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MBS 554

IV Semester M.Sc. Degree Examination, September/October 2022 (CBCS-PG-CGPA) MICROBIOLOGY Bio-Nanotechnology

Time: 3 Hours Max. Marks: 70

I. Write short notes on any five of the following:

 $(5 \times 3 = 15)$

- 1) X-ray diffraction.
- 2) Genotoxicity.
- 3) SERS Magnetic.
- 4) Actinomycetes.
- 5) FTIR.
- 6) Nanofilteration.
- 7) Nanoremediation.
- II. Write notes on any five of the following:

 $(5 \times 5 = 25)$

- 8) Electrical and Electrochemical properties of Nanoparticles.
- 9) Biopolymeric nanoparticles.
- 10) Nano medicine and its developments.
- 11) Potential risk of nanomedicines.
- 12) Principles of nanoparticles synthesis.
- 13) Role of nanoparticles in food preservations.
- 14) Toxicity evaluation.

III. Answer any three of the following:

 $(3\times10=30)$

- 15) Give a detailed account on types, properties and characterization of nanoparticles.
- 16) Describe Biological synthesis of nanoparticles using bacteria and fungi.
- 17) Discuss the role of nanoparticles for targeted drug delivery in cancer therapy.
- 18) Describe the role of green nanotechnology.
- 19) Discuss the role of nanotechnology in water and waste water treatment.