



K19P 0262

Reg. No. :

Name :

**II Semester M.Sc. Degree (Reg./Suppl./Imp.) Examination, April 2019
(2014 Admission Onwards)**

BOTANY

BOT 2C07 : Genetics, Evolution and Biometrics

Time : 3 Hours

Max. Marks : 60

Instruction : Draw drawing wherever necessary.

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

1) Write an account of protein synthesis.

OR

2) Write an account of regulation of gene expression in eukaryotes.

3) Explain insertional mutagenesis.

OR

4) Explain the measures of dispersion.

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

(2×6=12)

5) Explain enzymology of replication.

6) Explain heritability and its measurements.

7) Explain Hardy-Weinberg principle.

III. Answer **any six** of the following :

(6×3=18)

8) Explain molecular divergence and molecular clocks.

9) Give an account of mechanism of evolution.

10) Explain the measures of central tendency.

11) Give an account of test of significance.

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- 12) Explain three point test cross analysis.
- 13) Give an account of inherited human diseases.
- 14) Give an account of transcriptional machinery.
- 15) Give an account of structure and function of different RNA molecules.

IV. Answer any seven of the following :

(7×2=14)

- 16) Gene silencing
- 17) Site-directed mutagenesis
- 18) Genetic drift
- 19) Heterochromatin
- 20) Correlation
- 21) Poisson distribution
- 22) Mode
- 23) Levels of significance
- 24) Genetic code
- 25) RNA polymerase.