

This question paper contains **2** printed pages]

BG—28—2016

FACULTY OF SCIENCE

B.Sc. (Third Year) (Sixth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(Revised Course)

BIOTECHNOLOGY (Integrated)

Paper (BTT-6.4)

(An Introduction to Bioinformatics)

(Saturday, 26-11-2016)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—80

N.B. :— (i) Attempt All questions.

(ii) Draw well labelled diagram wherever necessary.

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|----|------------|--|----|
| 1. | (a) | Describe in brief metabolomics and pharmacogenomics. | 10 |
| | (b) | Give an account of proteomic and genomic. | 10 |
| 2. | Write on : | | |
| | (a) | NCBI | 8 |
| | (b) | SwissProt. | 7 |
| | <i>Or</i> | | |
| | (a) | EMBL. | 8 |
| | (b) | TrEMBL. | 7 |
| 3. | Write on : | | |
| | (a) | Pairwise sequence alignment. | 8 |
| | (b) | Multiple sequence alignment. | 7 |
| | <i>Or</i> | | |
| | (a) | Similiarity search. | 8 |
| | (b) | Protein structure visualization. | 7 |
| 4. | Write on : | | |
| | (a) | Molecular medicine. | 8 |
| | (b) | Forensic analysis. | 7 |

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BG—28—2016

Or

(a) Application of bioinformatics.

8

(b) Personalized medicine.

7

5. Write short notes on (any *three*) :

15

(a) PDB

(b) DDBJ

(c) Human Genome Project

(d) Tools for sequence alignment

(e) Gene therapy.

BG—28—2016

2