BOTANY 2017

Time: 1 Hours 45 Minutes Marks: 36

SECTION 'B' (SHORT-ANSWER QUESTIONS) (22)

NOTE: Answer 11 questions from this section.

2.(i) Define isomorphic alternation of generation.
(ii) State one function each of the following:
(a) Ribosome (b) Mitochondria
(iii) How is bacterial cell wall different from plant cell wall?
(iv) Name various types of Ascocarp.
(v) Name various components of the nucleus.
(vi) What is plasmid?
(vii) What are Mycorrhiza?
(viii) Define Heterogamy.
(ix) Name three pathways of water absorption in plants.
(x) Write the floral formula of family Solanaceae.
(xi) Name any two diseases caused by virus.
(xii) Write the botanical names of any two of the following:
• Wheat • Apple • Tomato • Amaltas
(xiii) Name different parts of a Carpel.
(xiv) Define Ascent of Sap.
(xv) Which compound receives CO_2 during dark reaction?
(xvi) Name only two types of fermentation.

3. Attempt any six part questions. Each question carries two marks.
(i) Name only the sub-division of Tracheophyta.
(ii) Name only 4 groups of fungi with their reproductive structures.
(iii) Draw a labeled diagram of Bacteeriophage virus.
(iv) Why is ATP called energy currency?
(v) State the postulates of cell theory.
(vi) Discuss why transpiration is a necessary evil.
(vii) Why is photorespiration considered a wasteful process?
(viii) How are bacteria classified on the basis of flagella?
(ix) Draw a labeled diagram of any one of the follwomg:

(i) L.S. of Ovule (ii) T/S. of Marchantia thallus

SECTION'C' (DETAILED- ANSWER QUESTIONS)

NOTE: Answer 2 question from this section(14)

4. Draw and describe the life cycle of Moss of Pinus.
5. Give the floral formula, floral diagram and one botanical name each from any two of the following:
(i) Rosaceae (ii) Fabaceae (iii) Mimosaceae
6. Drae and describe the life cycle of Zygomycota or Ascomyeota fungi.
7. With the help of a flow chart, describe the breakdown of ghucose into pyruvaree during glycolysis.
8. Define translocation. How does E. Munch hypothesis descrie the translocation of food in plants?