

M.E. Second Semester (Digital Electronics) (Part Time / Full Time) (C.G.S.- New)

13234 : Elective-II : Bio-Informatics

2 UMEF 5 / 4 UMEP 3

P. Pages : 1

Time : Three Hours



AU - 3326

Max. Marks : 80

- Notes :
1. Answer **three** question from Section A and **three** question from Section B.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answer necessary with the help of neat sketches.
 4. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION – A

- | | | | |
|----|----|---------------------------------------------------------|---|
| 1. | a) | What is bioinformatics? When and why it is required. | 7 |
| | b) | List the various categories of database. | 7 |
| 2. | a) | Explain navigating databases. | 7 |
| | b) | Draw and explain flow of information in bioinformatics. | 6 |
| 3. | a) | Explain PIR-PSD protein sequence database. | 7 |
| | b) | Explain nucleotide sequence database. | 6 |
| 4. | a) | Explain searching and retrieving from DDBJ database. | 7 |
| | b) | Describe Gene expressing database. | 6 |

SECTION – B

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|----|----|-------------------------------------------------------|----|
| 5. | | Explain nucleotide sequence submission tool. | 13 |
| 6. | a) | Which type of submission are not accepted by GenBank. | 7 |
| | b) | Explain how scope can be accessed. | 7 |
| 7. | | Explain phylogenetic prediction algorithms. | 13 |
| 8. | | Explain in detail Gene prediction algorithm. | 13 |
