



K20P 0359

Reg. No. : .....

Name : .....

II Semester M.Sc. Degree (CBSS – Reg./Suppl./Imp.) Examination, April 2020  
(2014 Admission Onwards)

ZOOLOGY

ZOO2C05 : Molecular Biology and Molecular Evolution

Time : 3 Hours

Max. Marks : 60

I. Answer **any two** of the following :

- 1) Explain DNA repair mechanisms.
- 2) Write a detailed account of transcription and post transcriptional modifications.
- 3) Write an essay on the molecular basis of gene mutations.
- 4) Write a detailed account of the evolution of eukaryotic organelles. (2×12=24)

II. Answer **any two** of the following :

- 5) Describe the experiments to prove the semi conservative model of DNA replication.
- 6) Differentiate between anagenesis and cladogenesis.
- 7) Write an essay on genetic polymorphism.
- 8) Explain operon model. (2×8=16)

III. Write short notes on **any four** of the following :

- 9) Genetic code.
  - 10) Pseudogenes.
  - 11) Introns and Exons.
  - 12) Molecular clock.
  - 13) Molecular chaperones.
  - 14) Prokaryotic Genome. (4×5=20)
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