

V Semester B.Sc. Examination, Nov./Dec. 2016
(Repeaters – Prior to 2016-17) (NS – 2013-14 and Onwards)

BOTANY – VI

Cytology, Genetics, Evolution and Plant Breeding

Time : 3 Hours

Max. Marks : 70

- Instructions :** 1) Answer **all** Parts.
2) **Draw diagrams wherever necessary.**

PART – A

A. Answer **any seven** of the following :

(7×2=14)

- 1) Differentiate between centromere and telomere.
- 2) Mention the types of Electron microscope.
- 3) Define trisomy with an example.
- 4) What is dihybrid cross and dihybrid ratio ?
- 5) What is cryopreservation ?
- 6) Define mutation.
- 7) What is crossing over ? Mention its importance.
- 8) Differentiate dominant gene from recessive gene.
- 9) What is test cross ?

PART – B

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

(6×4=24)

- 10) Supplementary factors
- 11) Inversions
- 12) Incomplete dominance
- 13) Cutting and grafting



- 14) Mitosis
- 15) Maintenance of germplasm
- 16) Nucleosome model
- 17) Chloroplast inheritance.

PART - C

C. Answer **any four** of the following :

(4x8=32)

- 18) Multiple factor inheritance with example.
- 19) Methods of vegetative propagation.
- 20) Explain Lamarckism.
- 21) Prophase I of Meiosis.
- 22) What is Epistasis ? Give an example.
- 23) What are complementary factors ? Give an example.

BMSCW