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Sixth Semester B.E. Degree Examination, June/July 2015
Marine Electrical Technology

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

PART – A

- 1 a. With the circuit diagram, explain static excitation system in detail. (10 Marks)
b. Draw and explain Automatic Voltage Regulator block diagram with its working principles. (10 Marks)
- 2 a. With block diagram, explain in detail about shore supply. (10 Marks)
b. What are the different emergency loads? Classify depends on the period of use, while supplying from emergency generator. (10 Marks)
- 3 a. What are the precautions adopted in high voltage distribution system in ship? Explain it in detail. (10 Marks)
b. List out the different electrical cables used in ship. Hence explain the effect of temperature on it. (10 Marks)
- 4 a. With the help of neat circuit explain star-delta starter used in marine electrical motor. (10 Marks)
b. What are the different types of marine motors? Explain briefly. (10 Marks)

PART – B

- 5 a. With the help of neat diagram, explain in detail about different Navigational lights used in ship. (10 Marks)
b. Explain in detail the need of Engine Room telegraph and Emergency Radio operation in ship. (10 Marks)
- 6 a. Write a short note on alternator maintenances with defect, symptom, cause and remedy. (10 Marks)
b. Explain in detail the maintenance of air circuit breaker. (10 Marks)
- 7 a. What are the different hazardous zones and temperature class? Explain in detail. (10 Marks)
b. With a neat diagram, explain basic turbo-electric propulsion system. (10 Marks)
- 8 a. List out the different switch gears and equipments and Discuss the importance of the same in ship. (10 Marks)
b. What are the different steps to minimize the risk of an Electrical shock on board? (10 Marks)

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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.