

INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)
END SEMESTER EXAMINATIONS- DECEMBER 2018
Post Graduate Diploma in Marine Engineering (PGDME)
Semester: II
Marine Steam Engineering (PD11T3206)

Date: 20-12-2018

Time: 2Hrs

Max Marks:50

Pass Marks:25

PART –A

(5x4= 20 Marks)

(All Questions are compulsory)

1. (a) Explain any two Non-Destructive tests carried out on boiler plates (4)
- (b) List advantages & disadvantages of smoke tube boilers. (4)
- (c) Explain the purpose of refractory used in boiler. (4)
- (d) State reason of warming up a steam turbine plant. (4)
- (e) Explain vibration in marine steam turbine. (4)

PART – B

(3x10 = 30 Marks)

(Answer any 3 of the following)

2. Sketch and describe a waste heat recovery system including an exhaust gas boiler, capable of supplying the auxiliary steam requirements of a motor ship. (10)
3. Discuss, with the aid of sketches, the action of a stream of steam as it passes (a) through the moving blades of an impulse turbine, and (b) through the moving blades of a parsons reaction turbine. (5+5)
4. Describe the construction of the drums for a water tube boiler. (10)
5. Sketch and describe a lubricating oil system for a typical steam turbine and reduction gear propulsion plant. (10)
6. Sketch and describe a turbine drain system and explain why it is necessary to have such an arrangement. (10)
