

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Describe basic procedure of part programming, write any one program used in CNC machine.
- Q.24 Define basic need of special design feature for CNC and cutting tool.
- Q.25 Define Automation with the concept of AI and Its application in manufacturing ROBOT.

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221751

Roll No.

5th Sem / Mechanical Engg, Mechanical (Tool & Die)

Subject : CNC Machine and Automation

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 G-codes are also known as.
- a) Preparatory codes
 - b) Spindle speed code
 - c) tool section code
 - d) Miscellaneous codes
- Q.2 Which of the following feedback device translates physical motion in to electrical motion.
- a) Encoder
 - b) transducer
 - c) digital system monitoring
 - d) none of the above

Q.3 Several machine tools can be controlled by a central computer in

- a) NC b) CNC
- c) DNC d) CCNC

Q.4 CAD stand for

- a) Computer aided design
- b) computer aided dimensions
- c) computer aided drafting
- d) none of the above

Q.5 M00 code is used for

- a) Spindle stop b) end of program
- c) coolant stop d) programme stop

Q.6 AGV are material _____ system that can be independently operated.

- a) Control b) Handling
- c) manufacturing d) none of them

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Response time means_____.

Q.8 What is ladder logic in PLC.

(2)

221751

Q.9 How many points are sufficient in linear interpolation?

Q.10 Define canned cycle.

Q.11 Write any two G codes with their use.

Q.12 What is swarf removal.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain point to point control system.

Q.14 Explain in brief the fixed automation.

Q.15 What are the areas of application, where CNC is profitable.

Q.16 Write a short note on AGV.

Q.17 What are the basic components in a PLC system.

Q.18 Write advantage of CNC machine over DNC machine.

Q.19 Describe G-code and M-code in NC programming.

Q.20 What are the advantage of pneumatic system over hydraulic derive.

Q.21 Difference between open loop and closed loop system.

Q.22 Write a short note on tachometer.

(3)

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