

INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)

June 2017 End Semester Examinations
B. Tech (Marine Engineering – First Semester)

Workshop Technology – UG11T 2106/UG11T 1106

Date: 08.07.2017
Time: 3 Hrs

Maximum Marks : 100
Pass Marks : 50

PART – A

10X3=30 Marks

(All questions are compulsory)

1. (a) Draw a Try square and an Internal calliper.
- (b) Explain the term Reaming.
- (c) What is the use of a Turret.
- (d) List the functions of Cutting Fluid.
- (e) Write down the properties of material for cutting tool and give one example for such material.
- (f) Explain the term Tolerance with respect to precision measurements in manufacturing machine parts.
- (g) Mention the importance of Marking of engine parts for fitting.
Mention one example for such marking.
- (h) According to factories Act define the meaning for Hazardous process.
- (i) Explain the process of Soldering.
- (j) Mention the Safety precautions to be carried out before doing welding operations.

PART – B

5X14=70 Marks

(Answer any 5 of the following)

2. (a) Draw a Drill Bit and label the different parts and cutting angles. (8 Marks)
(b) Draw a Bench vice and label the parts. (6 Marks)

3. (a) Draw a lathe Machine and label the parts. (8 Marks)
(b) List the safeties provided and safety precautions to be taken while working on a lathe machine. (6 Marks)

4. (a) Draw a single point cutting tool and mark the different angles and terminologies of it. (8 Marks)
(b) With a sketch explain the different wears that occur in a cutting tool. (6 Marks)

5. (a) Draw a neat sketch with labels of various parts of Micrometer and explain how to use it. (8 Marks)
(b) Draw and show the various measuring edges of Vernier calliper and its uses. (6 Marks)

6. (a) Draw a sectional view of a globe valve showing the gland box and its tightening arrangements. (8 Marks)
(b) List the procedure to be followed before overhauling an engine. (6 Marks)

7. (a) Mention the General Duties of an occupier as per factories act. (8 Marks)
(b) Explain the precautions to be carried out in case of a fire, according to factories act. (6 Marks)

8. (a) Draw and explain the process of Electric Arc Welding. (8 Marks)
(b) Explain in detail about the defects in Welding. (6 Marks)
