

CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

18MR63

Sixth Semester B.E. Degree Examination, Jan./Feb. 2023 Marine Electrical Technology

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Write a short note on :
i) Effects of inclination ii) Hazardous areas (12 Marks)
b. Explain the common system for distribution of AC power. (08 Marks)

OR

- 2 a. Define the types of tanker installations. (04 Marks)
b. Write a short note on Shore supply (10 Marks)
c. Draw a neat sketch of a ship's typical electrical distribution system. (06 Marks)

Module-2

- 3 a. Briefly explain detection and clearance of an Earth fault. (10 Marks)
b. What is an AVR? Mention the operating principle an AVR. (03 Marks)
c. Write a short note on : i) Effect of kW loading ii) Effect of KVA loading. (07 Marks)

OR

- 4 Explain the two synchronizing method used on boardship with the help of a neat diagram. (20 Marks)

Module-3

- 5 a. Briefly explain the classes of insulation. (10 Marks)
b. Write a short note on : i) Cable sheath ii) Cable gland. (10 Marks)

OR

- 6 a. What are the signals for a power driven ship under way (night)? (12 Marks)
b. What is HCLPMFL? Explain the working with a schematic diagram. (08 Marks)

Module-4

- 7 a. Explain the working of a cycloconverter with the help of a neat diagram. (10 Marks)
b. Briefly explain the layout and optimizing storage space. (10 Marks)

OR

- 8 What do you mean by electrohydraulic steering system? Also explain the four RAM type of steering system. (20 Marks)

Module-5

- 9 Briefly explain Cathodic protection system (20 Marks)

OR

- 10 Write a short note on :
i) The combustible Gas Indicator
ii) Portable Oxygen Analyzer
iii) Tankscope
iv) Fixed Oxygen Analyzer (Monday cell type) (20 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.