

Register No.:

**403**

**April 2024**

*Time - Three hours*  
*(Maximum Marks: 100)*

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.  
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

**PART - A**

1. Write about elastic behavior of metals.
2. Define hardness.
3. List any three properties involved in Torsion test.
4. Draw the creep curve.
5. Define Hot working.
6. What is called as cold shut?
7. What is meant by Thread Rolling process?
8. Write about extrusion defect.
9. Differentiate between tube drawing and tube sinking.
10. What is spring back effect?

[Turn over.....

PART – B

11. (a) (i) Explain the ductile and brittle behaviour of materials.(7)  
(ii) Explain about proof stress.(7)  
(Or)  
(b) Explain the Brinell hardness test with a neat line sketch.
12. (a) Define Fatigue. Explain the testing method with suitable sketches.  
(Or)  
(b) Explain the Stress rupture test and charpy impact test.
13. (a) Describe the plain strain compression test for sheet metals.  
(Or)  
(b) Explain the Forging process with Dynapak machine.
14. (a) List the classification of the rolling processes and explain any one process with neat sketch.  
(Or)  
(b) Explain the Direct extrusion and Indirect extrusion processes with suitable sketches.
15. (a) Write a detailed note on deep drawing process.  
(Or)  
(b) Explain the Bending process with neat sketches.

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