

Code : R7412310

**R07****IV B.Tech I Semester (R07) Supplementary Examinations, May 2012****NANO BIOTECHNOLOGY****(Biotechnology)****Time: 3 hours****Max Marks: 80****Answer any FIVE questions****All questions carry equal marks**

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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 mile stones in the evaluation of nanotechnology?
2. Explain the working of scanning electron microscopy with a neat sketch?
3. Explain nanoscale lithography with a neat sketch.
4. (a) Briefly narrate the history of nanomaterials.  
(b) Give some present and future applications of nanomaterials.
5. What is the role of genetically engineered polymer proteins – explain in detail.
6. What is molecular design explain in detail.
7. Write short notes on:  
(a) nano luminescent tags.  
(b) neuro electronic interfaces.
8. Write short notes on:  
(a) RNA topoisomerases.  
(b) DNA polynode.

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