

11

XI-A

Reg. No.

1119

## Second Mid-Term Test - 2018

Time : 1.30 hrs.

## BIOLOGY

Max. Marks : 50

## PART - I

## BIO - BOTANY

- I. Choose and write the correct answer 5 x 1 = 5
1. Which one of the following is correctly matches a sclerenchyma.
    - a) macro sclerenchyma - pulp of pyrus
    - b) Trichosclerenchyma - Aerial roots of vanda
    - c) Astrosclerenchyma - Trochodendron
    - d) Osteosclerenchyma - Crotalaria
  2. Select the correct statement regarding xylem tissue.
    - i) xylem fibres are absent in secondary xylem
    - ii) xylem vessels are imperforated cells.
    - iii) parenchyma arranged longitudinally along the long axis is called axial parenchyma.
    - iv) Tracheids are chief water conducting elements in Angiosperms and Gymnosperms.

a) iii and iv only    b) i and iii only    c) iii only    d) iii and ii only
  3. Munch hypothesis is based on
    - a) Translocation of food due to the TP gradient and imbibition force.
    - b) Translocation of food due to TP.
    - c) Translocation of food due to imbibition force.
    - d) None of the above
  4. The elements which is not remobilized?
    - a) phosphorous    b) potassium    c) calcium    d) nitrogen
  5. Assertion (A) : Conducting tissues, especially xylem show greatest reduction in submerged hydrophytes.  
Reason (R) : Hydrophytes live in water. So no need of tissues.
    - a) Both A and R are correct
    - b) A is correct but R is wrong
    - c) A is wrong but R is correct
    - d) Both A and R are wrong
- II. Answer any two of the following 2 x 2 = 4
6. List out the differences between Sclerenchyma and fibres.
  7. In which season the vessels of Angiosperms are larger in size. why?
  8. Define osmosis.
  9. What are parasites? Mention its types with suitable example.
- III. Answer any two of the following 2 x 3 = 6
- Q.No.11 is compulsory.
10. Briefly explain the mesophyll tissue of monocot leaf.
  11. Explain any three environmental factors affecting rate of

transpiration.

12. Give an account on Aeroponics.

**IV. Answer the following**

2 x 5 = 10

13. What are sieve tubes? Explain. (OR)

Write a note on the classification of minerals based on their functions.

14. Give an account on Girdling experiment. (OR)

What is diffusion? Mention its significances.

**PART - II BIO - ZOOLOGY**

**I. Choose and write the correct answer**

5 x 1 = 5

1. Identify the wrong match.

- a) Bowman's capsule - Glomerular filtration  
 b) DCT - Absorption of glucose  
 c) PCT - Absorption of K<sup>+</sup> and Na<sup>+</sup> ions  
 d) Henle's loop - Concentration of urin

2. Grafted kidney may be rejected in a patient due to

- a) innate immune response b) Humoral immune response  
 c) cell mediated immune response d) passive immune response

3. Synovial fluid is found in

- a) ventricles of the brain b) spinal cord c) immovable joint  
 d) freely movable joints

4. Which one of the following is an auto-immune disease

- a) Tetany b) Osteoporosis c) Myasthenia gravis d) Atrophy

5. The respiratory centre present in

- a) Medulla oblongata b) Hypothalamus c) Cerebellum  
 d) Thalamus

**II. Answer any two of the following**

2 x 2 = 4

6. Differentiate cortical from medullary nephrons.

7. Name the different types of movements.

8. Name the time bones in the middle ear.

9. Classify receptors based on type of stimuli.

**III. Answer any two of the following**

2 x 3 = 6

**Q.No.11 is compulsory**

10. Write short notes on Micturition

11. Draw and label the parts of L.S of human eye.

12. Explain the structure of a typical long bone.

**IV. Answer the following**

2 x 5 = 10

13. List out the benefits of regular exercises. (OR)

Name the three major regions of brain. Explain the parts of hind brain.

14. Describe sliding filament theory. (OR)

What is tubular secretion? Name the substances secreted through renal tubules.