

M.Sc.- I (Zoology) (NEP Pattern) Semester-I  
**NEP-84-1 / 01MSCZO04-1 - Bioinformatics Biostatistics and Biotechniques**

P. Pages : 1

Time : Three Hours



**GUG/W/24/15146**

Max. Marks : 80

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**1.** Write a note on Phylogeny analysis. **16**

**OR**

Write notes on:

- a) Bioinformatics in India. **8**
- b) Variants of BLAST. **8**

**2.** Describe in detail measures of central tendency. **16**

**OR**

Write notes on:

- a) Mean and mode. **8**
- b) Measures of dispersion. **8**

**3.** Explain Karl Pearson's coefficient of correlation and determination in detail with its significance. **16**

**OR**

Write notes on:

- a) Types and methods of correlation. **8**
- b) Test of significance. **8**

**4.** Write a note on principal and types of centrifuge and explain the process of ultra-centrifuge. **16**

**OR**

Write notes on:

- a) Fluorescence Microscope. **8**
- b) Phase-Contrast Microscope. **8**

**5.** Write short notes on

- a) FASTA. **4**
- b) Standard deviation of data. **4**
- c) One way ANOVA. **4**
- d) pH meter. **4**

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