



**AAM-419**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. III) Examination**

**October / November - 2016**

**Biotechnology : EC - 01**

*(Biostatistics)*

Time : 2 Hours]

[Total Marks : 50

**1 Attempt any seven :** **1×7=7**

- (1) What is standard deviation?
- (2) Color and smell of flowers is \_\_\_\_\_ data.  
(Qualitative / Quantitative)
- (3) \_\_\_\_\_ is used when dealing with rates and speeds.  
(Harmonic mean / Geometric mean / Arithmetic mean)
- (4) Name the types of measure of central tendency.
- (5) Define biostatistics.
- (6) What is data?
- (7) Give full form of ANOVA.
- (8) Define binomial distribution.

**2 Attempt any three :** **3×3=9**

- (1) Distinguish between Qualitative and Quantitative data.
- (2) Explain poisson distribution.
- (3) A migratory bird migrates from feeding place to breeding place at a speed of 70 km/hour and returns at the speed of 50 km/hour. Calculate Harmonic mean.
- (4) Write a short note on Tabulation of data.

3 Attempt any **four** :

**6×4=20**

- (1) Calculate mean, mode for following data :  
24, 6, 14, 16, 15, 15, 29, 11, 11, 9, 22, 8, 14,  
14, 16, 16
- (2) How graphical and diagrammatical representation is helpful in biostatistics ?
- (3) Define Biostatistics and give its applications in biotechnology.
- (4) Explain Student's T test.
- (5) Explain poisson distribution.
- (6) Calculate Geometric mean of the following data :  
37, 102, 34, 12, 111, 56, 72, 17, 33

4 Attempt any **two** :

**2×7=14**

- (1) What is sampling? Explain types and significance of sampling in biostatistics.
- (2) Describe measure of dispersion.
- (3) Explain in detail uses of Chi square test in biostatistics.