

S.No. 66

12PBTZ03

(For the candidates admitted from 2012 – 2013 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Third Semester

Biotechnology

BIOINFORMATICS, IPR AND BIOETHICS

Time : Three hours

Maximum.: 75 marks

SECTION A — (5 × 5 = 25 marks)

Answer ALL the questions.

1. (a) Explain the role of KEGG biological data base.

Or

- (b) Describe the functions of biological databases

2. (a) What is Sequence Alignment? Site the methods by which it can be done?

Or

- (b) How sequence similarity can be calculated using BLAST?

3. (a) Mention the challenges created by microarray experiments in bioinformatics?

Or

(b) Comment on 2 D Gel Electrophoresis

4. (a) Explain copyright, trademark and royalties.

Or

(b) Describe the key components of a good licensing agreement.

5. (a) Explain the various issues of Biosafety.

Or

(b) Explain the Policy implication for biosafety regulation and practice.

SECTION B — (5 × 10 = 50 marks)

Answer ALL the questions.

6. (a) Discuss about Human Genome Project and its implications.

Or

(b) Discuss the role of any two Primary Nucleotide Sequence Databases.

7. (a) What is Phylogenetic Analysis? How it can be constructed and interpreted?

Or

(b) Discuss about Global alignments and Local alignments.

8. (a) What are the different areas which can be studied using Microarray technologies?

Or

(b) What are the difference of Directed Sequencing and Shotgun Sequencing?

9. (a) Discuss about GATT and its agreement policy.

Or

(b) Compare and contrast Intellectual and industrial property.

10. (a) Discuss about various Levels of Biosafety.

Or

(b) Discuss about Risk Assessments of Biosafety.

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