INDIAN MARITIME UNIVERSITY

(A Central University, Govt.of India)

May/June 2015 End Semester Examinations

SEMESTER – I, B.TECH (MARINE ENGINEERING)

WORKSHOP TECHNOLOGY (T 2106 / T 1106)

Date:23.06.2015 Max.Marks:100 Time:-3 Hrs Pass Marks:50

Note: (i) Non-Programmable scientific calculator is allowed

- (ii) Attempt six questions
- (iii) Question no.1 is compulsory

PART – A Compulsory Questions

 $(3 \times 10 = 30 \text{ Marks})$

- 1. a) What is grindability?
 - b) Define the term Reaming.
 - c) Define Weldability.
 - d) Draw a neat sketch of twist drill, mentioning its parts.
 - e) Draw any three Moulding tools.
 - f) Draw a simple sketch of Blow down cock.
 - g) Differentiate between a file and a scraper.
 - h) What is spot facing?
 - i) Write short notes on: (i) Soldering (ii) Brazing.
 - j) What do you mean by packing? List any two packing materials.

PART - B (5 x14 = 70 Marks) (Answer any five of the following)

2. a) Draw neat sketches of any four types of files used.

(8)

b) Sketch and explain Dial Indicator Mechanism.

(6)

3.	a) List various types of chip breakers. Describe their uses.	(7)
	b) Enlist various types of cutting tool failures with diagram.	(7)
4.	a) Describe and sketch the following i) Hermaphrodite caliper ii) Spring caliper iii) Depth gauge	(9)
	b) Define Pattern makers scale. What do you understand by interchangeability	v. (5)
5.	a) Draw and label the parts of a Lathe Machine.	(10)
	b) Differentiate between Turret and Capstan lathe machine	(4)
6.	a) Describe various types of packing & jointing materials. State the material used for high pr.steam and Sea water. Give reason.	(8)
	b) Explain any one type of jig and one fixture with neat sketch.	(6)
7.	Define gas welding. Explain Oxy-acetylene gas welding with a neat sketch. Also draw a neat labeled sketch of Oxy-acetylene gas welding equipment.	(14)
8.	a) Briefly explain causes of accident.	(6)
	b) Write short note on Factory Act	(4)
	c) Write a short note on PPE (Personal Protective Equipment)	(4)
