

Register No.:

642

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. List out the classification of engineering materials with examples.
2. Write about legal factor in selection of materials.
3. What is direct corrosion?
4. What is anodic inhibitor? Give example.
5. What is high temperature material?
6. What are the effects of low temperature on metals?
7. List any three wear resistant materials.
8. List the types of Bearing materials.
9. Define super conductivity. Give examples.
10. What is a reactor?

[Turn over.....

PART - B

11. (a) Explain the criteria of material selection with an example.
(Or)
(b) Explain about the major electrical properties to be considered in SOM.
12. (a) Explain about galvanic corrosion and its prevention.
(Or)
(b) Explain about the different types of coating to prevent corrosion.
13. (a) Explain with three examples where high temperature situation exist and how the ordinary metals are affected.
(Or)
(b) (i) What is a super alloy? Explain.(10)
(ii) Mention some of the alloying elements which provide scale resistance to steels. (4)
14. (a) Explain the methods to control adhesive wear failure.
(Or)
(b) Explain the different types of friction materials with its composition and applications.
15. (a) Discuss about the classification of Tool materials with examples and applications.
(Or)
(b) Describe the process of cladding. List out the metals used in nuclear reactors.
