

End Semester Examinations - 2015-16 Even Semester - May 2016

14AE2003 Materials in Aerospace Application

Set B

Time : 3 hrs
Total Marks: 100

1. i) Describe briefly the Geometry of crystal Structure (10)
 ii) Explain the different Levels of Material Structure (10)
 OR
 2. i) Explain in detail the Mechanical properties of Materials (12)
 ii) Explain in detail the Geometry of Atomic Structure of Material (8)
 3. i) Describe various visual Inspection methods and tools used for non destructive testing(10)
 ii) Explain in detail working Principle, procedure, advantage and Disadvantage of Brinell hardness Test (10)
 OR
 4. i) Classify the methods of Impact test and explain them (12)
 ii) Write a Short note on Creep test of Material (8)
 5. i) How do you classify carbon Steel Alloy (4)
 ii) What are the physical properties of steel and explain its applications (16)
 OR
 6. Explain in detail different types of Copper Alloy along with their Properties and Applications in various Engineering Field (20)
 7. Briefly explain the Application ,Classification and properties of Magnesium Alloy (20)
 OR
 8. i) Explain in detail the physical and Mechanical Properties of aluminum Alloy (16)
 ii) What are the different Applications of Aluminum Alloy in Aerospace Industry (4)
 9. i) What are the Applications of Composite Materials In aerospace Industry?(10)
 ii) How do you classify Composite Material and explain it (10)
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Wishing you All the Best
