



Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2019
First Degree Programme under CBCSS
Foundation Course – II
ZO1621 – GENERAL INFORMATICS, BIOINFORMATICS AND
MOLECULAR BIOLOGY
(2015 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

I. Answer the following questions (in **one** or **two** sentences. **One** mark each.)

- 1) Linux
- 2) BRNET
- 3) Green computing
- 4) PDB
- 5) Rasmol
- 6) Transformation
- 7) One gene – one polypeptide hypothesis
- 8) Termination codon
- 9) Promoter
- 10) Okazaki fragments

(10×1=10 Marks)

II. Answer **any eight** of the following (**Not** to exceed **one** paragraph. **Each** carries **2** marks).

- 11) Transition and transversion
- 12) Internet protocol
- 13) Modem of a computer
- 14) E-journals



- 15) Open source initiative
- 16) Potential hazards of social networking
- 17) Pre-mRNA splicing
- 18) Entrez
- 19) Database on Mendelian inheritance in Man
- 20) Introns and exons
- 21) Inducible operon with one example
- 22) Wobble hypothesis

(8×2=16 Marks)

III. Answer **any six** of the following (**Not** to exceed **120** words. **Each** carries **4** marks).

- 23) tRNA structure and function
- 24) Wireless network
- 25) Search engines
- 26) Health problems associated with the use of computers and guidelines for proper usage.
- 27) Bioinformatics tools for sequence alignment
- 28) Proteomics
- 29) Griffith's transformation experiment
- 30) trp operon
- 31) Different types of DNA

(6×4=24 Marks)

IV. Answer **any two** of the following (**Each** carries **15** marks)

- 32) Explain the various steps involved in translation in eukaryotes. Add a note on post translational modifications of proteins.
- 33) Write an essay on bacterial recombination.
- 34) Give an account on popular databases in Bioinformatics.
- 35) Give an account on cyber ethics, cyber crime, cyber security, cyber laws and cyber addictions.

(2×15=30 Marks)
