

**M.Sc. DEGREE EXAMINATION, EVEN SEMESTER 2021**  
**II Year III Semester**  
**Nano Science and Technology**

**Max.marks :25**

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

1. Write a brief note on Vander waal's forces of interaction.
2. a) What are quantum dots?  
b) What is quantum confinement?  
c) Give the properties of quantum dots?
3. a) What are carbon nano tubes?  
b) Write down their applications.
4. Explain Scanning Near Field Optical Microscopy in detail.
5. Discuss the applications of nanomaterials in medical field.
6. What is Nano MOSFET? Explain it in detail.
7. Describe principle and working of a Scanning Electron Microscope (SEM).