K22P 0154

Reg. No. : .....

Name : .....

II Semester M.Sc. Degree (CBSS – Reg./Supple./Imp.) Examination, April 2022
(2018 Admission Onwards)
BOTANY
BOT2C07 : Genetics Evolution and Biometrics

Time : 3 Hours Max. Marks : 60

I. Answer **any two** of the following. **(2×8=16)**

1) Explain enzymology of DNA replication.

OR

2) Explain DNA replication mechanism in eukaryotes.

3) Explain transcription factors and machinery.

OR

4) Explain regulation of gene expression in eukaryotes.

II. Answer **any two** of the following. **(2×6=12)**

5) Explain the role of mutations in evolution.

6) Explain the role of polyploidy in evolution.

7) Explain the methods of test of significance.

III. Answer **any six** of the following. **(6×3=18)**

8) Cataclysmic evolution

9) Molecular tools in phylogeny

10) Analysis of variance

11) Genetics of ABO blood group

P.T.O.

12) Insertional mutagenesis

13) Polygenetic inheritance

14) Attenuation and antitermination

15) Aminoacyl t-RNA synthetase.

IV. Answer **any seven** of the following. **(7×2=14)**

16) RNA transport

17) Gene silencing

18) Hardy-Weinberg law

19) Natural selection

20) RNA splicing

21) Environmental mutagenesis

22) One gene-one enzyme concept

23) Genetic code

24) Rh factor

25) Euphonics.
