

Nanotechnology BE Chemical- (VIII Semester)

Time Allowed: 1 hr

Max Marks: 20

All notations have their usual meanings, assume missing data if any. Each part 5 marks.

1.a How does mechanical properties change for a Nanomaterial when its size changes from nanoscale to micro scale. Cite atleast 03 examples of such specific property changes to substantiate your answer.

1.b Differentiate between 0D, 1D, 2D and 3D nanostructures of Carbon and show how their properties differ.

2.a Explain the working of AFM for characterizing nanoparticles/nanomaterials.

b. What is the role of force-elasticity?