

ANNA UNIVERSITY – 2003
B.E/B.TECH DEGREE EXAMINATION
MARINE ENGINEERING
MANUFACTURING TECHNOLOGY

APRIL-2003

TIME-3 HOUR
MARK-100

PART A-(10 X 2=20 MARKS)

1. Broadly classify the welding processes.
2. List out the various non-destructive methods of inspecting welded joints.
3. What is core in casting?
4. What is the function of riser in castings?
5. What is dressing in grinding?
6. Define hardness of the grinding wheel.
7. Classify the types of rolling mills.
8. Distinguish between blanking and piercing.
9. Enumerate the methods of taper turning in lathe.
10. What are the methods of indexing?

PART B-(5 X 16=80 MARKS)

11. (i) Explain the centreless grinding process and the types of feeds with neat sketches.
(ii) Briefly explain the super finishing process?
12. (a) Explain in detail the Gas Metal Arc Welding (GMAW) process with neat sketches.
Or
(b) (i) Define resistance welding and briefly discuss the variables influence the same.
(ii) Briefly explain the principle of seam welding and flash butt welding with simple sketches.
13. (a) (i) What are the different types of patterns used for casting? And sketch the sweep and segmental patterns.
(ii) Discuss the properties of moulding sand.
Or
(b) (i) Explain the various steps involved in shell moulding process with sketches.
(ii) How are the defects in casting are classified? And give an example for each.
14. (a) (i) Explain the forward and backward extrusion process.
(ii) Briefly explain the principle of wire drawing.
Or
(b) (i) Distinguish between compound and progressive die.
(ii) Explain the explosive forming process with a neat sketch.
15. (a) (i) Distinguish between capstan and turret lathes.
(ii) Explain the various operations performed in drilling machines.
Or
(b) Explain the indexing mechanism with a neat diagram.