

HALF YEARLY EXAMINATION, 2018-19

BIOLOGY

Time : 3 hrs.

Class - XI

MM: 70

Date – 26.09.2018 (Wednesday)

Name of the student _____ Section _____

General Instructions :

- All questions are compulsory.
- The question paper comprises 4 sections A, B, C and D.
- There is no overall choice however, internal choice has been provided in one question of two marks, one question of 3 marks and all three questions of 5 marks category. Only one option in such questions is to be attempted.
- Questions 1 to 5 in section A are very short questions of one mark each.
- Questions 6 to 12 in section B are short questions of 2 marks each.
- Questions 13 to 24 in section C are of 3 marks.
- Questions 25 to 27 in Section D are of 5 marks each.

SECTION - A

- Q.1 What is the nature of cell wall in diatoms?
- Q.2 State the volume of air remaining in the lungs after normal breathing?
- Q.3 Multicellular organisms have division of labour. Explain.
- Q.4 Draw the structure of the amino acid 'Alanine'.
- Q.5 Why is mitosis called equational division?

SECTION - B

- Q.6 Define the following terms:
a) phylum b) class c) family d) order
- Q.7 Explain with examples macronutrients and micronutrients.
- Q.8 a) Why are villi present in the intestine and not in the stomach?
b) What are the basic layers of the wall of the alimentary canal?
- Q.9 What is meant by double circulation ? What is its significance?
- Q.10 Distinguish between IRV and ERV.

OR

Why do we consider blood as a connective tissue?

- Q.11 What happens to the respiratory process in a man going up a hill?
- Q.12 a) Differentiate between lymph and blood.
b) What is a mesosome in a prokaryotic cell? Mention the functions that it performs.

SECTION - C

- Q.13** What are the characteristic features of Euglena?
- Q.14** List any three points of differences between mitosis and meiosis?
- Q.15** Name two cell organelles that are double membrane bound. What are the characteristics of these two organelles? State the functions and draw labelled diagrams of both.
- Q.16** Describe the important properties of enzymes.
- Q.17** Write any three applications of proteins.
- Q.18** Write any three functions of Liver.
- Q.19** Define Oxygen dissociation curve. Can you suggest any reason for its sigmoidal pattern?
- Q.20** Define cardiac cycle and cardiac output.
- Q.21** Describe the events taking place during Interphase.
- Q.22** What are the functions of Hydrochloric acid in the stomach?
- Q.23** What is Binomial Nomenclature?
- Q.24** How is the five kingdom classification advantageous over the two kingdom classification?

OR

How is a key helpful in the identification and classification of an organism?

SECTION D

- Q.25** a) Describe briefly the four major groups of Protozoa.
b) Give examples of two plants that are partially heterotrophic.

OR

- a) Explain the process of inspiration under normal conditions.
b) How is respiration regulated?

- Q.26** a) What are gums made of? Is fevicol different?
b) Illustrate a glycosidic, peptide and a phospho-diester bond.

OR

Describe the structure of a human heart with the help of a well-labelled diagram.

- Q.27** Taking an example of a bacterial cell, explain the structure of a prokaryotic cell.

OR

- a) Describe the process of digestion of protein in stomach.
b) Give the dental formula of human beings.

