S. B. Roll. No.....

CNC MACHINES AND AUTOMATION
6th Exam/Mech./5380/Nov'24
(For 2018 Batch Onwards)

Duration: 3Hrs. **M.Marks:75**

SECTION-A

Q1. Do as directed. **15x1=15**

a. NC/CNC system is also known as _____System.
b. DNC stands for_____
c. A typical ATC system has a _____swing arm.
d. _____is the code for tool change.
e. _____codes are used for absolute dimensioning.
f. Coding systems use _____digits.
g. Numerical control system helps in automation. (T/F)
h. The two types of CNCs are _____and _____
i. Ceramics have high resistance to oxidation. (T/F)
j. Subroutines are powerful _____techniques.
k. When the tool is away from job it is _____axis.
l. _____lines are pasted on saddle to form anti-stick-slip.
m. FMS relies on the principle of _____technology.
n. Less skilled people cannot operate CNC machines. (T/F)
o. High carbon steel tools are suitable for low_____

SECTION-B

Q2. Attempt any six questions. **6x5=30**

i. Write a short note on a swarf removal.
ii. What are the advantages and disadvantages of CNC over NC machines?
iii. What are the different methods of part programming?
iv. Explain linear type of potentiometer.
v. What are the advantages of the automation?
vi. What is the difference between LVDT and RVDT?
vii. Write a short note on group technology.

SECTION-C

Q3. Attempt any three questions. **3x10=30**

a. What is PLC? Explain in the different component of PLC?
b. Discuss CAD/CAM in detail.
c. What are the profitable applications of CNC machines?
d. Explain workshop programming and manual part programming in details.
e. What are the basic tools for CNC machines?