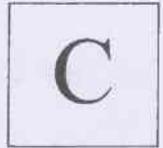


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***B.Tech. Degree VIII Semester Regular Examination in  
Marine Engineering June 2023***

**19-208-0801 SAFE WATCH KEEPING AND ENGINE ROOM RESOURCE MANAGEMENT  
(2019 Scheme)**

Time: 3 Hours

Maximum Marks: 60

**Course Outcome**

On successful completion of the course, the students will be able to:

- CO1: Understand the standards of training certification and watch keeping for sea farers and criteria for engine room watch  
 CO2: Gain knowledge regarding minimum requirements of engine room watch and engineering watch under way  
 CO3: Explain the details of engineering watch and ship board applications.  
 CO4: Understand the principles of leadership and team working skills required on board.  
 CO5: Gain knowledge on basic principles of managerial skills required on board.

Bloom's Taxonomy Levels (BL): L1 – Remember, L2 – Understand, L3 – Apply, L4 –Analyze, L5 – Evaluate, L6 – Create

PI – Programme Indicators

(Answer **ALL** questions)

(5 × 15 = 75)

		Marks	BL	CO	PI
I.	(a) Explain the major modifications introduced in STCW 2010 in addition to earlier visions indicating the reasons for modification.	8	L2	1	1.4.1
	(b) Explain the term "Fitness for duty" as per STCW convention. What are the possible reasons to refuse to hand over watch to your reliever?	7	L3	1	1.4.1
	<b>OR</b>				
II.	(a) Enumerate the practical duties and responsibilities concerning safety and protection of environment requirements for watch keeper.	8	L2	1	7.1.2
	(b) Enumerate the routine jobs carried out by the engine room watch keeper.	7	L2	1	1.4.1
III.	(a) What are the special requirements for engineer officers doing watch keeping on chemical tankers?	8	L1	2	7.1.2
	(b) What are the special precautions taken on Oil tankers, with respect to fire protection?	7	L2	2	7.1.2
	<b>OR</b>				
IV.	Write short notes on:				
	(i) Taking over an engine room watch	5	L1	2	1.4.1
	(ii) Navigation in congested waters and during restricted visibility	5	L1	2	1.4.1
	(iii) Preventive repair and maintenance.	5	L1	2	1.4.1

(P.T.O)

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		Marks	BL	CO	PI
V.	(a) Explain various statutory certificates and other documents to be provided on board for safe trading of the vessel and port state control inspection.	9	L2	3	6.1.1
	(b) Explain the purpose and validity of each of the above certificates.	6	L2	3	1.3.1
<b>OR</b>					
VI.	(a) Explain in detail, the various surveys to be carried out on sea going vessels.	9	L3	3	3.1.5
	(b) Describe the periodicity and grace time provided for each of the above surveys.	6	L1	3	1.3.1
VII.	Describe in detail the importance of personal relationship, leadership skills and decision making skills, especially when working in multi-cultural environment on ships.	15	L3	4	1.4.1
<b>OR</b>					
VIII.	Write short notes on:				
	(i) Engine room resource management	5	L1	4	1.4.1
	(ii) Work load management	5	L1	4	1.4.1
	(iii) Planning and coordination.	5	L1	4	1.4.1
IX.	(a) Explain the ship board man management structure of an ocean-going merchant ship.	8	L2	5	3.1.5
	(b) Enumerate the elements of Human Resource Management.	7	L3	5	1.3.1
<b>OR</b>					
X.	Write short notes on:				
	(i) Barriers in communication	5	L1	5	1.3.1
	(ii) ISPS code and its significance	5	L1	5	1.3.1
	(iii) ISM code and certificates issued under ISM code.	5	L1	5	1.3.1

Blooms's Taxonomy Levels

L1 – 39%, L2 – 36%, L3 – 25%.

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