

B.E./B.TECH Degree Examination, December 2020
Third Semester
MR18302- MARINE MANUFACTURING TECHNOLOGY
(Regulation 2018)

Time: Three hours

Maximum : 80 Marks

Answer **ALL** questions**PART A - (8 X 2 = 16 marks)**

1. What is the highest possible percentage of clay contents in loam sand?
a. 10 b. 20 c. 30 d. 50
2. Which of the following welding process is used for welding of sheet metals in automobile and air craft industries?
a. Shield metal arc welding b. Gas tungsten arc welding
c. Thermit welding d. Resistance welding
3. Which casting process has no size and shape limits?
a. Sand casting b. Shell-mould casting c. Plaster-mould casting d. none of the above
4. Blow holes in casting are caused by
a. excessive moisture b. low permeability c. excessive fine grains d. all of the above
5. What are different method of welding you know ?
6. Mention any two advantages of D .C and A. C welding
7. What are the generally used pattern materials?
8. State the major drawbacks of Hot working processes.

PART B - (4 X16 = 64 marks)

09. (a) Explain MIG and TIG welding process with neat sketch. (16)
(OR)
(b) How the welding is carried out in deep blue sea? Explain the different process with neat sketch. (16)
10. (a) Explain the lost foam and lost wax process with neat sketch. (16)
(OR)
(b) (i) Describe with sketches the steps involved in shell moulding process. (8)
(ii) How shrinkage defects occur in castings? How they are eliminated? (8)
11. (a) (i) Explain briefly the factors to be considered in the selection of a grinding wheel for a given application. (8)
(ii) What are all the superfinishing operation? Explain the different types. (8)
(OR)
(b) (i) Explain the different types of extrusion processes with sketches. (12)
(ii) Why allowance is needed in bending? (4)
12. (a) (i) Explain the Wiredrawing process with neat sketch. (8)
(ii) Explain with neat sketches the progressive and compound dies. (8)
(OR)
(b) (i) Explain the following methods of taper turning in a lathe: (8)
by swivelling the compound rest ii) by taper turning attachment.
(ii) Explain upright drilling machine with neat sketch. (8)