

**INDIAN MARITIME UNIVERSITY**  
(A Central University, Government of India)  
**End Semester Examinations December 2018**  
**B.Tech (Marine Engineering)**  
**Semester-I**  
**Workshop Technology (UG11T3106)**

Date: 09.01.2019  
Time: 3Hrs

Maximum Marks: 100  
Pass Marks: 50

**PART-A**

(10X3=30 marks)

**(All are Compulsory Questions)**

1. a. Explain the term Reaming.  
b. Explain Turret on a lathe.  
c. Mention any three advantages of Automatic lathe.  
d. Define cutting speed.  
e. Define the Process of Lapping.  
f. Draw and mention the use of Thread Pitch Gauge.  
g. Explain the Advantage of coated electrode in Arc Welding.  
h. Explain spot welding.  
i. Mention any three types of flange gasket material used for pipe work.  
j. Define child labour according to factory act.

**PART-B**

(5X14=70 marks)

**(Answer any five of the following)**

2. (7+7=14)
  - a. Draw and explain different types and classifications of files.
  - b. Draw a conventional drill bit and label the parts.
3. (7+7=14)
  - a. Draw a Lathe and label the parts.
  - b. Explain the various safety procedures to be followed while operating a Lathe machine.
4. (7+7=14)
  - a. Explain the general factors defining the cutting Speed and Feed.
  - b. Explain in detail about common types of tool failure.

5. (7+7=14)
- a. Explain the process of Grinding and the various safety procedures to be followed while doing grinding.
  - b. Draw and label a Vernier caliper. Mention about the various care and procedures to be followed while handling and storing precision instruments.

6. (7+7=14)
- a. Explain in detail about Arc welding
  - b. With a neat sketch explain the various defects in welding.

7. (7+7=14)
- a. Draw a neat sketch of Gate Valve and label the parts. Explain the function of gland packing.
  - b. Explain the common Markings and procedures carried while dismantling and Boxing back a machinery part.

8. (7+7=14)
- a. Explain in detail about Risk Assessment.
  - b. Explain about the safety procedures and permits to be taken before carrying out welding operation.

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