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School of Biological and Life sciences

Bachelor of Science Honours in Microbiology

Semester End Examination - May 2024

Duration : 180 Minutes

Max Marks : 100

Sem VI - P1UC603T - NanobiotechnologyGeneral Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) List the properties of grinding media in ball milling method of synthesis of nanomaterial. K1 (2)
- 2) Explain nanobiosensor and how does it differ from traditional biosensors? K2 (4)
- 3) Explain the limitations or challenges associated with biological synthesis of nanomaterials. K2 (6)
- 4) Illustrate the advantages of green synthesis of nanomaterial over other methods of synthesis? K3 (9)
- 5) Identify some metal oxide nanoparticles and their biomedical applications. K3 (9)
- 6) Interpret the challenges associated with biosensor miniaturization and mass production for commercial applications. K5 (10)
- 7) Discuss the metal nanoparticle coating in agriculture. K4 (12)
- 8) Assess the synthesis of nanomaterials using microorganisms. K5 (15)
- 9) Discuss the mode of AgNP application in agriculture. K5 (15)
- 10) Design an experiment to synthesize and characterize silver nanoparticle using plant extract. K6 (18)