

No. of Printed Pages : 03

Roll No.

5762

M. Tech. EXAMINATION, May 2018

(Second Semester)

(B. Scheme) (Main & Re-appear)

(MSN)

MSN604

BIO-NANOTECHNOLOGY

Time : 3 Hours]

[Maximum Marks : 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt any *Five* questions. All questions carry equal marks.

(3-43/14)M-5762

P.T.O.

Unit I

1. How engineers can learn from Biology in the context of Nanotechnology ? **20**
2. Describe, how materials are transferred into and within cells ? Explain Bio-transformation. **20**

Unit II

3. Describe Recombinant DNA technology and its application in present day science. **20**
4. Write a descriptive notes on the following : **5×4**
 - (a) Neurotransport
 - (b) Bio-molecular Modelling
 - (c) Proteins
 - (d) Biological Rythms.

Unit III

5. What do you understand by supra-molecular Chemistry ? Throw light on its concepts and language. **20**

6. Describe transport process and carrier design along with different types of carriers. **20**

Unit IV

7. What do you understand by principles of Bio-nanotechnology ? Describe its application for future. **20**
8. Write a descriptive note on DNA computers and artificial life. **20**

M-5762

2

(3-43/15)M-5762

3

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