

HP BOARD CLASS 12 QUESTION PAPERS 2020

BIOLOGY

Time Allowed : 3 Hrs.]

[Maximum Marks : 60

Special Instructions: [HTTP://WWW.HPBOARDONLINE.COM](http://www.hpboardonline.com)

- (1) All the questions are compulsory. Marks allotted to each are indicated against it.
- (ii) Internal choice is given in some questions.
- (iii) While answering your questions, you must indicate on your answer book the same question No. as appears in your Question paper.
- (iv) Do not leave blank page / pages in your answer book.
- (v) Answers should be brief and to the point.
- (vi) Star marked (*) questions are based on PISA format.

Section - A

- 1. Organism having characteristics of both plants and animals:
(a) Bacteria (b) Paramecium (c) Mycoplasma (d) Euglena
- 2. Root nodules of legumes contain Nitrogen fixing bacteria
(a) Rhizobium (b) Azotobacter (c) Frankia (d) Thiobacillus
- 3. Which organelle is called 'Suicidal Bags of cell'?
(a) Mitochondria (b) Golgi complex (c) Lysosome (d) ER
- 4. Lichen is association of two organisms :
(a) Bacteria & Fungi (b) Algae (c) Bryophyte & pteridophyte (d) Virus & Algae
- 5. What is the largest gland in human body?
(a) Salivary Gland (b) Liver (c) Pancreas (d) Adrenal Gland

Section - B

- 6. Draw a well labelled diagram of excretory system of human
- 7. Differentiate between Blood and Lymph.

OR

Differentiate between Systole and Diastole.

- 8. Examine the following diagram and answer the questions given below:
(a) Identify the structure.
(b) What are a and b spots ?
- 9. Give atleast three differences between phylloclade and phyllode.
- 10. List the functions of Golgi Body
- 11. Draw a well labelled diagram of the Animal cell
- 12. What are physiological effects of cytokinin.

13. Write four features of phylum Mollusca.
14. Differentiate between transpiration and Guttation
15. Describe the structure of mitochondria.

Section -C

16. Enumerate the characteristics of Pteridophyte.
17. Match the following:

a) Insulin	i) Glucagon
b) Corpus luteum	ii) Diabetes
c) Alfa cells	iii) Progesterone
d) Placenta	iv) HCG
18. Explain the mechanism of secondary growth in Dicot stem.
19. Give only schematic representation of calvin cycle.
20. Explain the structure and function of Nephron.
28. Explain the fluid mosaic model of cell membrane along with diagram.
22. Explain mitotic cell division in a cell.
23. (a) Explain briefly the mechanism of water absorption in plants.
(b) What are conjoint vascular bundles.
24. Explain the exchange of gases in human blood.
25. What is Transpiration ? Explain the mechanism of stomatal opening and closing
26. (a) Explain briefly double circulation in human heart.
(b) After fertilisation ovary changes into in plants.

Section - D

27. (a) What do you mean by law of limiting factor controlling photosynthesis
(b) What is epigynous condition?
28. (a) Give brief account of digestion of carbohydrate or protein in human alimentary canal.
b) Name two bile pigments.
(c) Crossing over takes place in which stage of Meiosis.
