



TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology
Department of Mechanical & Automotive Engineering
UNIVERSITY EXAMINATION FOR:
Diploma in Nautical Science (Y1S1)
ANS 2101 : Seamanship I (Paper 2)
SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: SEPTEMBER 2018
TIME: 2 HOURS
DATE: Sep 2018

Instruction to Candidates:

You should have the following for this examination

- *Answer booklet*
- *Examination Pass & Student ID Card*
- *Non-Programmable scientific calculator*

This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions.

Maximum marks for each part of a question are as shown.

Do not write on the question paper.

Question ONE

- a) Define the following terminologies: **(10 marks)**
- A Bend
 - Steering gears
 - Starboard Side
 - Beam
 - Ahead
- b) Using a well labelled illustration show the General Relative Bearings **(10 marks)**

Question TWO

- a) Define load line marks **(2 marks)**
- b) Explain the importance of the Loadline Mark **(3 marks)**
- c) With the aid of an appropriate illustration, show the following on the loadline marks:

- i. The Deck Line
- ii. The Dimension of the Centre Circle relative to the deckline
- iii. The Classification Society Initials

(8 marks)

d) Write the following loadline initials in full

(7 marks)

- i. S.
- ii. W.
- iii. WNA.
- iv. T.
- v. F.
- vi. SF
- vii. TF

Question THREE

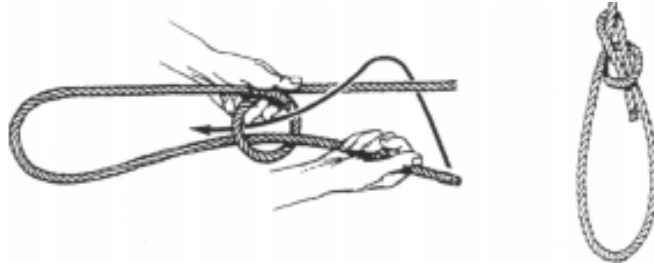
- a) Define mooring and unmooring operations **(4 marks)**
- b) Differentiate between mooring and berthing operations **(4 marks)**
- c) With the aid of clear diagram outline and represent important mooring lines used during mooring/berthing operations **(12 marks)**

Question FOUR

- a) Define a ship **(2 marks)**
- b) Differentiate between a ship and a vessel **(4 marks)**
- c) With the aid of a well-labelled diagram, show the different parts of a ship **(20 marks)**

Question FIVE

- a) Define the term 'ROPE' **(2 marks)**
- b) List TWO (2) classification of ropes **(2 marks)**
- c) Identify and discuss the following:



i.

(5 marks)



ii.



(8 marks)

d) List THREE (3) advantages of using natural fiber rope over manmade rope (3 marks)