

# **INDIAN MARITIME UNIVERSITY**

(A Central University, Government of India)

May/June 2018-End Semester Examination

## **B.Tech(Marine Engineering)**

Semester II

### **Workshop Technology (UG11T2106/1106)**

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Date: 14-07-2018

Maximum Marks:100

Time: 3 Hrs

Pass Mark : 50

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#### PART-A

(Marks 10 × 3=30)

(All questions are compulsory)

1. a) Explain Reaming operation.
- b) Draw and mention the uses of an inside spring caliper.
- c) Mention the factors affecting Tool Life in metal Cutting Tools.
- d) Explain Lapping operation.
- e) Draw and explain a double ended and a progressive Limit Plug Gauge.
- f) Mention various types of jointing gasket materials Used in between pipeline flanges.
- g) Define the Age limit for child labour as per factory Act.
- h) Mention the Various PPEs worn by a welder.
- i) Explain the Safe working practice to be followed before doing an hot work.
- j) Write down the benefits of good housekeeping in any workshop.

PART-B

(Marks 5×14=70)

(Answer any 5 from the following 7 questions)

2. Draw and Mention the uses of various equipments, tools and measuring Instruments used in an workshop operation of cutting a Precise Square Slot of 10x10 mm in the center of a square metal plate of 100 x 100 mm and 12 mm thickness. (14)
3. Draw a neat Sketch of an Lathe and label the parts. (14)
4. Write in detail about measuring tool life and defects of tool with respect to metal cutting operation. (14)
5. Draw, label and explain the procedure of reading an External Micrometer (14).
6. With the help of a neat Sketch explain the various defects in Welding. Explain any one of the NDT methods carried to find the defects. (14)
7. Write an Essay about Factory Act, mentioning any 5 of its important Chapters it deals. (14)
8. Write an Essay on Risk Assessment procedures with respect to any Major Maintenance work to be carried onboard. (14)

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