(b) Calculate coefficient of correlation from the following data

X: 9 8 7 6 5 4 3 2 1

Y: 15 16 14 13 11 12 10 8 9

9. (a) Brief about Internet basics.

Or

(b) Explain ACCELRYS software and HTML language.

10. (a) Discuss on human genome projects.

Or

(b) Explain structure and specialized sequence data bases.

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(For the candidates admitted from 2012-2013 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Third Semester

Medical Biochemistry

BIOSTATISTICS AND MEDICAL BIOINFORMATICS

Time : Three hours   Maximum : 75 marks

SECTION A — (5 × 5 = 25 marks)

Answer ALL questions.

All questions carry equal marks.

1. (a) Distinguish between diagram and graph.

Or

(b) What are the essentials of a good questionnaire?

2. (a) What is sampling? Point out its significance.

Or

(b) Explain. What is one-way analysis of variance?

3. (a) Calculate MODE from the following data

   X : 10-20 20-30 30-40 40-50

   F : 5   10   20   5

   Or

   (b) Explain in brief the properties of normal distribution.

4. (a) What are the objectives and scope of bioinformatics?

   Or

   (b) Explain MOE and TRIPOS software system in bioinformatics.

5. (a) Explain PDB and SWISS-PROT databases.

   Or

   (b) List out specialized sequence databases.

   SECTION B — (5 × 10 = 50 marks)

   Answer ALL questions.

   All questions carry equal marks.

6. (a) Give an account of the different ways of classification of data with suitable examples.

   Or

(b) Data on 60 cervical cancer patients attending a hospital during the year 2015 is given below. Draw a suitable diagram.

Type of treatment	No of patients
Surgery	8
Radiotherapy	42
Surgery + Radiotherapy	4
Chemotherapy	4
Surgery + chemotherapy	2

7. (a) Do the following data provide the effectiveness of the drug for typhoid

	Typhoid	No typhoid
Drug:	200	300
No drug:	280	20

   (For v = 1 $x^2 = 0.05 = 3.84$).

   Or

   (b) Outline the steps involved in testing of statistical hypothesis.

8. (a) Find the standard deviation of the following distribution

Age:	20-25	25-30	30-35	35-40	40-45	45-50
No. of persons:	170	110	80	45	40	35

   Or