

A-437 (E/H)

BIOLOGY 2017

Time : 3 Hours]

Class : 12th

[M. M. : 75

Instructions:

- (i) All questions are compulsory.**
- (ii) Questions paper has two sections 'A' and 'B'**
- (iii) In section 'A' there are objective type questions from question no. 1 to 4 Each carries 5 marks.**
- (iv) In section 'B' internal options are given from question 5 to 20.**

- (v) Question no. 5 to 8 are very short answer type. Which has word limit of 30 words approximately. Each question carries 2 mark.
- (vi) Question no. 9 to 12 are short answer type word limit is approximately 75 words. Each question carries 3 marks.
- (vii) Question no. 13 to 17 are long answer type word limit is approximately 120 words. Each question carries 4 marks.
- (viii) Question no. 18 to 20 are long answer type word limit is approximately 150 words. Each question carries 5 marks.
- (ix) Draw neat and labelled diagram wherever necessary.

SECTION - A (Objective type Questions)

Q. 1. Fill in the blanks- 5

- (a) Liver secretes.....juice.
- (b) Water absorption by using energy is called.....
- (c) Outer membrane of pollen grain is called.....
- (d) Lichen is an example of.....
- (e) Theory of population growth was given by.....

Q. 2. Choose the correct option. 5

- (a) What will happen when a cell is kept in a hypertonic solution-

(1) Plasmolysis	(2) Osmosis
(3) Excretion	(4) Evaporation
- (b) Blood Bank of human is-

(1) Spleen	(2) Lungs
(3) Heart	(4) Kidney
- (c) Hormone Stimulating vernalization is-

(1) Vernalin	(2) Florigen
(3) Abscisic acid	(4) Colchicin
- (d) Pyramid of energy in a forest ecosystem is always -
 - (1) Vertical
 - (2) Conical
 - (3) First vertical then conical
 - (4) Elliptical

(e) AIDS test is known as-

- (1) Australian antigen (2) Alisa
(3) Thyro test (4) pH test

Q.3. Write the answer in one word/sentence.

- (1) In which part of chloroplast, photosynthetic pigments are found?
(2) Where do you find Glenoid cavity?
(3) Name a total root parasitic plant.
(4) Write botanical name of coconut.
(5) What is called scientific study of human population.

Q.4. Match the columns -

- | | |
|----------------|------------------------|
| (a) Hg, As | (1) Actinomycetes |
| (b) Vitamin C | (2) Alexander Fleming |
| (c) Insulin | (3) Poisonous Elements |
| (d) Decomposer | (4) Scurvy |
| (e) Antibiotic | (5) Diabetes |

SECTION - B (Very Short answer type questions)

Q.5. Write differences between Trachiolo and bronchiole. 2

(OR) Name any two diseases related to bone.

Q.6. What is apomixis? 2

(OR) What is sexual dimorphism?

Q.7. Write any two advantages and two disadvantages of self pollination. 2

(OR) What is a test tube baby.

Q.8. What is food chain. 2

(OR) Write names of any four green house gases.

Q.9. Define the following- 3

(1) Osmotic pressue (2) Suction pressure (3) Root pressure

(OR) Write one symptom each of the deficiency of the following elements in plants.

(1) Nitrogen (2) Phosphorus (3) Magnesium

Q. 10. Describe in brief the structure of chloroplast. 3

(OR) Write any three difference between aerobic and anaerobic respiration.

Q. 11. Define the following- 3

(1) Population (2) Mortality (3) Natality

(OR) What do you understand by Yogasana? Write its two advantages.

Q. 12. What are Biopesticides? Write its advantages & harmful effects one each.

(OR) What are interferons? Write their significance.

(Long answer type questions)

Q. 13. Write any four difference between arteries and veins. 4

(OR) Write any four difference between Tendon and ligaments.

Q. 14. Explain structure of human tooth with the help of diagram. 4

(OR) Explain structure of a Neuron, with diagram.

Q. 15. Draw a labelled diagram of T.S. of plant ovule. 4

(OR) What is photoperiodism? Write its importance.

Q. 16. What is mimicry? Write its types. 4

(OR) What is Biodiversity? Write any three efforts of conservation of Biodiversity.

Q. 17. Explain any four common problems of Adolescence. 4

(OR) What is Vermicompost? Write its significance.

(Long answer type questions)

Q. 18. Where does Calvin cycle take place? Explain Calvin cycle by ray diagram only.

(OR) Explain any five factors influencing water absorption in plants.

Q. 19. Explain reflex action with diagram. 5

(OR) Explain the process of digestion in human stomach.

Q.20. What do you understand by ecological adaptations? Write any four adaptations in plants occurring due to lack of water. 5

(OR) Describe major causes, effects and control measures of water pollution.