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BMR301

Third Semester B.E./B.Tech. Degree Examination, Dec.2023/Jan.2024
Basic Ship Knowledge and Watch Keeping

Time: 3 hrs.　　　　　　　　　　　　　　　　　Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. VTU Formula Hand Book is permitted.
3. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	What is a Windlass? Explain the working principle and operation of a Windlass.	10	L2	CO3
	b.	Draw a layout of a ship and explain its different parts.	10	L3	CO4
		OR			
Q.2	a.	Define the following: i) Collision Bulkhead ii) C.C.R iii) E.C.R iv) Cofferdam v) Sounding pipes.	10	L1	CO1
	b.	Sketch and explain M/E shafting system.	10	L2	CO3
		Module – 2			
Q.3	a.	What are offshore vessels? Explain any 4 of its types in detail.	14	L2	CO2
	b.	Write down the difference between coastal trade of foreign trade.	6	L2	CO2
		OR			
Q.4	a.	Based on liquid bulk cargo, classify different type of ships and explain the same in brief.	10	L2	CO2
	b.	Write down the arrival and departure procedure for ships with familiarization of various notices and actions to be taken during emergencies.	10	L3	CO4
		Module – 3			
Q.5	a.	What is Manning of a ship? Explain about it in detail.	10	L2	CO2
	b.	What are the reasons for ship dentention? Explain about it in detail.	10	L2	CO3
		OR			
Q.6	a.	What is STCW? Explain in detail about STCW convention, its purpose and requirements.	10	L3	CO4
	b.	What is role of DG shipping and MMD in CoC? Explain the requirements of CoC class IV, class II and class I as per DG shipping.	10	L3	CO4

Module – 4					
Q.7	a.	Define the following: i) Trim ii) Heel iii) Freeboard iv) Draught v) Loadline marks.	10	L1	CO1
	b.	What is the meaning of watch in ships? Explain why engine watch keeping is crucial.	10	L1	CO1
OR					
Q.8	a.	What is CoC? Explain about it in detail.	10	L2	CO3
	b.	How to prepare main engine for a sea voyage? Explain it in detail.	10	L2	CO3
Module – 5					
Q.9	a.	What is the difference between stranding and grounding of ship? Write a short note on checks and damage control on grounding.	10	L3	CO4
	b.	How to be prepared for Man overboard emergencies? Explain them in detail.	10	L3	CO4
OR					
Q.10	a.	What are the SOLAS requirements for emergency generator? Explain them in detail.	10	L3	CO4
	b.	What is the principle of fire? Write a short on it.	10	L3	CO4

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