

NANO 336 : Elective A (Nanomedicine (Drug Delivery)

Marks – 100, Credit - 4

Unit I: Present status of pharmaceuticals and fine chemicals, Concept of nanomedicines, physical properties of molecules and super molecular complexes within cell.

Unit II: Molecular machinery and manufacturing with due stress on programmable medical micro machines, tiny supercomputers through molecular computing,

Unit III: Concept of nanorobots/ molecular robotics smaller than a cell and their role in elimination of cancer, infections etc.

Unit IV: Role of nanotechnology in biotechnology, engineered enzymes.

Unit V: Role of nanotechnology in cosmetics and pharmaceuticals, encapsulated drugs for sustained release(Concept of Drug delivery), Sunscreen and UV protective cosmetics, Biomedical tagging and bio magnetic separation, Diagnostic content agent, biomedical implants.