C 63056 (Pages : 2) Name.....

Reg. **No.....**

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2019

(CUCSS)

General Biotechnology

GB 2C 2—MOLECULAR BIOLOGY

(2010 Admissions)

Time : Three Hours Maximum : 36 Weightage

Section A

Answer **all** *questions, each with weightage 1.*

1. Nucleoproteins.
2. Ribozymes.
3. Semiconservative model of replication.
4. Wobble hypothesis.
5. Cocion usagc.
6. Specialised transduction.
7. Rolling circle model.
8. Repliosome.
9. Splicing.
10. Tumor suppressor genes.

(10 x 1 = 10 weightage)

Section B

Answer any **seven** *questions, each with weightage* 2.

11. Explain the regulation of the lac operon.
12. Explain the molecular basis of recombination in Eukaryotes.
13. Discuss the functions of the various enzymes involved in replication.
14. Discuss the spliceosome machinery and the mechanism involved.
15. Discuss the mechanism involved in conjugal transfer of DNA.

Turn over

16. Discuss the cellular oncogenes and their roles.

17. Explain reversion and suppression.

18. Discuss rho dependent and independent termination.

19. Discuss the DNA polymerases in Prokaryotes and Eukaryotes.

20. Write briefly on attenuation.

(7 x 2 = 14 weightage)

Section C

Answer any two *questions, each with weightage* 6.

21. Discuss protein synthesis in Prokaryotes.

22. Discuss RNA editing.

23. Discuss post transcriptional modifications.

(2 x 6 = 12 weightage)