Total No. of Questions : 5] [Total No. of Printed Pages : 2

Roll No _____

PY - 101(B)

B.Pharmacy I Semester

Examination, December 2014

Remedial Biology

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.
ii) All parts of each question are to be attempted at one place.
iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.
iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Explain the morphology and functions of Pneumatophore with examples.
   b) What are essential parts of a Flower? What functions they perform?
   c) Discuss morphological nature of Ginger, Potato and Onion.
   d) Give an account of simple tissues found in plants. Add a note on their functions.

   OR

   Explain dark reaction of Photosynthesis. What is the source of oxygen present in the final product of this process.

2. a) Discuss chemical nature of Lipids Add a note on compound lipids.
   b) Give an account of Glycans with suitable example.

   c) Describe various stages of cell cycle.
   d) Give an account of Enzymes. Explain their Chemistry and the properties affecting their activities.

   OR

   Explain the differences between mitosis and meiosis.

3. a) Describe distinguishing features of Prostita with examples.
   b) Explain the structure of Archegonium.
   c) Enumerate economic importances of Lichens.
   d) Discuss the structure, chemical composition and properties of viruses.

   OR

   What do you understand by alternation of Generations? Explain it taking the example of pteridophytes or Gymnosperms.

4. a) Explain Mendel's Law of dominance with example.
   b) Give the names of initiation and termination codons.
   c) Define Hardy and weinberg principle.
   d) Give an account of types of Mutation. Discuss the role of agents causing induced mutation.

   OR

   Explain in detail the two genes inheritance.

5. a) Define transcription and name the enzyme participating in it.
   b) Name the components forming an operon model.
   c) Describe Genetic code and explain its properties.
   d) Explain Darwin's Theory of Evolution.

   OR

   Enumerate evidences of evolution and discuss any one of them.

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