

INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)
End Semester Examination June / July 2019
B.Tech (Marine Engineering)
Semester – I
Workshop Technology (UG11T2106)

Date: 20-07-2019
Time: 3 Hrs

Maximum Marks: 100
Pass Marks: 50

PART –A (10 X 3 = 30 Marks)
(All are Compulsory Questions)

1. a. Draw and mention the uses of Try Square.
- b. Explain the function of a Planing Machine.
- c. What are the different jobs carried out on Lathe Machine?
- d. Mention the factors affecting tool life.
- e. Define the process of Lapping.
- f. What is least count of Vernier Calliper?
- g. Define Weldability. What all factors it depend upon?
- h. What are the hazards to health and safeties associated with welding?
- i. Explain the function of Pressure Reducing valve of Air and Steam on board ships.
- j. Mention the various PPEs used in Engine Room on board Ships.

PART B 5 X 14 Marks = 70 Marks
(Answer any 5 of the following)

- 2 (a). Explain with sketches different types of Callipers used. (7 marks)
- (b). Draw a Bench Vice and mention the parts. (7 marks)
- 3 (a). Draw a Lathe and label it parts. (10 marks)
- (b). Differentiate between Turret and Capstan Lathe Machine. (4 marks)

- 4 (a). Draw and explain the Nomenclature of Cutting Tool. (8 marks)
(b). Explain the different wears that occur in a cutting Tool. (6 marks)
- 5 (a). Write short notes on the following:
(i) Honing, (ii) Buffing, (6 marks)
(b). Draw and explain the operation of Inside Micrometre. (8 marks)
- 6 (a). Briefly describe with sketch the Oxy-Acetylene Gas Welding Process. (7 marks)
(b). What are different type of flames used in Oxy-Acetylene welding? (7 marks)
- 7 (a). Sketch a "Screw down non return" Globe Valve and name its parts. (7 marks)
(b). What is the function of Gland Packing. What are the properties of good Gland Packing (3 marks + 4 marks)
- 8 (a). Write a short note on Factory Act Regulation. (7 marks)
(b). Briefly describe the TIG welding Process. (7 marks)
