

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER – 2023**

MANUFACTURING PROCESS

[Maximum Marks : 100]

[Time : 3 hours]

PART – A
(Maximum Marks : 10)

Marks

I. Answer **all** questions in one or two sentences. Each question carries 2 marks.

1. Define Indirect measuring instrument.
2. Define welding.
3. What is T.I.G welding?
4. What is cold working?
5. What is a pattern?

(5x2=10)

PART – B
(Maximum Marks : 30)

II. Answer any **five** of the following questions. Each question carries 6 marks.

1. Define precision and non-precision measuring instrument.
2. Write short note on feeler gauge.
3. Sketch and name three welding positions.
4. Sketch F.C.C, B.C.C and H.C.P.
5. Define age hardening.
6. Name four types of pattern.
7. Name four defects in castings.

(5x6=30)

PART – C

(Maximum Marks : 60)

(Answer **one full** question from each unit. Each full question carries 15 marks)

UNIT – I

- III.** (a) Sketch an outside micrometer and mark its parts. (7)
(b) Sketch and explain electrical comparator. (8)

OR

- IV.** (a) Sketch and explain plug gauge. (7)
(b) Define the mechanical properties Creep and Fatigue strength. (8)

UNIT – II

- V.** (a) Sketch and name types of oxy-acetylene flame. (7)
(b) Sketch and explain atomic hydrogen welding. (8)

OR

- VI.** (a) Write short note on soldering and brazing. (7)
(b) Sketch and explain thermite welding. (8)

UNIT –III

- VII.** (a) Sketch and explain wire drawing. (7)
(b) Differentiate slip and twinning with sketch. (8)

OR

- VIII.** (a) Sketch an anvil and mark its parts. (7)
(b) Draw and explain the cooling curve for pure iron. (8)

UNIT – IV

- IX.** (a) Name the types of moulding sand and explain any two. (7)
(b) Sketch and explain cold chamber die casting method. (8)

OR

- X.** (a) Sketch and explain draft allowance in a pattern. (7)
(b) Sketch and explain centrifugal casting. (8)
