

मार्गदर्शक  
Date: 29/11/2024.

GANPAT UNIVERSITY  
B.TECH SEM.III MARINE ENGINEERING  
SEMESTER END EXAMINATION: DECEMBER-2014  
02MR-303 SHIP STRUCTURE & CONSTRUCTION

Time-3 HOURS

Total Marks : 70

- INSTRUCTIONS: (1) Attempt all questions.  
(2) Assume suitable data if necessary  
(3) Figures to the right indicate full marks

Section-I

Q-1: Answer the following Questions:

(12)

- a) Why periodical surveys are carried out? Name the periodical surveys and their interval.  
What things are inspected during surveys?  
b) Define a Classification Society. How many are members of IACS. What are the functions of a Classification Society?

OR

Q-1: Answer the following Questions:

(12)

- a) What is Harmonised System of Survey and Certification (HSSC)? What are the features of HSSC?  
b) Describe Registration procedure of a merchant ship

Q-2 Answer the following Questions:

(11)

- a) Describe basic concepts and functions of Drilling Ships, and Supply/Support Vessels. 6



- b) What are the constructional features and rule guidelines for a merchant vessel as per SOLAS ?

5

OR

Q-2 Answer the following Questions:

(11)

- c) What are conditions of validity of a class?  
d) What is Gross Register tonnage and Net Register Tonnage of a Ship?  
How are they calculated?

6

5

Q-3 Answer the following Questions:

(12)

- a) Define Load line of a Ship? Draw Load line markings.  
b) What are conditions of assignment of freeboard?

Section-II

Q-4: Answer the following Questions:

(12)

- a) How Normal Keel, Duct Keel and Keel of a Tanker are supported in dry dock? Explain by Sketch.  
b) Describe in brief the followings (with diagram where necessary.)  
i) Bulk Carriers  
ii) Liquefied Gas Carriers  
iii) Draught – Moulded and Extreme

OR

Q-4: Answer the following Questions:

(12)

- a) How the thicknesses of Ship's Plates vary as per their location in the ship?  
b) What is panting? Explain Panting Stringer

Q-5 Answer the following Questions:

(11)



- a) Differentiate Locking Pintle and Bearing Pintle. 6  
b) Sketch and describe any one kind of Rudder. 5

OR

Q-5 Answer the following Questions:

(11)

a) How the water tightness is maintained in Hatch Covers of both wooden type and Steel Hatch Covers. 6

b) Sketch and describe Bulbous Bow. 5

Q-6 How the Double bottom tanks are structured? Explain various types of floors used in its internal structures. (12)

-----End of Paper-----

3/3