

P. S. SCIENCE & H. D. PATEL ARTS COLLEGE, KADI

Internal Examination

B. Sc. SEM - VI

[Mark : 40

23-3-2016]

Paper BT - 604

[1-30 to 3-00

Analytical techniques in Biotechnology

1. Attempt all the questions. Each question carries 1 mark. 10

- (1) Give the full form of SOP.
- (2) Expand OECD.
- (3) Define immobilization.
- (4) Give the full form of NCBI & DDBJ.
- (5) Name of tool for alignment
- (6) Name the biosensor based on the detectors used for construction of it.
- (7) The volumetric productivity in _____ bioreactor is higher due to smaller particle size of immobilized system,
 - a. Fluidized Bed
 - b. Packed Bed
 - c. Stirred tank
 - d. None of these
- (8) _____ is the commonly used crosslinking agent in enzyme immobilization.
 - a. Gluteraldehyde
 - b. Formaldehyde
 - c. Cellulose
 - d. Polyacryamide
- (9) _____ is the assembly and management of all activities aimed at the production of the quality by organization,
 - a. Quality Control
 - b. Quality Assurance
 - c. Quality Management
 - d. None of these

(10) _____ is the responsibilities of QA Personnel.

- a. Study based inspections
- b. Facility based inspections
- c. Process based inspections
- d. all of these

2. Answer any 4 questions. Each question carries 5 marks 20

- (1) Write the components of Mass Spectrometer with examples and Explain MALDI-TOF.
- (2) Describe DIC in detail.
- (3) Write a short note on Steps of Analysis.
- (4) Enlist Components of Biosensor & explain biological element used in construction of biosensor.
- (5) Describe the basic principles of Good Laboratory Practices.
- (6) Describe component of bioinformatics.

3. Answer any 1 question. Question carries 10 marks. 10

- (1) Enlist types of Electron Microscopy. Explain TEM with suitable diagram in detail.
- (2) Explain methods of immobilization in detail.
- (3) Explain application of bioinformatics in lifesciences.