

C.U.Shah Science College
B. Sc Sixth Semester Examination
Nano Materials and Nanotechnology
(Elective-311)

Date: 22/03/2017

Seat No. _____

Time:

Total Marks

50+10

Answer the following question in detail

1. Explain Sol Gel Method and Sono Chemical Synthesis for the Preparation of Nanomaterials. (13)
2. Discuss Laser Vaporization method and Chemical Reduction Method for the Synthesis of Nanomaterials. (12)
3. Write a note on Graphene and Carbon Nanotubes. (13)
4. Write about Scanning Electron Microscope and Give difference between Optical Microscope and Electron Microscope. (12)
5. Answer the following question in short (10)
 - (a) What are quantum dots?
 - (b) Size of Nanoparticles range between _____nm to_____ nm.
 - (c) What are sols?
 - (d) Which type of hybridization of carbon atom in Bucky ball ?
 - (e) Give name of one Scientist associated with Nano science.
 - (f) Give one use of Zinc oxide in context of Nano materials.
 - (g) What is the full form of DLS?
 - (h) What is full form of STM?
 - (i) Mention the name of two methods for Characterization of Nanomaterials
 - (j) Define: Nanotechnology.