



TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology
Department of Mechanical & Automotive Engineering
UNIVERSITY EXAMINATION FOR:
Diploma in Nautical Sciences
ANS 2212 : Chart Work Practices II
END OF SEMESTER EXAMINATION
SERIES: AUGUST 2019
TIME: 2 HOURS
DATE: Pick Date Aug 2019

Instruction to Candidates:

You should have the following for this examination

- *Student I.D. Card & Examination Pass*
- *Answer booklet*
- *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 terms; (10 marks)
- Chart work
 - Navigation
 - Departure
 - Variation
 - Deviation
- b) What is the difference between a map and a chart (5 marks)
- c) Find the D' lat and D' long between two places (5 marks)
- | | |
|---------------|---------------|
| A 23° 14.4' S | A 14° 27.6' E |
| B 10° 27.6' S | B 23° 21.4' E |

A 19° 44.8' N

A 164° 27.4' E

B 11° 43.1' N

B 158° 23.7' W

Question TWO

- a) What are the considerations when selecting a chart (5 marks)
- b) When involved in making up a 'Passage plan' what principles would you employ in its construction? (10 marks)
- c) What is contained in the 'weekly notices to mariners' and what would you use the information for? (5 marks)

Question THREE

Find the great circle distance and the initial course from a position off Cape Palliser (41° 40'S 175° 25'E) to a position where the track (7° 00'N 80° 50'W)

(20 marks)

Question FOUR

- a) What official publications must be carried by your ship (10 marks)
- b) A vessel is steering 070° by compass course, Deviation for the ship heads is 2°E Variation is 9°W. Find the true course (Draw a diagram) (10 marks)

Question FIVE

Describe the passage plan steps involved

(20 marks)