

CBCS SCHEME

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21MR42

Fourth Semester B.E. Degree Examination, June/July 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. What is Automatic Voltage Regulator (AVR)? Explain with a neat sketch. (10 Marks)
b. State the purpose of emergency generator and its location. (10 Marks)

OR

- 2 a. Explain Three lamp method of synchronization. (10 Marks)
b. Draw a neat sketch of Brushless, self excited, error operated excitation systems. (10 Marks)

Module-2

- 3 a. State the difference between insulated system and earthed neutral system. (10 Marks)
b. Write a note on Shore Supply Connection. (10 Marks)

OR

- 4 a. Why dead man alarm system is used in engine room when the ship is UMS? (10 Marks)
b. Draw a neat sketch of power distribution system of ship. (10 Marks)

Module-3

- 5 a. Draw and explain direct on-line starter. (10 Marks)
b. What is single phase motor? Explain the motor maintenance carried in ship. (10 Marks)

OR

- 6 a. What do you mean by intrinsically safety equipment? (10 Marks)
b. What is flame proof enclosure? (10 Marks)

Module-4

- 7 a. Draw a neat sketch and explain incandescent lamp. (10 Marks)
b. What is navigation and signal lights? Explain with a neat sketch. (10 Marks)

OR

- 8 a. Explain about the communication system used for internal in ship and explain any one in detail. (10 Marks)
b. Write the full form of GMDSS. Explain why it is important. (10 Marks)

Module-5

- 9 a. Explain the Battery room maintenance in ship. (10 Marks)
b. What is multimeter? How it is used in ship? (10 Marks)

OR

- 10 a. Sketch and explain how insulation resistance is measured. (10 Marks)
b. With a neat sketch, explain the diode test carried in ship and current clamp meter also. (10 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.