

## SECTION-D

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

- Q.23 Explain the principle of EDM with neat sketch and write its applications.
- Q.24 Describe the gear shaping process with suitable example and draw a neat diagram and write its applications.
- Q.25 Explain Honing Process. Its applications and explain any one Honing machine.

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Roll No. ....

## 4th Sem / Mechanical, Mech ( Tool & Die)

### Subject : Workshop Technology - III

Time : 3 Hrs.

M.M. : 60

## SECTION-A

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

- Q.1 Which of the following manufacturing processes is suitable for mass production of small gears?
- a) Casting                      b) Forging
- c) Stamping                     d) Machining
- Q.2 A surface grinding machine is used to grind:
- a) Flat surfaces                b) Cylindrical surfaces
- c) Internal surfaces          d) All of the above
- Q.3 The wire electrode in wire EDM is typically made of:
- a) Brass                         b) Copper
- c) Tungsten                     d) Graphite

Q.4 The operation of cutting of a flat sheet to the desired shape is called

- a) Shearing
- b) Piercing
- c) Punching
- d) Blanking

Q.5 Surface roughness is typically measured in

- a) micrometer
- b) nanometer
- c) millimeters
- d) centimetre

Q.6 Galvanizing is a process of coating iron or steel with:

- a) Zinc
- b) Tin
- c) Nickel
- d) Chromium

### SECTION-B

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

Q.7 What is the module of a gear?

Q.8 What are the two main types of abrasives?

Q.9 \_\_\_\_\_ uses high-frequency vibrations to erode material with abrasive particles.

Q.10 Name two common rolling defects.

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Q.11 Name a finishing process that uses soft cloth wheels and polishing compounds to improve the surface finish.

Q.12 \_\_\_\_\_ is a process of depositing a metal coating on a conductive surface using an electric current.

### SECTION-C

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

Q.13 What are the common gear finishing processes and their purposes?

Q.14 What factors influence the selection of a grinding wheel?

Q.15 What are the advantages and limitations of centerless grinding?

Q.16 Explain Laser Beam Machining process.

Q.17 Explain the principle of abrasive jet machining.

Q.18 Explain the process of upset forging.

Q.19 What are some common rolling defects and how can they be prevented?

Q.20 Describe the lapping process and its applications.

Q.21 Explain the various Press operations.

Q.22 What is anodizing and its primary applications?

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