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

WORKSHOP TECHNOLOGY-III
5th Exam/Mech./5332/Nov'24
(For 2018 Batch Onwards)

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

SECTION-A

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

a. The milling machine has no provision to hold one or more number of cutters at a time. (T/F)
b. What are the important operations done on milling machine?
c. In up and down milling a method the cutter rotates in the same direction to the work is fed. (T/F)
d. In how many operations a T-slot is milled?
e. Grinding is a metal cutting process. (T/F)
f. Very high pressure is required in grinding process. (T/F)
g. Surface grinder is used to grind _____surfaces.
h. What do you mean by gear shaping?
i. The helical gears are also called spiral gears. (True/False)
j. What is the full form of LASER?
k. Modern machining process is _____arc machining.
l. Metallic coating is the process of_____
m. Galvanising improves the resistance against corrosion. (True/False)
n. What are the units of surface roughness?
o. Buffing is a surface finishing process performed after_____

SECTION-B

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

i. Explain the working principle of a milling machine.
ii. Differentiate between up milling and down milling.
iii. What are the advantages of grinding over machining processes?
iv. Explain dressing and balancing of grinding wheels.
v. Write advantages and disadvantages of gear hobbing process.
vi. Write down the principle and applications of Electron Beam Machining.
vii. Give applications of metal spraying processes.
viii. Discuss the purpose of finishing surfaces of metal parts.

SECTION-C

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

a. Explain briefly the following milling machine accessories: a) Arbors b) Adaptors c) Collets d) Vices e) Indexing head
b. Discuss the centreless grinding operation, the machine used, its advantages and limitations.
c. Write a short note on electroplating.
d. Using a neat sketch give simple description and working of honing super finishing process.
e. How laser machining is different from plasma arc machining? Explain using neat sketches.