

Student Exam No. _____

GANPAT UNIVERSITY

B. Tech. Semester: VI -Marine Engineering

Regular Examination April - June 2015

2MR604- Marine Auxiliary Machines II

Time: 3 Hours

Total Marks: 70

Instructions: (1) Attempt all questions.

- (2) Assume suitable data if necessary.
- (3) Figure to the right indicates full Marks.
- (4) Start new question on new page.

Section - I

- Q. 1** (a) Differentiate between detuning and damping. **6**
- (b) Sketch and describe an oily water separator with coalescer. **6**

OR

- Q. 1** (a) What are the sources of noise in a Ship? What are the methods of controlling them? **6**
- (b) Define the three standards for sewage effluent quality, discharged from the ship. **6**

- Q. 2** (a) What is Hydraulic Accumulators? Explain any one type with sketch. **6**
- (b) Explain the term dBA. Give the various dB values of general sounds found in ER. **6**

OR

- Q. 2** Sketch and describe lip seal arrangement of stern tube sealing. What is the reason for special cross section of the seal ring? **12**

- Q. 3 Why variable displacement pumps are required for steering power drive? 11
Sketch and describe one of such pump.

Section – II

- Q. 4 Differentiate any two of following : 12
1. Follow-up and Non follow-up Steering
 2. Normal Coupling bolt and Pilgrim Type Coupling Bolt
 3. Keyed Propeller and Keyless Propeller

OR

- Q. 4 (a) Explain the working principle of Hydraulic jack. Enlist its uses on board. 6

- (b) What is hunting gear? Sketch and describe. 6

- Q. 5 (a) Why the Stern Tube Bearings are of such a length? What is the use of Poker gauge? 6

- (b) What are the preparations required for dry-docking a ship? What precautions will you take before the flooding operation in dry-docks? 6

OR

- Q. 5 (a) How many tanks are involved in the Stern Tube sealing and lubrication arrangement? How the draught of ship affects number of 6

- (b) Sketch and describe Muff Coupling method of joining shafts. 6

- Q. 6 Sketch and describe 4 Ram Steering System. What is fail-safe system? 11

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