



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.

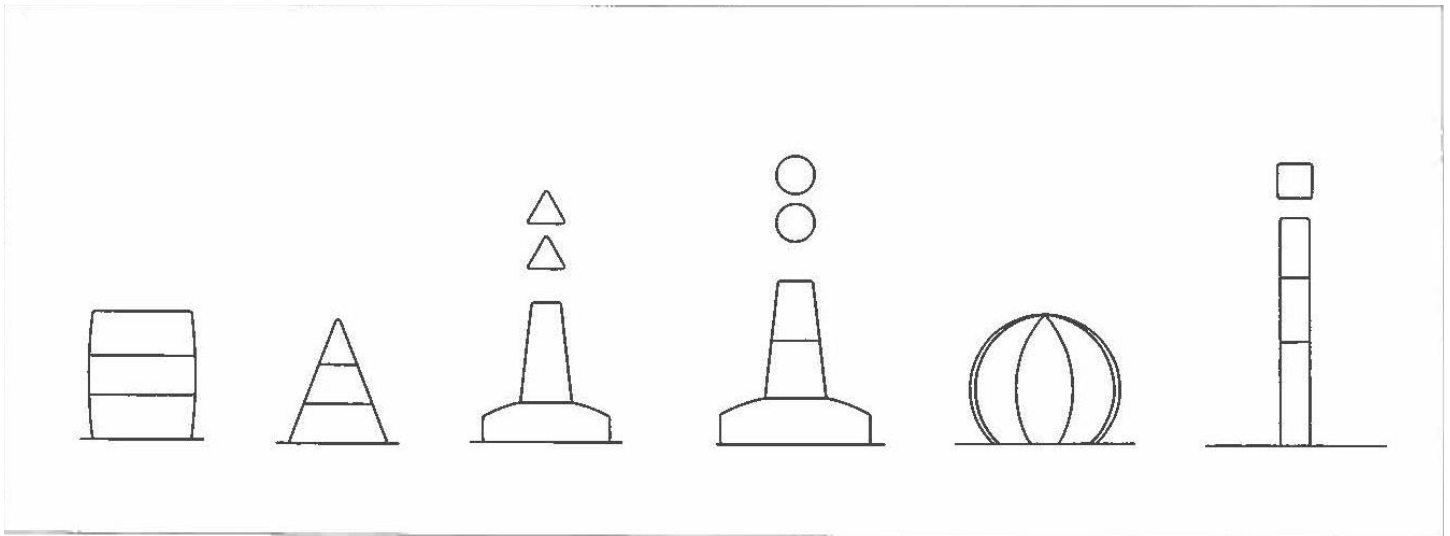
Question ONE

- 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 normal 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

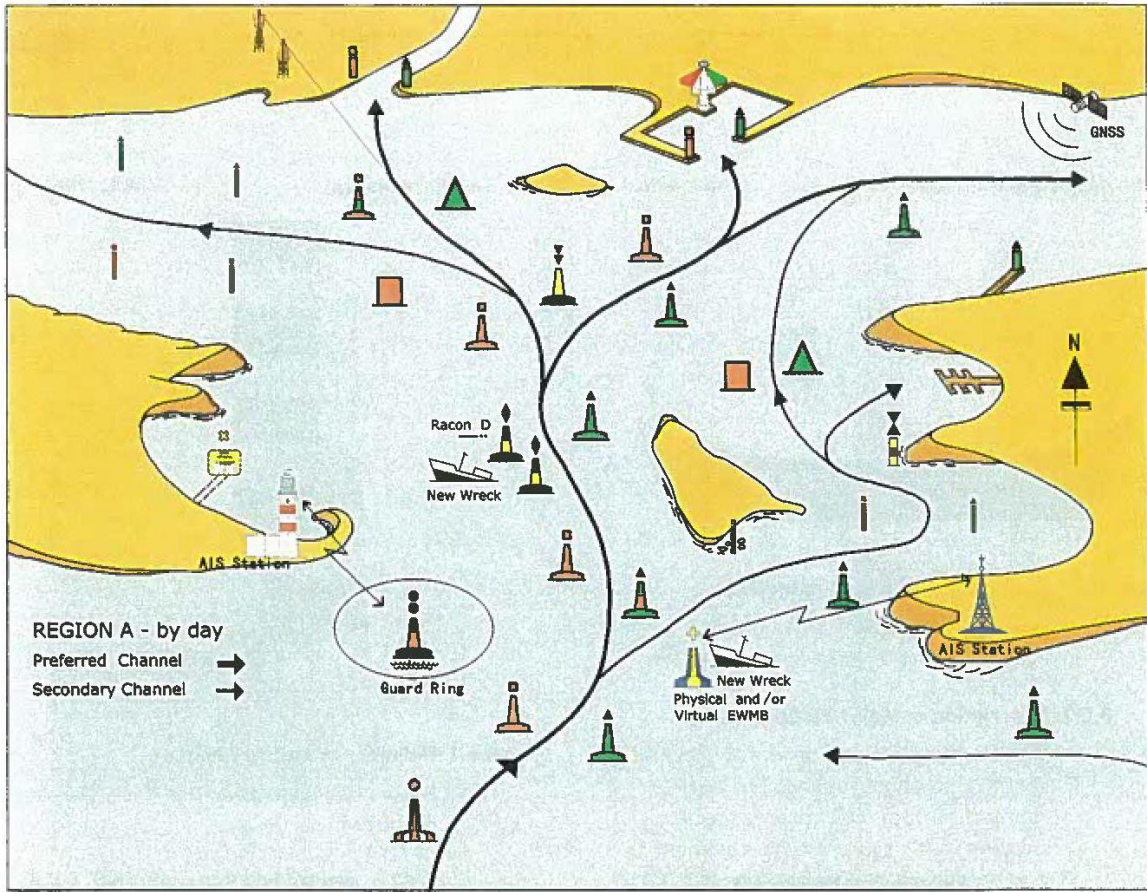
Using appropriate illustrations and drawing define the following cardinal marks in region A.

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

Question FOUR

Using illustration below define the following

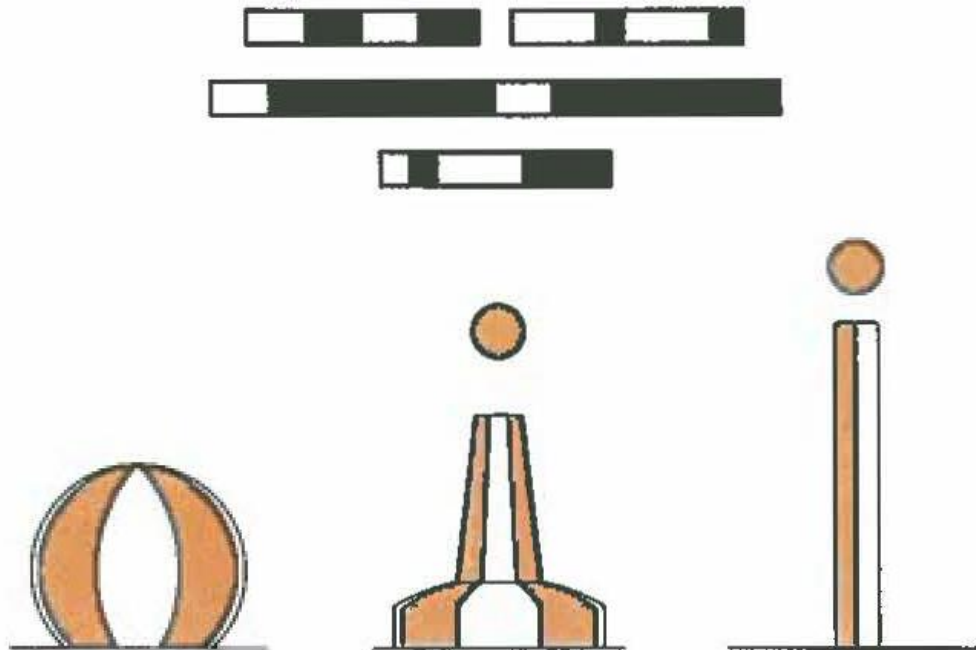
- a) The course made good at Racon (D) (5 Marks)
- b) The entry to berth using the sector lights. (5 Marks)
- c) The preferred course near the first wreck. (5 Marks)
- d) The general choice of the course as planned (5 Marks)



Question FIVE

a) Identify and describe the figure below:

(10 Marks)



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

(10 Marks)