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Question Paper Code: 55P24

Ph.D. COURSE WORK EXAMINATION, NOV 2018

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) Write about various polarization techniques. CO1- U (20)
Or
(b) Explain grain size and various ASTM grain size numbers . CO1- U (20)
2. (a) Explain X-ray diffraction. CO2- U (20)
Or
(b) Explain Identification of Crystal Structure. CO2- U (20)
3. (a) Explain the working principle of electron microscopy with any one example. CO3- U (20)
Or
(b) Explain Electron Probe Microanalysis. CO3- U (20)
4. (a) Explain Brinell, and Rockwell hardness test. CO4- U (20)
Or
(b) Explain how to measure the ductility of the materials. CO4- U (20)

5. (a) Explain the test carried to find LCF. CO5- U (20)
- Or
- (b) Explain fatigue with suitable example. CO5- U (20)
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