GAZ-478 Seat No. _____

B. Sc. (Sem. VI) Examination

March / April - 2017

CBT-604 - Biotechnology : Paper - 14

(Analytical Techniques in Biotechnology)

Time : 3 Hours] [Total Marks : 70

1 Attempted all question **(1x15=15)**

(1) Which of the following is NOT a laboratory safety rule ?

(a) You should never mix acids with bases

(b) You should tie back your long hair

(c) You should never add water to acid

(d) All of the above are valid safety rules

(2) "Qualitative results" refer to:

(a) Results that can be observed during an experiment.

(b) Results those are difficult to observe during an experiment.

(c) Results that require numerical data.

(d) None of these is correct.

(3) which of following is used to visualize live cells

(a) SEM

(b) TEM

(c) Phase contrast microscope

(d) All of these

(4) Biochips are made up of

(a) semi-conducting molecules inserted into the protein frame work

(b) conducting molecules inserted into the protein frame work

(c) non-conducting molecules inserted into the protein frame work

(d) any of the above

(5) Which one is NOT biological database

(a) NCBI

(b) EMBL

(c) EBD

(d) PIR

(6) _____ and _____ is biological components of biosensor

(7) _____ and _____ is nucleotide database

(8) _____ full form of CATH

(9) _____ and _____ expand of GMP & GLP

(10) _____ expand BLAST

11 to 15 Match the followings

(11) Biosensor	(A) Visualize tool
(12) PDB	(B) immobilized enzymes
(13) SEM	(C) Align tool
(14) BLAST	(D) protein data
(15) RASMOL	(E) structure of cells

2 Attempted any **five** questions : **3×5=15**

(1) Define GLP and practices

(2) Define qualitative analysis

(3) Explain bioreactors

(4) Explain bioinformatics

(5) Define characters of ideal biosensor

(6) Define mass spectroscopy

3 Attempted any **four** questions : **5×4=20**

(1) Describe components of bioinformatics

(2) Explain SEM microscopy

(3) Explain concepts of immobilization

(4) Describe BLAST and their types

(5) Describe Rasmol and applications

4 Attempted any **two** questions : **10×2=20**

(1) Define bioinformatics and applications in biotechnology.

(2) Describe biosensor, explain types and components.

(3) Explain aspects and steps of analysis in laboratory.
