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.

GBGS SCHEME

USN								15MR63

Sixth Semester B.E. Degree Examination, June/July 2019 **Marine Auxiliary Machines - II**

Time: 3 hrs. Max. Marks: 80 Note: Answer any FIVE full questions, choosing ONE full question from each module. Module-1 What is MARPOL? What are its annexes? Explain Annex 1 and Annex 5 in detail. (14 Marks) b. Explain a SECA area and where are they located. (02 Marks) 2 Explain the construction and working of an oily water separator with the help of a neat diagram. (16 Marks) Module-2 Draw and explain the compressed air system in brief. (12 Marks) Explain the principle of operation of a purifier. (04 Marks) Draw the detailed cross section of a fuel oil purifier and explain its working. (14 Marks) What is the difference between a purifier and a clarifier? (02 Marks) Module-3 a. Explain the working of a 'Thermostatic Bellows type expansion valve'. (14 Marks) b. What is the difference between a vapour compression and vapour absorbtion cycle? (02 Marks) What are the common faults in a refrigeration system? (08 Marks) b. What are the desirable properties of a refrigerant? (08 Marks) Module-4 What are the pollutant present in fuel? What are its causes? Give possible corrective action (12 Marks) b. What are the causes for Crancase oil dilution? How is it checked? (04 Marks) OR What are the desirable properties of lubricants? (12 Marks) b. What is base number of a lubricant explain its impotence? (04 Marks) Module-5

As a 2nd engineer you have been asked to plan a main engine decarb in port. Explain the 9 steps you would take keeping in mind the safe working practices. (16 Marks)

OR

- Discuss the advantages and disadvantages of adopting the following policies for maintenance of engine room equipment.

 i) Planned maintenance 10

 - Condition maintenance ii)
 - Periodic maintenance iii)
 - Breakdown maintenance. iv)

(16 Marks)