

Roll No

[2]

PY - 101(B)
B.Pharmacy I Semester

Examination, June 2015

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 questions 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) Write note on Collenchyma.
- b) Labelled diagram of T.S. of Sclereid.
- c) Short note on Plasmolysis.
- d) Draw a well labelled diagram of T.S. of monocot root.

OR

Describe the following in short :

- i) Long distance transport of water in plants
- ii) C₄ pathway in photosynthesis.

2. a) Functions of Endoplasmic reticulum.
- b) S and G phases of mitosis.
- c) Structure of mitochondria.
- d) Give an account of the factors affecting enzyme activity.

OR

Describe the process of meiotic cell division.

3. a) Define viroid and virus.
- b) Write the characteristics of Eubacteria.
- c) Describe alternation of generation.
- d) Classify chordata with its characteristics. Along with minimum two characters of each class with examples.

OR

Write the important features of pteridophytes, Gymnosperms and Algae.

4. a) Write note on Lamarckism.
- b) Explain Hardy-Weinberg principle.
- c) Mendel's law of independent assortment.
- d) Briefly describe the following :
 - i) Genetic code
 - ii) Various types of sex determination.

OR

Explain the following in short:

- i) Evidences for evolution
- ii) DNA Finger printing.

5. a) Write about modifications of leaf.
- b) Nucleic acids.
- c) Characteristics of plant growth regulators.
- d) Give an account of DNA replication.

OR

Explain the mechanism of action of enzyme.