USN					

18MR53

## Fifth Semester B.E. Degree Examination, Dec.2023/Jan.2024 Marine Internal Combustion Engine - I

	Tir	ne:	3 hrs.	x. Marks: 100						
Se	Note: Answer any FIVE full questions, choosing ONE full question from each module.									
racti			Module-1							
nalp	1	a.	What are I.C. Engines? Explain the classification of I.C. Engines.	(10 Marks)						
as r		b.	Sketch and explain the working of 2-stroke diesel engine.	(10 Marks)						
On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Any revealing of identification, appeal to evaluator and /or equations written eg, $42+8=50$ , will be treated as malpractice.										
es. Se tr	2	0	OR Sketch and explain the working of 4 stroke discal expine	(10 M I)						
pag vill l	2	a. b.	Sketch and explain the working of 4-stroke diesel engine.  Explain the differences between 2 stroke and 4 stroke engine.	(10 Marks) (10 Marks)						
ank 30, v		υ.	Explain the differences between 2 stroke and 4 stroke engine.	(10 Marks)						
lg bl 8 = 5			Module-2							
ainir 42+8	3	a.	With a neat sketch, explain bed plate.	(10 Marks)						
eg, 4		b.	With a neat sketch, explain A-frame.	(10 Marks)						
the										
s on wri	1	0	With speet sketch avalain Tie Pod	(10 N/ - 1-)						
line	4	a. b.	With a neat sketch, explain Tie Rod. With a neat sketch, explain cylinder liner.	(10 Marks) (10 Marks)						
ross		υ.	with a neat sketch, explain cylinder liner.	(10 Marks)						
nal c /or e			Module-3							
agor	5	a.	Explain reverse flow scavenging with a neat sketch.	(10 Marks)						
w di		b.	Explain super charging or pressure charging.	(10 Marks)						
dra ⁄alua										
orily to ev	6	0	OR Explain pulse type turbocharger with a neat sketch.	(10 M l)						
oulse	O	a. b.	Explain gas exchange process.	(10 Marks) (10 Marks)						
om)		0.	Explain gas exchange process.	(To Marks)						
irs, c			Module-4							
ıfica	7	a.	Explain causes, effects and indications of crank case explosions.	(12 Marks)						
ur aı dent		b.	Write a note on starting air line explosion.	(08 Marks)						
g yo of i		Cardil	OB							
letin	8	a.	What is scavenge fire? Explain causes, effects and indications of scavenge fire	e. (12 Marks)						
On completing y Any revealing of	O	b.	Write a note on microbial degradation of fuel.	(08 Marks)						
on ce ny r				(00 1.2)						
1. C 2. A			Module-5							
ite:	9	a.	Explain the types of lubrication.	(10 Marks)						
Ž		b.	List and explain the methods for selection of lubricants.	(10 Marks)						
Important Note : 1. 2.			OR							
lmp	10	a.	Explain the desirable properties of lube oil related to marine diesel engines.	(10 Marks)						
		b.	Write a note on lube oil testing.	(10 Marks)						
			1997							