

Reg. No. :

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Question Paper Code: 52104

M.E. DEGREE EXAMINATION, MAY 2017

Elective

CAD / CAM

15PCD524 - MATERIAL TESTING AND CHARACTERIZATION

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 20 = 100 Marks)

1. (a) Explain elaborately on specimen preparation techniques. (20)
Or
(b) Explain grain size and various ASTM grain size numbers. (20)
 2. (a) Write notes on elements of crystallography. (20)
Or
(b) Explain working principle of Geiger Diffractometer with diagram. (20)
 3. (a) Explain the working principle of transmission electron microscopy. (20)
Or
(b) Explain Construction and working of AFM and its applications. (20)
 4. (a) Explain various static method to test mechanical property of material. (20)
Or
(b) Explain stress strain relationship for various materials. (20)
 5. (a) Explain the Rotating Beam and Plate Bending HCF testing methods. (20)
Or
(b) Explain creep test and where it is used. (20)
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