

Model Question Paper -1 with effect from 2020-21(CBCS Scheme)

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Fifth Semester B.E. Degree Examination Marine Internal Combustion Engine 1

TIME: 03 Hours

Max. Marks: 100

- Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.
02. Draw the diagram neatly and label it.
03.

Module – 1			
Q.1	(a)	Explain the valve timing diagram of 4 stroke engine with neat sketch?	10
	(b)	Define the following 1. Indicated power 2. Brake power 3. Mechanical efficiency 4. Mean effective pressure 5. Mean piston speed	10
	(c)		
OR			
Q.2	(a)	Explain the nomenclature of engine 6KMC90 E ?	10
	(b)	Differentiate between 2 stroke engine and 4 stroke engine?	10
	(c)		
Module – 2			
Q.3	(a)	Draw a neat sketch of trunk piston?	10
	(b)	Define white metal bearing; explain with a neat sketch the structure of bearing?	10
	(c)		
OR			
Q.4	(a)	Define serration, how connecting rod is different in 2 stroke and 4 stroke?	10
	(b)	Give a justification, why A frame is made as structure for 2 stroke engines and why not in 4 stroke engines?	10
	(c)		
Module – 3			
Q.5	(a)	Explain the different types of scavenging process?	10

	(b)	Describe the defective/ faulty encountered in turbo charger?	10
	(c)		
OR			
Q.6	(a)	Explain pulse type turbo charger, state its advantage and disadvantage?	10
	(b)	Draw a neat sketch of axial flow turbocharger?	10
	(c)		
Module – 4			
Q.7	(a)	Explain the cause and prevention and action of scavenge fire?	10
	(b)	Draw a neat sketch of fuel injector and label the parts?	10
	(c)		
OR			
Q.8	(a)	Sketch and explain the crankcase relief door?	10
	(b)	In ship, the fuel stored in bunker tank started fouling, what action and preparation you are going to take after seeing this incident?	10
	(c)		
Module – 5			
Q.9	(a)	Explain the different types of lubrications?	10
	(b)	The ship has taken lubricants 500T from Singapore ,they started the voyage and reached Dubai, the report from lab has come, describe the contents in lab report?	10
	(c)		
OR			
Q.10	(a)	Explain the properties of lubricants	10
	(b)	Sketch the lubrication line diagram of auxiliary engine?	10
	(c)		

Table showing the Bloom's Taxonomy Level, Course Outcome and Programme Outcome				
Question		Bloom's Taxonomy Level attached	Course Outcome	Programme Outcome
Q.1	(a)	L2	CO1	PO1
	(b)	L1	CO1	PO1
	(c)			
Q.2	(a)	L2	CO1	PO1
	(b)	L2	CO1	PO1
	(c)			
Q.3	(a)	L3	CO2	PO2
	(b)	L3	CO2	PO2
	(c)			
Q.4	(a)	L1	CO2	PO2
	(b)	L4	CO2	PO2
	(c)			
Q.5	(a)	L3	CO3	PO3
	(b)	L4	CO3	PO3
	(c)			
Q.6	(a)	L2	CO3	PO3
	(b)	L2	CO3	PO3
	(c)			
Q.7	(a)	L2	CO4	PO4
	(b)	L3	CO4	PO4
	(c)			
Q.8	(a)	L2	CO4	PO4
	(b)	L4	CO4	PO4
	(c)			
Q.9	(a)	L2	CO5	PO5
	(b)	L4	CO5	PO5
	(c)			
Q.10	(a)	L2	CO5	PO5
	(b)	L4	CO5	PO5
	(c)			
Bloom's Taxonomy Levels	Lower order thinking skills			
	Remembering(knowledge): L_1	Understanding Comprehension): L_2	Applying (Application): L_3	
	Higher order thinking skills			
	Analyzing (Analysis): L_4	Valuating (Evaluation): L_5	Creating (Synthesis): L_6	

