

M.Sc. F.Y.(Microbiology) (CBCS Pattern) Sem II
PSCMBT08 / PSMBT-107 : Nano Microbiology Paper-IV

P. Pages : 1

Time : Three Hours



GUG/S/18/20168

Max. Marks : 80

Notes : All questions are compulsory and carry equal marks.

1. What is nanolithography. Discuss different types of nanolithography. **16**
OR
Write short notes on :
- a) Heterogeneous nanostructures and composites.
 - b) Nano colloids.
2. Discuss in detail DNA based nanostructures. **16**
OR
Write short notes on :
- a) Cubosomes
 - b) Carbon nanotubes
3. What are quantum dots? Discuss biosynthesis of quantum dots and their application in immuno - nanotechnology. **16**
OR
Write a note on :
- a) Quantum dot as biological fluorescent tag.
4. Give the production of Sulphur free nano - particle by Yeast. **16**
OR
Write in short.
- a) Nano materials with antibacterial activity.
 - b) Nanoparticle based immobilization assays.
5. Write a note on : **16**
- a) Evolution of nanoscience.
 - b) DNA Nanotubes.
 - c) Give synthesis of SNP's by Fungi.
 - d) Nano carbon ball as deodorizer in ferment process.
