

**B.Sc. DEGREE EXAMINATION, ODD SEMESTER 2020**  
**III Year V Semester**  
**Basics of Nano Science**

**Max.marks :25**

Answer any **FIVE** questions ( $5 \times 5 = 25$ ) Marks

1. Discuss the important characteristics of nanobelts.
2. Differentiate SEM from TEM.
3. Define 'top-down' and 'bottom-up' approaches for the synthesis of nanomaterials. Give examples of both approaches too.
4. Define Quantum dots. How band gap of QDs affect luminescent properties?
5. Write a note on Targeted Drug Delivery with a neat sketch.
6. What is the principle of AFM? Which mode of AFM is preferred to characterize nano surfaces. Why?
7. Why nanoparticles are selected for nano medicines?