



M.Sc. III Semester Degree Examination, April/May - 2024

MICROBIOLOGY

MB DSE1 : Microbial Nanotechnology

(NEP)

Time : 3 Hours

Maximum Marks : 70

Note : Answer **any five** of the following questions with question No. **1 (Q.1)** is **Compulsory**.
Each question carries **equal** marks.

1. Describe the quantum dot shell structures. 14
2. Write an account on nanoparticle based smart delivery system. 14
3. Explain the fungal mediated synthesis of nanoparticles. 14
4. Discuss principle of X ray Diffraction. 14
5. Write the construction and application of FESEM. 14
6. (a) Discuss DNA Nanocapsule. 5
(b) Write green synthesis of silver nanoparticles. 5
(c) Write the applications of nanoparticles in medicine. 4
7. (a) Briefly discuss Particle size analysis. 7
(b) Photoluminescence. 7
8. (a) Write a note on emergence and challenges of nanotechnology. 5
(b) Write a note on nanopesticides. 5
(c) Write a note on nanoporous polymers in water purification. 4

