

(20518)

Roll No. ....

B. Sc.(Micro.)-II

**3501**

**B. Sc. (Micro.) Examination, May 2018**

**Computer & Biostatistics  
(B-208)**

*Time : Three Hours*

*[Maximum Marks : 35*

*Note :* Attempt any *Five* questions. All questions carry equal marks. Calculator is allowed.

1. Discuss the various input and output devices of computer system.
2. Explain the different classifications of computer system.
3. Discuss the applications of Microsoft Excel. Convert the following:
  - (i)  $(346)_8 = ( \quad )_2$
  - (ii)  $(4117)_{10} = ( \quad )_2$
  - (iii)  $(13.15)_{10} = ( \quad )_2$
  - (iv)  $(155)_8 = ( \quad )_2$

(2)

4. What is measure of central tendency ? Describe mean, median and mode with their merits and demerits.
5. Write a detailed note on binomial and Poisson distributions.
6. Differentiate between correlation and regression analysis. Obtain Karl-Pearson's coefficient of correlation for the following data set :

x	14	12	10	8	6	5	4	3	2
y	2	4	5	9	11	13	10	15	17

7. Describe  $t$  and  $F$  tests. Does the sample evidence indicate that the average time an employee stays with a company in their current positions is less than 3 years ? A random sample of 50 employees yielded a mean of 2.79 years and standard deviation of 0.76. Use  $\alpha = .05$ .
8. Discuss systematic and stratified sampling with their importances.
9. Explain the basic principles of design of experiment.

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10. Give the layout and analysis of randomized block design (RBD). Highlight the importance of RBD over CRD.