(Following Paper ID and Roll No. to be filled in your Answer Books) Paper ID : NF Roll No.

B.TECH.

Theory Examination (Semester-IV) 2015-16

MATERIAL SCIENCE

Time : 3 Hours

Max. Marks : 100

Section-A

NOTE: Attempt all questions.

- **1.** (a) Define Electron and proton.
 - (b) Define hydrogen bonding.
 - (c) Define phase rule.
 - (d) Define ficks law.
 - (e) Define brass and bronze.
 - (f) Define super conductor.
 - (g) Define mechanical behaviour of plastic.
 - (h) Explain magnetic property.
 - (i) Define slip.
 - (j) Draw the figure of blast furnace.

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(2×10 = 20)

P.T.O.

Section-B

2. Attempt any five questions: $(10 \times 5 = 50)$

- (a) Calculate the atomic radius and A.P.F for SC, BCC, FCC Structure.
- (b) Define Meissonier effect. Give the experimental demonstration of meissner effect.
- (c) Draw the neat sketches illustrating the arrangement of atom around :



(f) What is composite material? Give three example of composite material.

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Section-C



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