

Exam.Code:0912

Sub. Code: 6730

1079

B.E. (Biotechnology) Eighth Semester

Elective – I

BIO-815A: Nano Biotechnology

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) What is a nanorod?
- b) What are nanoensembles?
- c) What are electrochemical biosensors?
- d) What are nanoshells?
- e) Differentiate between single and multi walled CNTs,
- f) What is the C-60 structure called and why?
- g) Give an example of an W/O nanoemulsion.
- h) What are nanosensors?
- i) What are liposomes?
- j) What is a quencher?

(10x1)

UNIT – I

- II. What are nanobiosensors? Give two applications. (10)
- III. Detail the biomedical applications of CNTs. (10)
- IV. What are nanoemulsions? Where do these find applications? (10)

UNIT – II

- V. What are nanopores? Give their applications. (10)
- VI. How are actin based motor proteins fabricated? (10)
- VII. What are nanorobots? Give any two applications of nanorobotics. (10)

x-x-x