$21-11-2023$
Time: 1.30 Hours

## Standard 11

## BIOLOGY BIO -BOTANY (Mark : 18) <br> Section - I

I. Choose the correct answer:

1) Read the following sentences and identify the correctly matched sentences
i) In Exarch condition, the protoxylem lies outside of metaxylem.
ii) In endarch condition, the protoxylem lies outside of metaxylem.
iii) In centarch condition, metaxylem lies I the middle of the protoxylem
iv) In mesarch condition, protoxylem lies in the middle of the metaxylem
a) i and ii only
b) ii and iii only
c) i and iii only
d) iii and iv only
2) Usually, the monocotyledons do not increase their girth, because
a) They possess actively divising cambium
b) They do not possess actively dividing cambium
c) Ceases activity of cambium
d) All are correct
3) Find out the $A, B, C$ and $D$ from the following

a) A - Non biological, B-Lightning, C-Symbiotic, D- Legume
b) A - Lightning, $B$ - Non biological, $C$ - Symbiotic - D - Legume
c) A - Legume, B - Non biological, C - Symbiotic, D - Lightning
d) A - Symbiotic, B - Non biological, C - Legume, D - Lightning

## Section - II

II. Answer any two questions from the following:
$2 \times 2=4$
4) What are the parameters which control water potential?
5) What are the minerals deficient and cause Whiptail disease and Little leaf disease?
6) What are Brachy scleirids?

## Section - III

III. Answer any two questions from the following:
7) Micronutrients, macro nutrients and Unclassified minerals - Compare
8) Differentiate - Heart wood and Sap wood
9) Differentiate - Passive transport and Active transport.

2
Section - IV
IV. Answer all the questions:
10) Explain the experiment to prove osmosis
(OR)
Differentiate between the cross section of Dicot and Monocot stem.

## BIO -ZOOLOGY (Mark : 18) <br> Section - I

## Answer the Questinos.

1) The Pigment present in the Muscle fibre to store oxygen is
a) Myoglobin
b) Troponin
c) Myosin
d) Actin
2) Which part of the humain Brain is concerned with the regulation of Body Temperature
a) Cerebellum
b) Cerebrum
c) Medulla oblongata
d) Hypothalamus
3) Which of the following hormone is not secreted under the Influence of pituitary gland
a) Thyroxine
b) Insulin
c) Oestrogen
d) Glucocorticoids

## Section - II

## Answer any two of the following Questinos.

4) Which is the only Jointless Bone in human Body?
5) Sam's optometrist tells him that his introcular pressure is high. What is the condition called and which fluid does it involve?
6) Write any two functions of oxytocin?

## Answer any two of the following. Q.No. 9 is compulsory.

7) Differentiate thick and thin filaments.
8) List out the function of Brain Lobes.
9) Pineal gland is an endocrine gland - Write its role.

## Section - IV

## Answer the following Questinos.

10)a) What are the different types of ribbons that form the rib cage
(OR)
b) Differentiate rod cells and cone cells.

