

**M. TECH. (NANO TECHNOLOGY) SEM-III (CBCS – 2015 COURSE) :  
WINTER - 2017**

**SUBJECT: ELECTIVE – I: NANOMEDICINE**

Day : **Tuesday**  
Date : **16/01/2018**

**W-2017-2756**

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

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**N.B.**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Answers to both the sections should be written in **SEPARATE** answer book.
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**SECTION - I**

- Q.1** Describe with suitable examples various nanocarriers used for drug delivery. **(10)**  
**OR**  
Discuss the role of nanomedicine in Pharmacology.
- Q.2** How are polymer based nano capsules used for drug delivery? Explain giving **(10)**  
suitable examples.  
**OR**  
Describe the role of liposomes for cancer treatment.
- Q.3** Discuss the pivotal role played by the nano particulate drug delivery system **(10)**  
(NDDS) for pharmaceutical drug delivery.  
**OR**  
Discuss the significance of theranostic nanoparticles. Give suitable examples.

**SECTION - II**

- Q.4** Explain the strategies used to enable improved drug efficacy. **(10)**  
**OR**  
Describe the significance of nanoparticles for gene therapy.
- Q.5** Give a detailed overview about diagnosis, testing and characterization of **(10)**  
nanotrio systems.  
**OR**  
Define 'Nanobots'. State their pivotal role in treatment of cancer.
- Q.6** State the advantages and limitations of dendrimers for drug delivery. **(10)**  
**OR**  
What are polymeric micelles? State their advantages for use in drug delivery.

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