



UNIT -3 –NANOMATERIALS

PART-A

1. Define nanotechnology
2. What is a quantum dot?
3. What is the size range of nanomaterials?
4. What are NanoMaterials, Give an Example
5. What is the significance of the surface area to volume ratio in nanomaterials?
6. Distinguish between Nano and bulk materials
7. What are types of nanomaterials?
8. Mention the types of approaches to synthesize Nanoparticles
9. What are bottom up approach? Give an example
10. What are Top down approach? Give an example
11. Name two methods of synthesizing nanoparticles
12. What are carbon nanotubes?
13. List out the properties of carbon nanotubes
14. List out the uses of carbon nanotubes.
15. How are nanomaterials used in medicine?

PART B

1. Discuss about the difference between molecules, nanoparticles and bulk materials.
2. Discuss the preparation of carbon nanotubes by chemical vapour deposition method.
3. List out the properties and uses of CNT.
4. Describe the synthesis of nanomaterials by laser ablation and solvothermal process.
5. Discuss the various steps involved in synthesis of nanomaterials by sol gel method.
6. Identify the applications of nanotechnology in medicine, energy science and electronics.