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Question Paper Code : 57640

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2016

First Semester

Marine Engineering

MV 6101 – BASICS OF MARINE ENGINEERING

(Regulation 2013)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions.

PART – A (10 × 2 = 20 Marks)

1. What is the meaning of a 'Power Plant' ?
2. What is a water tube boiler ?
3. Define a 'Compression Ratio'.
4. What is an Air – Fuel ratio ?
5. What is Refrigeration principle ?
6. State two latest refrigerants.
7. What is 'Forging' ?
8. Define a Gear Train.
9. What is a chuck in a lathe ?
10. What is the use of a milling machine ?

PART – B (5 × 16 = 80 Marks)

11. (a) Write short notes on the following : (16)
- (1) Thermal energy (2) Hydel energy
(3) Solar energy (4) Wind energy

OR

- (b) Explain with a line diagram a steam power plant. (16)

12. (a) Describe a carburetor and an ignition coil of a petrol engine. (16)

OR

- (b) Draw the fresh water cooling system of a marine diesel engine & name the components. (16)

13. (a) Explain with a line sketch the vapor compression cycle refrigeration plant on a ship. (16)

OR

- (b) Explain the working principle of the thermostatic expansion valve with a sketch. (16)

14. (a) Discuss the hot as well as cold forging processes. (16)

OR

- (b) Write short notes on :

- (1) Arc welding (2) Gas welding
(3) Brazing (4) Soldering (16)

15. (a) Explain belt drive and rope drive .Mention the various uses. (16)

OR

- (b) Explain briefly the following :

- (1) CAD (2) CAM
(3) CIM (4) ROBOT (16)