

## TECHNICAL UNIVERSITY OF MOMBASA

# FACULTY OF ENGINEERING AND TECHNOLOGY DEPARTMENT OF MECHANICAL & AUTOMOTIVE ENGINEERING

#### **UNIVERSITY EXAMINATION FOR:**

DIPLOMA IN NAUTICAL SCIENCE

ANS 2206: CHARTWORK PRACTISES

END OF SEMESTER EXAMINATION

**SERIES:** DECEMBER 2016

TIME: 2 HOURS

**DATE:** Pick Date Dec 2016

#### **Instructions to Candidates**

You should have the following for this examination

- -Answer Booklet, examination pass and student ID
- -Parallel ruler/ setsquares and protractors
- -Pencil HB or B
- -Scientific Calculator (set to 2 decimal places)

This paper consists of **FIVE** questions. Attempt any THREE questions.

The following are provided with the Question paper

Do not write on the question paper.

#### **Question ONE**

a) Define the following terms:

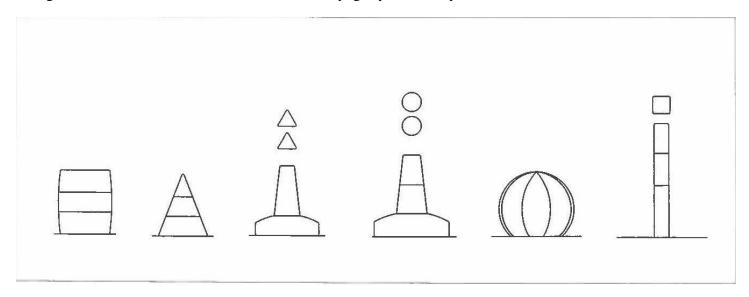
(10 Marks)

- i. Rising and Falling Tide
- ii. Range
- iii. Mean Tide Range
- iv. Period
- v. Spring Tides
- b) Using an appropriate illustration, draw and define the tidal curve of a nomrla 12 hour tide clearly showing the times and height of tides (10 Marks)

## **Question TWO**

Using the illustration below discuss the IALA buoyage system for system A

(20 Marks)



## **Question THREE**

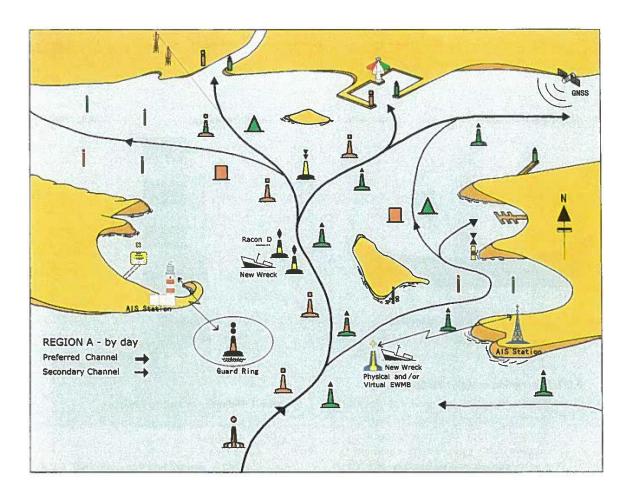
Using appropriate illustrations and drawing define the following cardinal marks in region A.

a) North.	(5 Marks)
b) East	(5 Marks)
c) South.	(5 Marks)
d) West	(5 Marks)

## **Question FOUR**

Using illustration below define the following

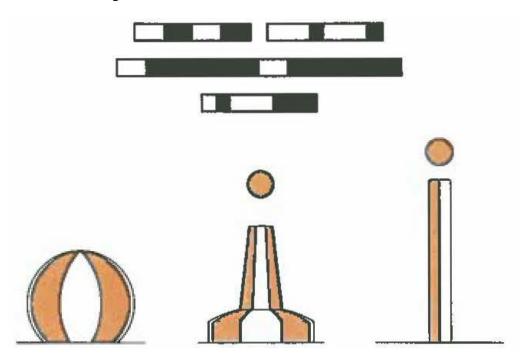
a) The course made good at Racon (D)	(5 Marks)
b) The entry to berth using the sector lights.	(5 Marks)
c) The preferred course near the first wreck.	(5 Marks)
d) The general choice of the course as planned	(5 Marks)



## **Question FIVE**

a) Identify and describe the figure below:





b) Further, describe it functions and night time identification from a visual lookout

(10 Marks)