CODE NO: 07A72311

R07

SET - 1

IV B.TECH - I SEMESTER EXAMINATIONS - MAY, 2011 NANO BIOTECHNOLOGY (BIOTECHNOLOGY)

Time: 3hours Max. Marks: 80

Answer any FIVE questions All Questions Carry Equal Marks

- - -

- 1. Explain nano scale mechanism with reference to biosystems. [16]
- 2. Write about the principle of spectroscopy and what are the important types of spectroscopes explain. [16]
- 3. Write short notes on:
 - a) Polymerization.
 - b) e-beam lithography.

[8+8]

- 4. Explain in detail about "Heterogeneous nano structures and composites". [16]
- 5. What is the role of genetically engineered polymer proteins and explain in detail.

[16]

6. What is molecular design explain in detail.

[16]

7. What is molecular design explain in detail.

[16]

- 8. Write short notes on:
 - a) Neuroelectronic Interphases.
 - b) Molecular Motors.

[8+8]

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R07

SET - 2

IV B.TECH - I SEMESTER EXAMINATIONS - MAY, 2011 NANO BIOTECHNOLOGY (BIOTECHNOLOGY)

| 1 ime: 3nours | | Max. Marks: 80 |
|---------------|-----------------------------|----------------|
| | A marron any EIVE avastions | |

Answer any FIVE questions

| | All Questions Carry Equal Marks | |
|----|-------------------------------------------------------------------------|-------|
| | ••• | |
| 1. | Explain scope and future prospects of nano biotechnology. | [16] |
| 2. | Explain in detail about spectroscopy. | [16] |
| 3. | Write short notes on: a) Self Assembly. b) Nano Scale Lithography. | [8+8] |
| 4. | Explain in detail about "Heterogeneous nano structures and composites". | [16] |
| 5. | Explain molecular biology of protein synthesis in detail. | [16] |
| 6. | Write short notes on: a) Drugs-Photodynamic Therapy. | |
| | b) Nano Luminescent Tags. | [8+8] |
| 7. | Explain molecular biology of protein synthesis in detail. | [16] |
| 8. | Write short notes on: a) RNA Topoisomerase. | |
| | b) Procollagen. | [8+8] |

a) b)

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SET - 3

[8+8]

IV B.TECH - I SEMESTER EXAMINATIONS - MAY, 2011 NANO BIOTECHNOLOGY (BIOTECHNOLOGY)

Time: 3hours Max. Marks: 80

Answer any FIVE questions

| | All Questions Carry Equal Marks | |
|----|-------------------------------------------------------------------------|-------|
| | | |
| 1. | Write an essay on scanning probe instruments in detail. | [16] |
| 2. | Explain scope and future prospects of nano biotechnology. | [16] |
| 3. | Write short notes on: a) Molecular Synthesis. b) Polymerization. | [8+8] |
| 4. | Explain in detail about "nano scale biostructrues" like DNA and RNNA. | [16] |
| 5. | What are protein-hybrid computers? Explain. | [16] |
| 6. | Write short notes on: a) E-beam lithography. b) Nano Scale Lithography. | [8+8] |
| 7. | Explain in detail about "Heterogeneous nano structures and composites". | [16] |
| 8. | Write short notes on: | |

Drugs-Photodynamic Therapy.

Neuroelectronic inter phases nano luminescent.

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SET - 4

IV B.TECH - I SEMESTER EXAMINATIONS - MAY, 2011 NANO BIOTECHNOLOGY (BIOTECHNOLOGY)

Time: 3hours Max. Marks: 80

Answer any FIVE questions All Questions Carry Equal Marks

- - -

| 1. | Explain in detail about Electron microscope. | [16] |
|----|----------------------------------------------------------------------|-------|
| 2. | Write short notes on: a) Molecular Synthesis. | |
| | b) Self assembly. | [8+8] |
| 3. | Explain in detail about "nano scale biostructures" like DNA and RNA. | [16] |
| 4. | What are protein-hybrid computers? Explain. | [16] |
| 5. | Explain molecular biology of protein synthesis in detail. | [16] |
| 6. | Write short notes on: | |
| | a) Drugs-photodynamic therapy. | |
| | b) Molecular motors. | [16] |
| 7. | Write short notes on: | |
| | a) Procollagen. | |
| | b) DNA Polynode. | [8+8] |
| 8. | What is molecular design explain in detail. | [16] |
