Code :R7412310

IV B.Tech I Semester(R07) Supplementary Examinations, May/June 2011 NANO BIOTECHNOLOGY (Biotechnology)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions All questions carry equal marks $\star \star \star \star$

- 1. (a) Nanotechnology is new, but research on nanometer scale is not new at all. Write a short paragraph supporting this statement.
 - (b) What are the milestones in the evolution of nanotechnology?
- 2. (a) What is the difference between nanotechnology & nanoscience?
 - (b) What are the challenges faced by researchers in nanotechnology?
- 3. Explain e-beam lithography with a neat sketch.
- 4. What are the causes of interest in nanomaterials? Explain.
- 5. What are the protein-hybrid computers?
- 6. What is molecular design? Explain in detail.
- 7. Write short notes on:
 - (a) Molecular motors
 - (b) Neuro electronic interfaces
- 8. Write short notes on:
 - (a) Designer biopolymers.
 - (b) Protein magnetic materials.
