Reg. No	Name	U640

## **BSc DEGREE END SEMESTER EXAMINATION MARCH 2017**

# SEMESTER – 6: ZOOLOGY (CORE COURSE)

# COURSE: U6CRZOO12: GENERAL INFORMATICS, BIOINFORMATICS AND BIOSTATISTICS

(For Regular - 2014 Admission)

Time: Three Hours Max. Marks: 60

### **PART A**

Answer all questions. Each question carries 1 mark.

- 1. Expand NCBI
- 2. Differentiate between RAM and ROM
- 3. What is Rasmol?
- 4. Define Correlation
- 5. Define degree of freedom
- 6. What is multiple sequence alignment?
- 7. What is normal distribution?
- 8. What is gene finding?

 $(1 \times 8 = 8)$ 

#### **PART B**

Answer any six questions. Each question carries 2 marks.

- 9. What is quartile deviation?
- 10. Describe the various input devices
- 11. What is booting?
- 12. Describe FASTA sequence format
- 13. What is proteomics?
- 14. What is SNP?
- 15. Describe the various data collection methods
- 16. What is frequency curve?

 $(2 \times 6 = 12)$ 

## PART C

Answer **any four** questions. Each question carries 5 marks.

- 17. Briefly describe the various operating systems
- 18. Describe the various nucleic acid sequence databases in bioinformatics
- 19. Explain the features of BLAST search engine
- 20. Briefly describe the different measures of central tendency
- 21. Describe the different tests of significance
- 22. What are the different types of correlation?

 $(5 \times 4 = 20)$ 

### **PART D**

Answer **any two** questions. Each question carries 10 marks.

- 23. Write an essay on applications of bioinformatics
- 24. Write an essay on databases in bioinformatics
- 25. Explain the different types of graphical representations with examples
- 26. Calculate the mean deviation of the following frequency distribution

Mid value of class	32.5	37.5	42.5	47.5	52.5	57.5	62.5	67.5	72.5	77.5
Frequency	10	8	18	3	4	19	18	3	2	2

 $(10 \times 2 = 20)$