

--	--	--	--	--	--	--	--

***B.Tech. Degree IV Semester Supplementary Examination in
Marine Engineering May 2016***

MRE 405 MARINE AUXILIARY MACHINERY - I

Time : 3 Hours

Maximum Marks : 100

(5 × 20 = 100)

- I. Draw a line diagram for main engine fresh water cooling system showing important fittings. (20)
- OR**
- II. Explain the preparation and procedure of HFO Bunkering. (20)
 - III. Describe with the aid of a line sketch the working of 2 – stage reciprocating air compressor used on board ship. (20)
- OR**
- IV. Describe the process of fresh water generation in a ship. What are the methods of distillate treatment? (20)
 - V. Sketch a Bilge oil separator used on board ship. Explain the function of its mountings. (20)
- OR**
- VI. What is MARPOL convention? Write notes on various annexes. (20)
 - VII. Explain two different types of heat exchangers used in ships. Enumerate the comparison between each other. (20)
- OR**
- VIII. Write notes on :
 - (a) Electrically operated deck crane. (5)
 - (b) Windlass and mooring winch. (5)
 - (c) Duplex filters. (5)
 - (d) High and low sea chests. (5)
 - IX. Explain the theory of oil purification. Describe working of heavy fuel oil purifier. (20)
- OR**
- X. Make a comparative study on centrifugal pump and gear pump with particular reference to its applications and maintenance. (20)