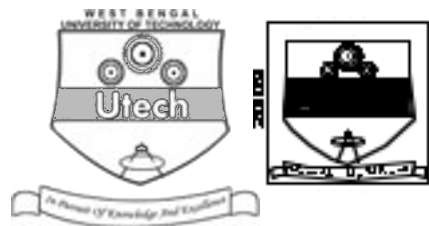


VOYAGE PLANNING AND COLLISION PREVENTION – III (SEMESTER - 6)

CS / BNS / SEM-6 / BNS-603 / 09



1.
Signature of Invigilator

2.
Signature of the Officer-in-Charge

Reg. No.

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Roll No. of the Candidate

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CS / BNS / SEM-6 / BNS-603 / 09

ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE – 2009

VOYAGE PLANNING AND COLLISION PREVENTION – III (SEMESTER - 6)

Time : 3 Hours]

[Full Marks : 70

INSTRUCTIONS TO THE CANDIDATES :

1. This Booklet is a Question-cum-Answer Booklet. The Booklet consists of **32 pages**. The questions of this concerned subject commence from Page No. 3.
2. a) In **Group – A**, Questions are of Objective type. You have to answer the questions in the space provided marked '**Answer Sheet**'.
b) For **Groups – B & C** you have to answer the questions in the space provided marked '**Answer Sheet**'. Questions of **Group – B** are Short answer type. Questions of **Group – C** are Long answer type. Write on both sides of the paper.
3. **Fill in your Roll No. in the box** provided as in your Admit Card before answering the questions.
4. Read the instructions given inside carefully before answering.
5. You should not forget to write the corresponding question numbers while answering.
6. Do not write your name or put any special mark in the booklet that may disclose your identity, which will render you liable to disqualification. Any candidate found copying will be subject to Disciplinary Action under the relevant rules.
7. **Use of Mobile Phone and Programmable Calculator is totally prohibited in the examination hall.**
8. You should return the booklet to the invigilator at the end of the examination and should not take any page of this booklet with you outside the examination hall, **which will lead to disqualification.**
9. Rough work, if necessary is to be done in this booklet only and cross it through.

No additional sheets are to be used and no loose paper will be provided

FOR OFFICE USE / EVALUATION ONLY

Marks Obtained

	Group – A								Group – B				Group – C				Total Marks	Examiner's Signature
Question Number																		
Marks Obtained																		

.....
Head-Examiner / Co-Ordinator / Scrutineer

6761 (09/06)



DO NOT WRITE ON THIS PAGE



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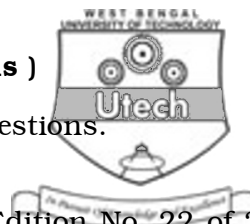
GROUP – A
(Objective Type Questions)

1. Answer the following questions briefly : 10 × 1 = 10

- i) Which volume of ALRS will be consulted for information on VTMS ?
- ii) What is the significance of three point bearing ?
- iii) What is the cumulative notices to mariner ?
- iv) How does the nature of bottom helps 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 towing VLSL more than 200 mtrs. 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 questions.



3 × 5 = 15

2. You have received admiralty notices mariners weekly Edition No. 22 of 2008. Describe the logical steps you will take correct charts on board your ship.
3. Explain horizontal and vertical positioning of masthead lights for a VSL 200 mtrs. in length.
4. Explain the following terms used in connection with matters related to ship's routing :
 - i) Routing system
 - ii) TSS
 - iii) Traffic lane
 - iv) Round about
 - v) Deep water route.
5. Discuss Rule No. 8 (Action to avoid collision) in your own words.

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

Question No. 6 & 7 are compulsory and attempt any one from the rest. 3 × 15 = 45

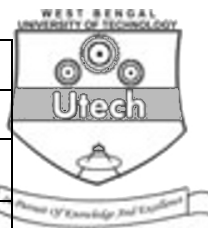
6. Find the earliest time after first high water on 13th September at Darwin, a vessel can cross below the bridge if her draft is 14 metres and the height of the mast is 50 metres with a minimum clearance of 1.5 metres between the mast and the bridge.

The charted height of the bridge is 35 metres.



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

DARWIN		
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		



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 :

- CPA, range time
- Course and speed of target
- 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.

- What is meant by VSLS in distress ? Indicate 5 distress signals. 5
- Explain the advantages of employing chore based meteorological routing services. To which type of vessels meteorological routing is especially suitable ? 10

END