CBCS SCHEME

USN	18MR5
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Fifth Semester B.E. Degree Examination, Jan./Feb. 2021 Marine Auxiliary Machines

Max. Marks: 100 Time: 3 hrs. Note: Answer any FIVE full questions, choosing ONE full question from each module. Module-1 With a neat sketch, explain engine Fresh water cooling system. (10 Marks) 1 a. Explain the colour coding of different pipe line on board. (10 Marks) b. OR Draw the Blige line onboard the ship and explain how Blige water is transferred to Blige 2 (10 Marks) Explain the importance of Hydrophore system. (10 Marks) b. Module-With a neat sketch, explain swing check valve. (10 Marks) 3 a. Write down the difference between safety valve and relief valve. (10 Marks) b. With a neat sketch, explain globe valve. (10 Marks) a. (10 Marks) Write a note on refractory material. Module-3 (10 Marks) Write a note on NPSH. 5 a. What are the inspections to be carried out on a pump and motor during overhauling? b. (10 Marks) Explain series and parallel operation of a centrifugal pump graphically. (10 Marks) a. With a neat sketch, explain the working of Diaphragm pump. (10 Marks) Module-4 (10 Marks) With a neat sketch, explain shell and Tube Heat Exchanger. (10 Marks) Write a note on U-V sterilizer. Explain the methods of Marine Heat Exchanger maintenance. (10 Marks) (10 Marks) Explain the principle of Heat transfer. Module-5 Sketch and explain four ram type steering gear system. (10 Marks) 9 (10 Marks) What is the purpose of stern tube? b.

OR

a. Sketch and explain two ram steering gear system.
b. How do you conduct Emergency Steering Operation?
(10 Marks)
(10 Marks)

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