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10MR54

Fifth Semester B.E. Degree Examination, Dec.2016/Jan.2017
Marine Auxiliary Machinery – I

Time: 3 hrs.

Max. Marks:100

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

PART – A

- 1 a. Draw a neat sketch of main engine fuel oil system. (10 Marks)
b. Draw a neat layout of bunkering system of HFO (08 Marks)
c. Write the colour coding for sea water, freshwater, steam and sludge. (02 Marks)
- 2 a. What are the procedures should be followed while Bunkering. (10 Marks)
b. Write about strainers and filters used onboard. (10 Marks)
- 3 a. What is Osmosis? (05 Marks)
b. What is reverse Osmosis? (05 Marks)
c. Write a brief note on Flash evaporators and U-V sterilizer. (10 Marks)
- 4 a. Write a short note on displacement and roto-dynamic pumps. (05 Marks)
b. Draw the centrifugal pump discharge characteristics and what is priming? (05 Marks)
c. Explain about gear pump with a neat sketch. (10 Marks)

PART – B

- 5 a. Discuss about Marpol and its annexes. (10 Marks)
b. Explain about oil content monitoring equipment with a neat sketch. (10 Marks)
- 6 a. Write the precautions taken before entering (or) cleaning tanks. (10 Marks)
b. What is homogenizer and write about its uses and working. (10 Marks)
- 7 a. Draw and explain rotary vane type steering gear. (15 Marks)
b. How is the thrust transferred to the hull? (05 Marks)
- 8 a. Explain biological sewage treatment plant. With a neat sketch. (15 Marks)
b. Write short note on Bio chemical oxygen demand. (05 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.