

**USN** 18MR641 Sixth Semester B.E. Degree Examination, July/August 2022 **Advanced Marine Technology** Time: 3 hrs. Max. Marks: 100 Note: Answer any FIVE full questions, choosing ONE full question from each module. Module-1 What is a tanker ship? Explain the classification of tanker ship. (12 Marks) Briefly explain Pre-Marpol tanker and Marpol tanker. (08 Marks) OR Explain with a neat sketch, ring main system of tanker pipeline. 2 (12 Marks) What is a deck seal? Explain the working of deck seal in an IG plant. (08 Marks) Module-2 Explain the features of fully pressurized and fully refrigerated gas carrier ships. (10 Marks) Sketch and explain independent tank type 'A'. (10 Marks) OR Draw a neat sketch of a heater for a gas carrier. When it will be initiated? Explain. (08 Marks) Explain with a neat sketch, deep well pump fitted on board refrigerated gas carrier. (12 Marks) Module-3 Explain about ballast tank protection. (08 Marks) Explain in detail about oil record book. (12 Marks) OR What is COW? What are its advantages and disadvantages? 6 (10 Marks) Explain Emergency Shut Down (ESD) system in detail. (10 Marks) Module-4 What is a Chemical Tanker? Explain the features of chemical tanker. 7 a. (10 Marks) What are the different types of tank washing machines? Explain. (10 Marks) OR What are the safe practices on board chemical tankers, when handling Noxious chemical 8 a. (15 Marks) What are dangerous goods? Why are they useful? What are the objectives of IMDG code? (05 Marks) Module-5

What are Gearless and self Discharge type of bulk carriers? Explain. (10 Marks) Explain Smaller Bulkers and Larger Bulkers. (10 Marks)

OR With a neat diagram, explain the mid ship section of a bulk carrier. 10 (12 Marks) Write a note on Container Ships. (08 Marks)