

NETTUR TECHNICAL TRAINING FOUNDATION DIPLOMA IN MECHATRONICS ENGINEERING & SMART FACTORY – CP15 II SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JUNE 2023

Subject: Manufacturing Engineering

Total Time: 2 Hr.

Subject Code: CP15203T

Total Marks: 50

PART B

1.0 ANSWER ANY EIGHT OF THE FOLLOWING

2*8=16

- 1.1 What are the types of manufacturing process?
- 1.2 Define steel
- 1.3 What is ferrous material? Give an example
- 1.4 What is conventional machining, give an example?
- 1.5 What are the work holding devices?
- 1.6 Define collet.
- 1.7 Name the types of formative manufacturing process
- 1.8 Define plastic moulding and its classification.
- 1.9 List any four welding applications
- 1.10 What are the purposes of Electro plating process?

2.0 ANSWER ANY SIX OF THE FOLLOWING

3*6=18

- 2.1 What are the types of plain carbon steel? Explain
- 2.2 Explain the three types of feed mechanism
- 2.3 Define taper turning and chamfering process
- 2.4 Draw and explain the nomenclature of milling cutter.
- 2.5 What are the uses & properties of cutting fluid?
- 2.6 Define extrusion process of metal forming with diagram and write its advantages
- 2.7 What are the defects of moulded components?
- 2.8 Explain the types of temporary fasteners.

3.0 ANSWER ANY FOUR OF THE FOLLOWING

4*4=16

- 3.1 Explain up milling and down milling with neat sketch
- 3.2 Explain EDM and its working with neat sketch.
- 3.3 Explain open and close forging with diagram.
- 3.4 Explain the types of welding joint with diagram
- 3.5 Write a short note on drilling, knurling, boring and tapping process
- 3.6 With neat sketch explain the working principle of USM.