



AU-1928

Seat No. _____

B. Sc. (Sem. VI) (External) Examination

March / April - 2018

**CC-I-14 : Analytical Techniques in
Biotechnology : Paper - 14**

Time : 3 Hours]

[Total Marks : 70

1 MCQS (all questions are compulsory) 15

- (1) Which of the following is protein database?
 - (1) EMBL
 - (2) PIR
 - (3) NCBI
 - (4) None of above
- (2) Human genome project was initiated by
 - (1) NIH
 - (2) DOE
 - (3) HGP
 - (4) BOTH (1) and (2)
- (3) All are sequence alignment tools except
 - (1) Rasmol
 - (2) BLAST
 - (3) FASTA
 - (4) Clustal W
- (4) Most of the industrial enzymes are obtained from
 - (1) Microbial
 - (2) Plants
 - (3) Insects
 - (4) Animal tissues
- (5) What is the full form of PDB ?
 - (1) Partial Data Base
 - (2) Protein Data Base
 - (3) Protein Data Bank
 - (4) Primary Data Bank
- (6) Which of the following is one of the types of biosensor?
 - (1) Potentiometric
 - (2) Calorimetric
 - (3) Amperometric
 - (4) All of the above

(7) "Any device that uses specific biochemical reactions to detect chemical compounds in biological samples" is called?

- (1) immobilization
- (2) Biosensor
- (3) Bioinformatics
- (4) Bioreactor

(8) Which chemical is used for the fixation in Electron Microscopy?

- (1) Zenker's fluid
- (2) Ethylene
- (3) Osmium tetroxide
- (4) Bouin's solution

(9) What is the full form of DDBJ ?

- (1) DNA Database
- (2) DNA Database of Japan
- (3) DNA Database of Germany
- (4) None of the above

(10) In pharmacokinetics what does the acronym ADME stand for?

- (1) Absorption, Distribution, Metabolism, and Excretion
- (2) Administration, Distribution, Metabolism, and Efficacy
- (3) Absorption, Disintegration, Metabolism, and Efficacy
- (4) Administration, Differentiation, Metabolism, and Excretion

(11) What is the full form of SRS ?

(12) Write down the full form of SEM ?

(13) Name of any two matrices used in MALDI.

(14) Give the full form of NCBI.

(15) Define GMP.

2 Give a short note on any five of the following : 25

- (1) Biological database
- (2) Principle of microcopy
- (3) Sequence alignment
- (4) GLP
- (5) Bioreactors and their types
- (6) Application of bioinformatics
- (7) Methods of immobilization

3 Give a detail note on any three of the following. 30

- (1) MALDI
 - (2) Human Genome Project
 - (3) Biosensors
 - (4) GMP
 - (5) Biotechnology, Bioinformatics and Internet
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