



BT - MRE-VI-08 - 028

B. Tech Degree VI Semester Examination in Marine Engineering, November 2008

MRE 602 MARINE ELECTRICAL TECHNOLOGY

Time : 3 Hours

Maximum Marks : 100

- I. (a) Explain the rules and regulations governing electrical machineries on ships. (10)
(b) Explain the different alternator excitation methods. (10)
OR
- II. (a) Sketch and describe a brushless alternator. (10)
(b) What are the different types of emergency batteries? Explain the construction details. (10)
- III. (a) Sketch a 440 volt MSB and briefly explain important consoles. (10)
(b) Explain the precautions adopted in high voltage distribution system. (10)
OR
- IV. (a) Explain the different protective methods on squirrel cage induction motor. (10)
(b) Explain the working of a three phase induction motor. (10)
- V. Explain (i) the working of oxygen analysis (ii) Navigation lights – regulations and circuit. (10+10)
OR
- VI. Write short notes on (20)
(i) E/R telegraph
(ii) Salino meter
(iii) Rudder angle indicator
- VII. (a) Explain about the different types of faults that may occur in alternator? (10)
(b) Explain how an earth fault in a deck light fitting is detected and rectified? (10)
OR
- VIII. (a) Explain the micro processor control and maintenance electrical fire fighting. (10)
(b) What are the precautions to be taken against electric shock and related hazards. (10)
- IX. (a) Write short note on Diesel electric and turbo electric propulsion system. (10)
(b) What are the conditions to be satisfied for the parallel operation of two generators? (10)
OR
- X. (a) What is meant by 'Ex' Protection. Briefly explain each. (10)
(b) What are important rules and regulations regarding emergency generator. (10)
