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MATS201

Enrol No. .....

Minor Examination September 2015

MATERIAL SCIENCE

TIME : 1 HR *Maximum Marks : 20*

Attempt all questions each carry 5 marks each

1. Differentiate between the following - a
   (i) Twining v/s Slip
   (ii) Edge v/s Screw dislocation
   (iii) Nano material v/s Composite material.

2. (a) Draw and explaing stress v/s strain curve for ductile and brittle material.
   (b) What do you understand by hardness of material? Name the methods for testing of hardness material.

3. (a) How do you classify various engineering materials?
   (b) State revent advances in materials.

4. (a) Determine the interplaner spacing between (200), (220) and (111) planes in a FCC crystal. The atomic radius 1.246 ^{o}A
   (b) Lattice constant of a copper unit cell is 3.61^{o}A. Compute the density of atoms per unit length along direction [110] and [111].