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SET C



**INDIAN SCHOOL MUSCAT  
FIRST TERM EXAMINATION  
BIOLOGY(THEORY)**

CLASS: XI  
30.09.2018

Sub. Code: 044

Time Allotted: 3 Hrs  
Max. Marks: 70

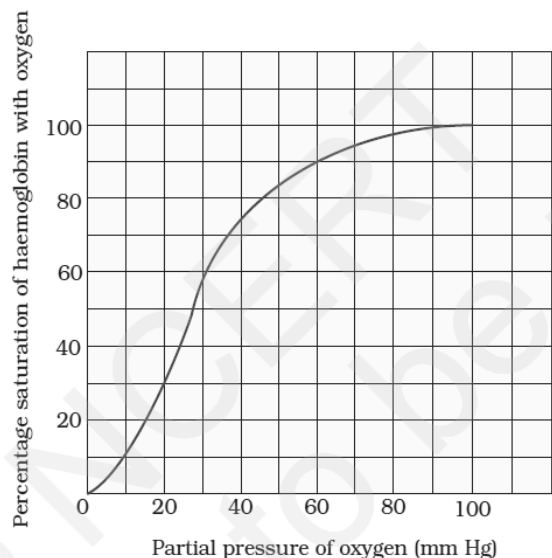
**General Instructions:**

- (i) There are a total of 27 questions and five sections in the question paper. All questions are compulsory.
- (ii) Section A contains questions number 1 to 5, Very Short Answer type questions of 1 mark each.
- (iii) Section B contains questions number 6 to 12, Short Answer type I questions of 2 marks each.
- (iv) Section C contains questions number 13 to 24, Short Answer type II questions of 3 marks each.
- (v) Section D contains questions number 25 to 27, Long Answer type questions of 5 marks each.
- (vi) There is no overall choice in the question paper, however, an internal choice is provided in one question of 2 marks, one question of 3 marks and all the three questions of 5 marks. In these questions, an examinee is to attempt any one of the two given alternatives.

- |           |  |   |
|-----------|--|---|
| 1         | Which part of the long intestine harbours symbiotic bacteria in human?                       | 1 |
| 2         | Name the proteins that form myofibrils in muscle fibres.                                     | 1 |
| 3         | Which type of joint allows limited movements of the bone in human body?                      | 1 |
| 4         | Why Hypothalamus is said to be endocrine?  | 1 |
| 5         | Plants like <i>Rhizophora</i> , can grow well in swampy areas. How?                          | 1 |
| 6         | What is the cause of emphysema? How is it characterized?                                     | 2 |
| 7         | How are blood platelets formed? What will happen if their count is less in human blood?      | 2 |
| 8         | Give one example of a) ammonotelic animal b) ureotelic animal                                | 2 |
| 9         | State the significance of ciliary movements in our body.                                     | 2 |
| <b>OR</b> |  |   |
|           | Name the pigment present in muscle and how do you classify the muscles based on this pigment |   |
| 10        | Explain the types of axon in neural system.  | 2 |
| 11        | Give reason, the immune responses of old persons become weak.                                | 2 |
| 12        | Write down two distinguishing feature of a stem.   | 2 |

13 Write down the function of a) amylases b) lipases c) nucleases 3

14 Observe the graph and answer the following questions 3



Name the curve shown in the graph. Where this kind of graph is important? How many molecules of oxygen is carried by each molecule of hemoglobin?

15 Briefly explain how are electrical impulses generated and transmitted in human heart. 3

16 Specify the three steps and associated parts of excretory system during urine formation in human. 3

17 Describe the different groups of ribs in rib cage. 3

18 Where is Organ of Corti located? Describe its structure. 3

**OR**

Name the three layers of cells in the innermost layer of the eye and describe them.

19 How do you group the hormones based on their chemical nature? Mention the types of hormone receptor. 3

20 Give example(s) of: 3

(a) Hyperglycemic hormone and hypoglycemic hormone

(b) Hypercalcemic hormone

(c) Gonadotrophic hormones

(d) Progestational hormone

(e) Blood pressure lowering hormone

(f) Androgens and estrogens

21 What is phyllotaxy? What type of phyllotaxy seen in Plants Such as Guava, sun flower and *Alstonia*? How do you distinguish between a leaf and a leaflet? 3

- 22 Draw a section of a monocotyledonous seed and label any four parts in it. 3
- 23 Which type of fleshy fruit mango is? Define it and account on its pericarp. 3
- 24 What is inflorescence? Mention its types. Write one difference between them. 3
- 25 Mucosa of Alimentary canal is a vital layer for digestion. Comment on it. 5

**OR**

Write one function of each of the following:

- a) Albumin in plasma
  - b) Basophils
  - c) Systemic circulation
  - d) A-V valves
  - e) Pulmonary artery
- 26 What is Uremia? Why is this condition harmful to us? Describe how these uremic patients are treated. 5

**OR**

Explain the generation and conduction of nerve impulse from dendrite of one nerve cell to dendrite of another nerve cell.

- 27 How are modifications of stems useful to these following plants? 5
- i) Colacasia ii) Water melon iii) Bougainvillea iv) Opuntia v) Banana

**OR**

Define the following terms;

- a) Staminode
- b) Apocarpous ovary
- c) Placentation
- d) Aestivation
- e) Venation

**End of the Question Paper**