V.P.& R.P.T.P.SCIENCE COLLEGE

Internal Test

B.Sc. Vth Semester

BOTANY-US05CBOT05

Date-5/10/2013 Time-3.30p.m.to 5.00p.m.

Saturday Marks-30

N.B. Draw neat and labeled diagrams wherever necessary.

Q-1 Choose the correct answer from the options. (06)

(1) Balbiani rings occur in:

(a) Polysomes (b) Heterosome

(c)Lampbrush chromosome (d) Polytene chromosome

(2) Chromatin can be stained by:

(a)Geimsa (b) Fast green (c) Saffranin (d) Eosin

(3) The substance of centrosome is called:

(a) Kinoplasm (b) Kinetosome (c) Karyolymph (d) Karyosome

(4) F_1-particles are present in:

(a) Chloroplast (b) Mitochondrion (c) Nucleus (d) Ribosome

(5) Addition or deletion of nitrogen bases is called:

(a) Substitution mutation (b) Frame shift mutation

(c) Transition (d) Transversion

(6) The Pachytene configuration of a translocation heterozygote is:

(a) Cross shaped (b) Ring shaped (c) Figure of eight (d) Rod shaped

Q-2 Answer the following in short (any three). (06)

1. Mention the names of single membraned cellular organelles.
2. Give the location and function of expansin.
3. Briefly describe "cisternae" of Golgibody.
4. Differentiate between mitochondrion and hydrogenosome.
5. Draw an inversion loop at Pachytene.
6. Write the general chromosome formulae for tetrasomy and nullisomy.

Q-3 (a) Distinguish between:

(i) Chromomere and centromere (03)

(ii) Integral protein and peripheral protein in cell-membrane. (03)

OR

Q-3 Write an account of special types of chromosomes. (06)

Q-4 (a) What are the functions of Smooth E.R.? (03)

(b) Explain the structure and functions of Peroxisome. (03)

OR

Q-4 Describe the ultrastructure of Ribosome. (06)

Q-5 Describe semiconservative method of DNA replication. (06)

OR

Q-5 Give an account of structural changes in chromosomes due to deficiency and duplication. (06)