

MATA GUJRI PUBLIC SCHOOL
HALF YEARLY EXAMINATION (2017-18)
Biology

Class – XI-A
Name _____

Time - 3 hrs
MM - 70
25.9.17

General Instructions:

- (i) All questions are compulsory.
- (ii) Questions numbers 1 to 4 are very short answer questions carrying 1 mark each.
- (iii) Questions numbers 5 to 7 are short answer questions carrying 2 marks each.
- (iv) Questions numbers 8 to 16 are also short answer questions carrying 3 marks each.
- (v) Questions number 17 is value based question carrying 4 marks.
- (vi) Questions numbers 18 to 20 are long answer questions carrying 5 marks each.
- (vii) The Question paper includes a section on open case studies based questions on two case studies of 7 marks each from the syllabus, a total of 14 marks.

Section - A

1. Mention the level of organization in (i) Ctenophora and (ii) Porifera.
2. Why are vascular bundles of a dicot stem called 'open'?
3. Mention two specific features of animals of Urochordata.
4. Write two characteristic features of Cyclostomata.

Section - B

5. Write the characteristic features of Phaeophyceae, with reference to:
- (a) Pigment (b) Cell wall (c) Reserve food (d) Flagellation

OR

- (a) How are viroids different from viruses?
(b) Name one virus each that has
- (i) single-stranded RNA (ii) double-stranded DNA.
6. How is a pinnately compound leaf different from a palmately compound leaf?
7. What is intercalary meristem? How does it help in the growth of plants?

Section - C

8. Describe the digestive system of a cockroach.
9. List two similarities between deuteromycetes and ascomycetes.
10. (a) Write the functions of: Nephridia, Adipose tissue.
(b) Define Parthenocarpic fruit.
11. Draw the floral diagram of the 'lily' family and write its floral formula.

OR

Draw a portion of the structure of a dicot stem as seen in a transverse section, Label six parts.

12. (a) Name the conducting elements of xylem in plants and differentiate between them.
 (b) Show diagrammatically marginal placentation, with an example.
13. Draw and label the structure of monocotyledonous and dicotyledonous seed.
14. Represent schematically the diplontic life cycle. Name the alga and another group of plant that shows this.
15. Write six distinguishing features of class Arthropoda.
16. Differentiate between:
- (a) Ascospores and conidia.
 (b) Dinoflagellates and chrysophytes.

Section - D

17. People working in certain industries especially those involved in grinding or breaking of stones and manufacture of cement, etc suffer from certain respiratory disorders, though they are provided with protective masks and nasal filters. The companies arrange for periodic medical check-up too.
- (a) What are such diseases called?
 (b) Name two such diseases.
 (c) What are the common symptoms?
 (d) What value is shown by the authorities of the industries in providing medical check-up and protective masks?

Section - E

18. Describe in detail the digestion of proteins as they pass through the human alimentary canal.
 OR
 (a) Explain why do we call heart myogenic and SAN as pacemaker of the heart?
 (b) Draw a standard ECG and explain its segments.
19. Enumerate the major steps in human respiration.
 OR
 How is urine formed in human kidney?
20. (a) Explain the events occurring in a cardiac cycle and the blood flow through the heart during the cycle.
 (b) Draw and label internal structure of human heart.
 OR
 (a) 'Bile does not have any enzyme; yet it is important for digestion'. Justify the statement.
 Draw and label the duct system of liver, gall bladder and pancreas.