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(21119) Roll No. ....

M.Sc (Biotech). -III Sem.

**NP-3339**

M.Sc. (Biotechnology) Examination,  
November-2019

**CONCEPTS TO NANO-BIOTECHNOLOGY**  
[H-302 (M.Sc. Biotech.)]

Time : Three Hours] [Maximum Marks : 50

Note : Attempt questions from all sections as per instructions.

**Section-A**

(Very Short Answer Questions)

Note : Attempt all of five questions. Each question carries 2 marks. Very short answer is required not exceeding 75 words. 5×2=10

1. Nano-scale
2. Green Nanotechnology
3. Nano-tubes
4. Nano-medicine
5. Quantum dots

**Section-B**

(Short Answer Questions)

Note : Attempt all the two out of the following three question.Each question carries 5 marks. Short answer is required not exceeding 200 words.

5×2=10

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6. Methods in Synthetic Nanoscale Elements for delivery of material into the viable cell.
7. Applications of Nano-Particle in controlled drug delivery.
8. Fabrication and preparation of ultra thin carbon coated TEM grids.

**Section-C**

(Detailed Answer Questions)

Note : Attempt any three questions. Each question carries 10 marks. Answer required in detail.

3×10=30

9. What are Nano-materials ? Describe in brief the applications of Structural DNA Nanotechnology.
10. What are Biomolecules ? Describe in brief their characteristic features. Also mention their applications in nanotechnology.
11. What are probes ? Describe in brief various methods of probing DNA structure with nanoparticles.
12. Write a review on Regulations of nanotechnology.

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