



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Biology**

**Course Code: BIO-112 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q. No. 2: Give brief answers of following questions. (10 x 2)

1. What is the Difference between CNS and PNS?
2. What do you know about biodiversity? Also define acid rain?
3. What is the difference between endangered species and threatened species?
4. Differentiate between dominance and epistasis.
5. Why Interphase is defined as a resting phase?
6. What is the function of RNA polymerase in transcription?
7. Define Photoperiodism and its effects.
8. Write down the names of flower parts with labeled diagram.
9. Write down main differences between auxins and Cytokinins.
10. What is neuron? Draw its structure.

Q. No. 3: Define Osmoregulation. Describe Osmoregulation in plants as well as in animals. (10)

Q. No. 4: Define specialized plant cells. Also explain significance of secondary growth. (5)

Q. No. 5: Write a note on Hypothalamus and Pituitary Gland. (5)

Q. No. 6: What is a Gene? Also describe how DNA encodes protein structure? (5)

Q. No. 7: Why meiosis is called reductional division and what is its significance? (5)



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Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Biology**  
**Course Code: BIO-112 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Pectin is an example of
 

A). Disaccharides	B). Polysaccharides
C). Monosaccharides	D). Oligosaccharides
2. DNA is the carrier of
 

A). Ribozymes	B). Genetic Markers
C). Nuclear Material	D). Genetic Message
3. The protection of an internal environment from the harms of fluctuations is the definition of which of the followings?
 

A). Osmoregulation	B). Excretion
C). Thermoregulation	D). Homeostasis
4. Endoplasmic reticulum (ER) is a complex, \_\_\_\_\_ membrane system.
 

A). Two dimensional	B). Four Dimensional
C). Three Dimensional	D). Ten Dimensions
5. Plants growing in waterlogged soils and aquatic environments contain \_\_\_\_\_ tissues.
 

A). Storage parenchyma	B). Pseudoparenchyma
C). Aerenchyma	D). Chromoplast Parenchyma
6. A nerve is a -----
 

A). Bundles of axons and dendrites of axons	B). collection of neurons
C). Concentration of dendrites and axons	D). None of these
7. Thyroid glands produce -----
 

A). Tri-iodothyronine	B). T3, T4 and calcitonin
C). Calcitonin	D). Tetraiodothyronine
8. Mitosis is divided into -----
 

A). Interphase	B). Karyokinesis
C). Cytokinesis	D). B and C
9. Which of these is incorrectly matched?
 

A). Protoplast- plant cell engineering	B). DNA polymerase- PCR
C). DNA ligase- mapping human chromosomes	D). RFLPS-DNA finger printing
10. Which of the biomass has been increased in area by human activities?
 

A). Savana	B). Grassland
C). Desert	D). Coniferous