



Name :

Roll No. :

Invigilator's Signature :

**CS/BNS/SEM-6/BNS-603/2011
2011**

**VOYAGE PLANNING &
COLLISION PREVENTION – III**

Time Allotted : 3 Hours

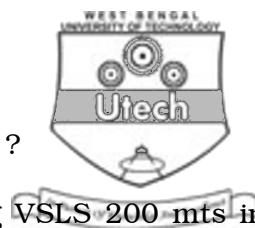
Full Marks : 70

The figures in the margin indicate full marks.

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

**GROUP – A
(Very Short Answer Type Questions)**

1. Answer the following questions very briefly : $10 \times 1 = 10$
- i) Which volume of ALRS will be consulted for information VTMS ?
 - ii) What is the significance of three-point bearing ?
 - iii) What is cumulative notice to mariner ?
 - iv) How does the nature of bottom help in navigation ?
 - v) Draw a symbol or abbreviation of ocean current and flood tide stream 2 kN.



- vi) What lights shall be exhibited by WIG ?
- vii) What lights will be shown by touring VLS 200 mts in length ?
- viii) What is the significance of chart catalogue ?
- ix) Enlist factors affecting tide.
- x) What are the various sources for tidal prediction ?

GROUP – B

(Short Answer Type Questions)

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

- 2. You have received admiralty notices mariners weekly edition No. 22 of 2008. Describe the logical steps you will take to correct charts on board your ship.
- 3. Describe the contents of NP 136 Ocean Passages for The World ? How can you use the information for an intended ocean passage ?
- 4. Explain the following terms used in connection with matters related to ship's routing :
 - a) Routing system
 - b) TSS
 - c) Traffic lane
 - d) Round-about
 - e) Deep water route.
- 5. Discuss Rule No. 8 (Action to avoid collision) in your own words.

**GROUP – C****(Long Answer Type Questions)**

Question Nos. 6 and 7 are compulsory and attempt

any *one* from the rest.

3 × 15 = 45

6. Find the earliest time after first high water on 13th September at Darwin a vessel can cross below the bridge if her draft is 14 metres and the height of the mast is 50 metres with a minimum clearance of 1·5 metres between the mast and the bridge.

The charted height of the bridge is 35 metres.

The extracts from A.T.T. are as follows.

DRAW IN		
Time Zone		— 0930
12° 28' S		130° 51' E
	Time	Height
13	0245	1·9 m
F	0830	6·7 m
	1515	0·8 m
	2128	6·5 m
	MHWS at Darwin	6·9 m

CS/BNS/SEM-6/BNS-603/2011



7. Own course 055° (T) at 15 knots :

Time	Bearing	Range
0930	105° (T)	14.0 M
0936	105° (T)	11.5 M
0942	104.5° (T)	8.9 M

Find :

- a) CPA, range time
- b) Course and speed of target
- c) Aspect at 0942.

Master of own ship decides to let the target pass ahead with a CPA of 1.5 M by taking a single action at 0945.

State three possible actions open to him. Which of them is most preferable ? Give reasons.

- 8. Discuss and explain Narrow Channels Rule No. 9. Also state various precautions to be observed by VSLs transiting narrow channels.
- 9. Write short notes on the following :
 - a) Cardinal system of voyage
 - b) Lateral system
 - c) Contents of mariner's handbook.

=====