

# Biology

Time : 2½ Hours ]

PARTS - A & B

[ Max. Marks : 50

Instructions :

1. Answer the questions under **Part - A** on a separate answer book.
2. Write the answers to the questions under **Part - B** on the question paper itself and attach it to the answer book of **Part - A**.

Time : 2 Hours ]

PART - A

[ Marks : 35

## SECTION - I (Marks : 4 × 1 = 4)

- Note :
- 1) Answer **ANY FOUR** questions from the following.
  - 2) Each question carries **ONE** mark.

1. What is Blood Transfusion ?
2. When does Callus form ?
3. What are the requirements for Photosynthesis ?
4. What are Nissil granules ? Where do you find Nissil granules ?
5. Expand NIN.
6. What is Glossitis ?

## SECTION - II (Marks : 5 × 2 = 10)

- Note :
- 1) Answer **ANY FIVE** questions, choosing atleast **TWO** from each **GROUP 'A & B'**.
  - 2) Each question carries **TWO** marks.

### Group - A

7. Draw the structure of Chloroplast and label the parts.
8. Who are Universal Donors ? Who are Universal Recipients ?
9. Write a short note on Ovum of Frog.
10. Describe the duties of Village Health Guide.

### Group - B

11. What is Apical Dominance ? How does it influence plants ?
12. What is Fluorosis ? How does it affect the body ?
13. What is incubation period (Write about HIV. - 2007 March Question)
14. Mention the sources and the chemical name of Vitamin A.

## SECTION - III (Marks : 4 × 4 = 16)

- Note :
- 1) Answer **ANY FOUR** questions, choosing atleast **TWO** from each **GROUP**.
  - 2) Each question carries **FOUR** marks.

### Group - A

15. How can you show that heat is liberated during respiration ?
16. Describe the composition of human blood.
17. In what way, calcium helps the body ? Name the food materials which are rich sources of Calcium.
18. Write a brief account on Hepatitis.

### Group - B

19. Write an account on the structure of a Datura flower. Draw and label the diagram.
20. Write the definition of Asexual and Sexual reproductions. What are the major differences between asexual and sexual reproductions ?
21. Write a brief account on Adrenal gland.
22. Why is the spread of HIV a burning issue today ? (What first aid do you render for fractures ? - 2007 March Question)

## SECTION - IV (Marks : 1 × 5 = 5)

- Note :
- 1) Answer **ANY ONE** question.
  - 2) The question carries **FIVE** marks.

23. Draw a neat and labelled diagram of male reproductive system of Frog.
24. Draw a neat and labelled diagram of Leaf, which is the most suitable structure for Photosynthesis.

## Note :

- 1) Answer all the questions.
- 2) Each question carries  $\frac{1}{2}$  mark.
- 3) Candidates must use the Capital Letters while answering the multiple choice questions.
- 4) Marks will not be awarded in case of any over-writing or re-writing or erased answers.

I. Answer the following. Each question carries 1/2 mark.  $(10 \times \frac{1}{2} = 5)$

1. The process in which energy stored in Carbohydrates released is known as ( )  
A) Photosynthesis B) Respiration  
C) Reproduction D) Excretion
2. The substance that prevents clotting of blood in blood vessels is ( )  
A) Haemoglobin B) Heparin  
C) Thyroxin D) Pepsin
3. Dicotyledonous weeds are destroyed by a chemical called ( )  
A) Indole acetic acid  
B) 2-4 dichloro-phenoxy acetic acid  
C) Abscissic acid  
D) Naphthalene acetic acid
4. In diseases like Polio, the cells which get destroyed by virus are ( )  
A) Monocytes B) Erythrocytes  
C) Motor Neurons D) Sensory Neurons
5. The most essential floral organs required for Sexual reproduction ( )  
A) Calyx and Corolla  
B) Corolla and Androecium  
C) Gynoecium and Androecium  
D) Gynoecium and Thalamus
6. Deficiency of Pantothenic acid results in burning of ( )  
A) Stomach B) Hands  
C) Feet D) Heart
7. 'Grave-yard of Red Blood Cells' is ( )  
A) Spleen B) Liver  
C) Lymph D) Kidney
8. The cartilagenous rings that support the trachea of man are in the shape of ( )  
A) J B) D  
C) O D) C
9. Foetus is connected to the wall of Uterus of the mother by ( )  
A) Placenta B) Umbilical cord  
C) Fallopian tube D) Epididymes
10. The micro-nucleus of Paramecium controls ( )  
A) Respiration B) Digestion  
C) Excretion D) Reproduction

II. Fill in the blanks with correct answer. Each question carries 1/2 mark.  $10 \times \frac{1}{2} = 5$

11. Sinus venosus is formed by the union of
12. The famous Russian Scientist, who conducted experiments on conditioned reflexes was ...
13. Mumps is caused by ..... virus
14. Cane sugar is called.....
15. The production of RBC is called .....
16. The fluid that flows between the outer and middle membranes and covers the brain is .....
17. Chrysanthemum propagates often by means of .....
18. Early ripening of fruits is promoted by .....
19. There is no medicine for HIV. .... is the only cure for HIV.
20. The vitamin ..... prevents sterility in males

III. Match the following :  $(5 \times \frac{1}{2} = 2\frac{1}{2})$

Group - A	Group - B
21. Haberlandt ( )	(A) Protein - calorie deficiency
22. Kwashiorkor ( )	(B) Spores
23. Marasmus ( )	(C) Protein deficiency
24. Yeast ( )	(D) Tissue culture
25. Fungi ( )	(E) Vitamin - D deficiency
	(F) Budding
	(G) First Aid

$(5 \times \frac{1}{2} = 2\frac{1}{2})$

Group - A	Group - B
26. Xerophthalmia ( )	(A) Cow milk
27. Vitamin - K ( )	(B) Testis
28. Vitamin - C ( )	(C) Clitellum
29. Earthworm ( )	(D) Carbon fixation
30. Abscissic acid ( )	(E) Scurvy
	(F) Eye
	(G) Fall of flowers