

INDIAN MARITIME UNIVERSITY

(A Central University, Government of India)

End Semester Examination Dec 2019/Jan 2020

B.Tech (Marine Engineering)

Semester -I

UG11T1106/2106- Workshop Technology

Date: 21.12.2019

Time: 3 Hours

Max Marks: 70

Pass Marks: 35

Part-A

(10X2=20 marks)

(All are Compulsory Questions.)

1. Explain working principle of milling machine.
2. List out types of chucks used on a center lathe.
3. List out applications of surface plate and scriber.
4. Explain advantages of using cutting fluid in metal cutting.
5. Explain the term lapping.
6. Explain use of dial gauge and feeler gauge in work shop.
7. Explain in brief MIG welding.
8. Explain purpose of using flux during welding.
9. Explain function of pressure reducing valve.
10. List out sources of accident in the workshop.

Part-B

(5X10=50 marks)

(Answer any five of the following)

11. (5+5= 10 marks)
 - a. With suitable sketch explain use of die and die stock.
 - b. What is reamer? Explain different types.
12. (5+5= 10 marks)
 - a. With a neat sketch explain working of sensible drilling machine
 - b. Draw a turret lathe and label the parts.
13. (5+5= 10 marks)
 - a. Explain the terms cutting speed, feed, shank and rake.
 - b. What are common tool failures? List out properties of cutting tool.
14. (5+5= 10 marks)
 - a. Briefly explain honing process
 - b. With suitable sketch explain use of inside micrometer.
15. (5+5= 10 marks)
 - a. Explain the procedure for peening of weld.
 - b. Draw a labelled sketch of various types of welding joints.
16. (5+5= 10 marks)
 - a. With suitable sketch explain use of keys and cotters in engineering
 - b. Explain procedure for bedding in of bearings.
17. (5+5= 10 marks)
 - a. What are the safety measures to prevent electrical hazards?
 - b. With a neat sketch explain welding defects and causes for the same. (Any three).