

- 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 _____.

- 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

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.