

NETTUR TECHNICAL TRAINING FOUNDATION
DIPLOMA IN MECHATRONICS ENGINEERING AND SMART FACTORY – CP15
VI SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-MAY 2023

Subject: Industrial Equipment Maintenance
Subject Code: CP15602T

Total Time: 2 Hr.
Total Marks: 50

PART B

1.0 ANSWER ANY EIGHT OF THE FOLLOWING

2*8=16

- 1.1 Define availability
- 1.2 Name any 4 types of PPE and its uses
- 1.3 What is equipment history card?
- 1.4 What is commissioning?
- 1.5 What is erection?
- 1.6 What do you understand by the term Reliability?
- 1.7 What do you understand by codification and its need?
- 1.8 List out the factors which affects spare parts planning
- 1.9 What is supply chain management?
- 1.10 What is smart maintenance?

2.0 ANSWER ANY SIX OF THE FOLLOWING

3*6=18

- 2.1 Write down the elements of preventive maintenance.
- 2.2 Write the formula to calculate i) Availability ii) Performance iii) Quality
- 2.3 What is work order, explain with its process flow diagram
- 2.4 What do you understand by the term Failure Rate? Explain with an example
- 2.5 What is inspection and Processing station in Modular Manufacturing System?
- 2.6 What is VED analysis, and its usage?
- 2.7 Explain how additive manufacturing helps in maintenance?
- 2.8 Write the different types of smart sensors and explain

3.0 ANSWER ANY FOUR OF THE FOLLOWING

4*4=16

- 3.1 List the types of maintenance & explain any three in detail.
- 3.2 What is a Bath Curve? Explain its three stages with a neat diagram.
- 3.3 Explain the troubleshooting method following in Modular Manufacturing System
- 3.4 What is Calibration and what are its objective?
- 3.5 Explain the classification of spare part based on ABC Analysis and write its features
- 3.6 Explain the prognostic approach method with its types.

