q.10 Which is not the disadvantages of CNC?

- a) More flexibility
- b) High maintenance cost
- c) High initial cost
- d) Skilled CNC personnel

### **SECTION-B**

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Name types of adaptive control systems.

Q.12 \_\_\_\_\_ is called the brain of the computer

Q.13 The output of CAD is the input of \_\_\_\_\_

Q.14 Material handling is a part of \_\_\_\_\_ FMS systems

Q.15 The \_\_\_\_\_ to NC systems is given by actuation

Q.16 The \_\_\_\_\_ axis decide the tool movement.

Q.17 Expand MCU

Q.18 Name elements of FMS

Q.19 \_\_\_\_\_ converts one form of energy to another useful form

Q.20 Give two advantages of CNC

### **SECTION-C**

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Explain different types of manufacturing Line in CAM.