

Name :

Roll No. :

Invigilator's Signature :

**CS/BNS/SEM-6/BNS-603/2010
2010**

**VOYAGE PLANNING AND COLLISION PREVENTION-
III**

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

*ANTWERP (PROSPERPOLDER) and RADAR PLOTTING SHEET
to be Supplied by the Institution.*

GROUP – A

(Objective Type Questions)

1. Answer the following very briefly : 10 × 1 = 10
- a) Which volume of ALRS deals with maritime safety information ?
 - b) What is cumulative notices to mariner ?
 - c) What is the significance of chart catalogue ?
 - d) What is neap tide ?
 - e) Define natural scale.
 - f) Which volume of list of lights and fog signals cover India ?
 - g) What is transit bearing ?
 - h) What are Hydrolant and Hydropacs ?
 - i) What does the word under way mean ?
 - j) What is leading light ?



GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. What information do you get in weekly notices to mariners ?
3. Explain how chart corrections are done. What are correction tracings ?
4. What informations may be found in ocean passages for the world ? How is it kept up to date ?
5. Enlist 5 distress signals.
6. When you can deviate from collision regulations ? Which rule authorises you to do that ?

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

Question Nos. 7 and 8 are compulsory and attempt any *one* from the remaining.

7. Find the error to be applied to the sounding after taking a cast of lead off Mumbai at 1451 hrs L.M.T. on the first (1st) March, 1992 before comparing it with the chart. The extract from A.T.T. for the day under reference are given below :

Extract from A.T.T.

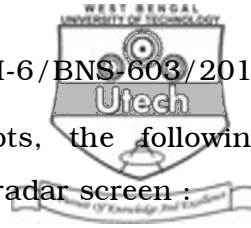
Lat $18^{\circ} 55'$ N

Long $72^{\circ} 50'$ E

Time zone $- 5^{\text{H}} 30 \text{ M.}$

Time Height

0049	—	4.4 m
0700	—	0.9 m
1300	—	4.2 m
1851	—	1.0 m.



8. While steering 336° (T) at 12 knots, the following observations of a target were made on the radar screen :

Ship's time	Bearing	Range
1100	050° (T)	5.50 Miles
1106	050° (T)	4.25 Miles.

Find :

- Time and range at CPA
- Course and speed of target
- Aspect at 1106.

At 1109 own ship altered course 20° to starboard and reduced speed to 8 knots.

- Find the new range and time at CPA.
- Explain actions to be taken by VSLs in restricted visibility under rule no. 19 of ROR.
 - What are the advantages of shore based meteorological routing services ? Explain the limitations of various factors taken in shore based meteorological routing services.

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