

- Q.25 Describe various swarf removal methods used in CNC machine?
- Q.26 Differentiate between forward and backward scheduling in FMS.
- Q.27 Explain absolute and incremental system of dimensioning.
- Q.28 Differentiate open loop and closed loop control system?
- Q.29 Explain the major elements of FMS.
- Q.30 Explain the axis identification for CNC machines.
- Q.31 Write short note on :
- a) Manual based process planning
 - b) Computer Based process planning
- Q.32 What is CAM? Write the benefits of CAM.
- Q.33 Explain the concept of actuators in CNC machines.
- Q.34 Explain the major elements of FMS.
- Q.35 Write short note on G and M-Codes.

SECTION-D

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

- Q.36 Write the advantages and disadvantages of CAPP.
- Q.37 Describe the advantage and disadvantages of CNC machine over conventional medicine?
- Q.38 Define FMS. Explain computer aided scheduling.

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**5th Sem / Mech. Engg. (Fabrication Tech.)
Sub. : Computer Aided Manufacturing**

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 In ship manufacturing, the type of layout preferred is
- a) Product layout
 - b) Process layout
 - c) Fixed-position layout
 - d) GT layout
- Q.2 The punch card reader in a CNC machine is _____.
 a) Feedback system b) Input device
 c) Program d) Driving system
- Q.3 Which CAPP system uses computers at lower-level strategies?
 a) Variant CAPP b) Retrieval CAPP
 c) Generative CAPP d) All of the above
- Q.4 CAD/CAM is the relationship between
 a) Science and engineering
 b) Manufacturing and marketing
 c) Design and manufacturing
 d) Design and marketing
- Q.5 Cellular manufacturing is also known as _____. (1) 127256

- a) Manufacturing Technology
 b) Group Technology
 c) Production Technology
 d) None of the above
- Q.6 Which layout is mostly used for the batch type of production?
 a) Product layout b) Process layout
 c) Inline layout d) None of the above
- Q.7 The full form of AS/RS is _____.
 a) Automated Shorting and Retrieval System
 b) Automated Storage and Revival System
 c) Automated shorting and Restoration System
 d) Automated Storage and Retrieval System
- Q.8 _____ are used to locate parts precisely on pallets.
 a) Tools
 b) Fixtures
 c) Workstations
 d) Load & unload stations
- Q.9 The purpose of using recirculating ball screw and nut mechanism in CNC machine is _____.
 a) For higher surface finish
 b) To remove backlash
 c) For carrying out up milling
 d) To reduce the setup time
- Q.10 Which of the following code is used in programming for circular interpolation anticlockwise.
 a) G00 b) G01
 c) G03 d) G02

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SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Full form of FMC is _____.
 Q.12 G-Code are also known as _____.
 Q.13 An _____ is an independent and self-operated vehicle moves on defined guide ways.
 Q.14 Write the input devices of NC machine tools.
 Q.15 In _____ control system, a feedback device is used. (open loop/closed loop)
 Q.16 Which CAPP system uses computers at higher-level strategies?
 Q.17 In _____ control system, a feedback device is used. (Open loop/closed loop)
 Q.18 The device which measures physical motion and then converts it into electrical input/output signal is called _____.
 Q.19 What are the two main types of CAPP?
 Q.20 The full form of CIM is _____.

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Explain generative CAPP.
 Q.22 Differentiate between CNC and DNC machine tools.
 Q.23 Define the terms FMS and CIM.
 Q.24 Write short note on manufacturing flexibility.

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