

**M. TECH. (NANO TECHNOLOGY) SEM-III (CBCS – 2015
COURSE) : SUMMER - 2018
SUBJECT: Elective-I: NANO MEDICINE**

Day: **Tuesday**
Date: **29/05/2018**

S-2018-2950

Time: **11.00 AM TO 02.00 PM**
Max Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.

SECTION-I

- Q.1 Define 'Nanomedicine'. State its significance in biomedical domain. (10)
OR
- Q.1 Describe various nanocarriers used for drug delivery. (10)
- Q.2 Give an overview about testing and characterization methods of various nanobiosystems. (10)
OR
- Q.2 How are polymer based nanocapsules useful for drug delivery? (10)
- Q.3 Which strategies are adopted to improve drug efficacy '*in vivo*'? (10)
OR
- Q.3 Describe how polymeric micelles are useful for drug delivery. (10)

SECTION-II

- Q.4 Describe various diagnostic applications of Nanomedicine. (10)
OR
- Q.4 Discuss the significant role of Nanomedicine for Pharmacology applications. (10)
- Q.5 What is 'gene therapy'? How can nanoparticles be used for the same? (10)
OR
- Q.5 Describe specific application of nanobots in cancer diagnosis and therapy. (10)
- Q.6 How is testing and characterization of a Nanobiosystem undertaken? (10)
OR
- Q.6 Describe the usefulness of Liposomes for cancer therapy. (10)

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