NANO MATERIALS, COMPOSITE MATERIALS & SMART MATERIALS

UNIT V

1.	Define the terms i) nanoparticles. ii) Nanomaterial and iii) Nanoclusters
2.	Describe various steps involved in preparation of nanoparticles by sol-gel method
3.	What are carbon nanotubes? Mention its applications.
4.	What are different types of Carbon nanotubes? mention its properties
5.	What information of nonmaterial can be obtained by SEM? Explain the working and instrumentation of SEM with neat sketch
6	What is the principle of Transmission Electron Microscope? Describe the instrumentation and its advantages over Scanning Electron Microscope.
7	Differentiate the SEM from TEM
8	What are Composite Materials? Classify composite materials and explain with examples.
9	Discuss the engineering applications of composite materials.
10.	Give any four applications of SEM
11	What are smart materials? Mention its applications
12	List out various stimuli that makes the material smart
13	Discuss the applications of SEM and TEM
14	Write a note on Fibre Reinforced composites with applications
15	Explain the working process of scanning electron microscope with a neat sketch.