

QUARTERLY EXAMINATION- 2023  
BIOLOGY

CLASS :11

TIME : 3.00

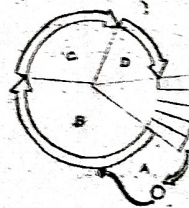


MARKS : 70

**PART - I (BIO-BOTANY) SECTION - I**

- I Note : (i) Answer all the questions. (ii) Choose the most suitable answer from the given four alternatives and write the option code and the corresponding answer.**
- Phylogenetic classification is the most favoured classification because it refers  $8 \times 1 = 8$ 
    - Comparative Anatomy
    - Number of flowers produced
    - Comparative cytology
    - Evolutionary relationship
  - Assertion (A) : Bryophyllum and Begonia are examples for foliar buds.  
Reason (R) : Leaves of these plants possess adventitious buds.
    - Both assertion and reason are true and the reason is correct explanation of assertion
    - Both Assertion and Reason are true but Reason is not a correct explanation of Assertion
    - Assertion is true but Reason is false
    - Assertion is false but Reason is true
  - Proteins perform many physiological functions. For example some functions as enzymes. One of the following represents an additional function that some proteins discharge
    - Antibiotics
    - Pigment conferring colour to skin
    - Pigments making colours of flowers
    - Hormones
  - Match the different kind of plastids with its function
 

a) Amyloplast	i) store oil	a) A - ii B - i C - iii D - iv
b) Elaioplast	ii) store starch	b) A - i B - ii C - iii D - iv
c) Aleuroplast	iii) store protein	c) A - i B - ii C - iv D - iii
d) Chloroplast	iv) photosynthesis	d) A - iv B - iii C - ii D - i
  - In an inflorescence where flowers are borne laterally in an acropetal succession the position of the youngest floral bud shall be
    - Proximal
    - Distal
    - Intercalary
    - Any where
  - Who proposed the five kingdom classification?
    - Charles Darwin
    - Carolus Linnaeus
    - R.H. Whittaker
    - Ernst Haeckel
  - Which of the following represents gametophytic generation in pteridophytes?
    - Prothallus
    - Thallus
    - Cone
    - Rhizophore
  - Identify A, B, C and D in the given diagram depicting cell cycle and select the correct option.
    - A - G<sub>2</sub> B - G<sub>1</sub> C - S D - G<sub>0</sub>
    - A - G<sub>0</sub> B - G<sub>1</sub> C - S D - G<sub>2</sub>
    - A - S B - G<sub>1</sub> C - G<sub>2</sub> D - G<sub>0</sub>
    - A - S B - G<sub>0</sub> C - G<sub>1</sub> D - G<sub>2</sub>



**SECTION - II**

- II Note : Answer any four questions.** 4 X 2 = 8
- List out any two Primary functions of stem.
  - What is Eustele? Give an example.
  - Draw the structure of polytene chromosome and label its parts.
  - Define DNA Barcoding.
  - Write any two significance of seeds.
  - Differentiate between Holoenzyme and Apoenzyme.

**SECTION - III**

- III Note : Answer any three questions. Question No 19 is compulsory.** 3 X 3 = 9
- Write any three uses of herbarium.
  - Differentiate between TEM and SEM .
  - Write the properties of Water.
  - Write the distinguishing features of Monera.
  - Draw the floral diagram and write the floral formula of Hibiscus rosa - sinensis.

**SECTION - IV**

- IV Answer all the questions.** 2 X 5 = 10
- a) Give a general account on lichens. (OR) b) Describe the floral characters of Datura metal.
  - a) Explain the structure of chloroplast with diagram. (OR)  
b) Differentiate between mitosis and meiosis.



**BIO - ZOOLOGY (Marks : 35)****8 X 1 = 8****I. Answer all Questions :-**

1. The cell wall of bacteria is made up of  
A) Carbohydrate                      B) Lipoprotein  
C) Glycogen                              D) Peptidoglycan
2. The class which has three chambered heart in phylum chordate?  
A) Osteichthyes                      B) Amphibia                      C) Reptilia                      D) Aves
3. The ciliated epithelium lines the  
A) Skin                      B) Digestive tract                      C) Gall bladder                      D) Trachea
4. Frog is called \_\_\_\_\_ organism as it excrets nitrogen in the form of urea.  
A) Ammonotelic                      B) Ureotelic                      C) Uricotelic                      D) Nitrogenotelic
5. Villi are found in \_\_\_\_\_ part of the human digestive system.  
A) Stomach                      (B) Small intestine  
(C) Colon                      (D) Rectum
6. \_\_\_\_\_ is the chemical that causes addiction and stimulate smoking  
(A) nicotine                      (B) nickel                      (C) cadmium                      (d) benzidene
7. The average life span of RBC's in a healthy individual is  
(A) 100 days                      (B) 102 Days                      (C) 80 Days                      (D) 120 days
8. Orinithine cycle takes place in gland.  
(A) kidney                      (B) pancreas                      (C) galibladder                      (d) liver

**II. Answer any four of the following questions :-****4 x 2 = 8**

9. Some epithelia are pseudo stratified, what does this mean?
10. What is clitellum?
11. What is heterodont? Mention the human dental formula.
12. What are effects of smoking?
13. How does the heart produces the sound during the process of heart beat?
14. What is lithotripsy?

**III Answer any three of the following questions.****3 x 3 = 9****(question number 19 is compulsory)**

15. Differentiate prokaryotes and eukaryotes?
16. What is ambulacral system?
17. Mention the place and reason of ciliated epithelium present in human organ.
18. List out the economic importance of frog?
19. Tabulate the antigens and antibodies based on the blood group.

**IV. Answer all the questions :-****2 x 5 = 10**

20. a) Differentiate male and female cockroaches.                      **(OR)**  
b) Explain the exchange of gases in alveoli with necessary diagram.
21. a) What is cardiac cycle? List out phases in it.                      **(OR)**  
Explain any four disorders related to the excretory system.