# AMRITA VIDYALAYAM

# FIRST TERMINAL EXAMINATION 2018 - '19

Class: XI

Marks: 70

Time: 3 hrs

### **BIOLOGY (044)**

#### **GENERAL INSTRUCTIONS:**

- 1. All questions are compulsory.
- 2. This question paper consists of four sections A, B, C and D.
- 3. Section A is very short answer questions carrying 1 mark each.
- 4. Section B is short answer questions carrying 2 marks each.
- 5. Section C is also short answer questions carrying 3 marks each.
- 6. Section D is long answer questions carrying 5 marks each.
- 7. There is no overall choice. However, an internal choice has been provided in one question of 2 marks, one question of 3 marks and all questions of 5 marks. A student has to attempt only one of the alternatives in such questions.
- 8. Wherever necessary, the diagrams drawn should be neat and properly labelled.

#### **SECTION-A**

- 1. Name the thin walled chloroplast containing cell present in the ground tissue of leaves.
- 2. The development of Pamericana is said to be Paurometabolous. Why?
- 3. Expand PPLO.
- 4. Name the final stage of Meiotic Prophase I.
- 5. Name two denitrifying bacteria.

#### **SECTION-B**

- 6. Differentiate between spring wood and autumn wood.
- 7. Write notes on Compound Eye of a cockroach.
- 8. Explain 'Cell Theory'. Who formulated this?
- 9. What is Hydroponics? Name the German Botanist who demonstrated this for the first time.
- 10. Briefly explain the steps of conversion of atmospheric Nitrogen to Ammonia by Nitrogenase enzyme complex.
- 11. Differentiate between IRV and ERV.
- 12. Write down the steps involved in Respiration.

OR

Write any two disorders of Respiratory System.

## **SECTION - C**

- 13. How sub-phylum Vertebrata is further divided?
- 14. Give a neat labeled diagram showing the regions of a root tip.
- 15. Draw a dicotyledonous leaf.

OR

Differentiate between Dicot stem and Monocot stem.

- 16. Explain the process of alternation of generation exhibited by Cnidarians. Give one example.
- 17. Explain epidermal tissue system. Draw stomata and label the parts.
- 18. 'All vertebrates are chordates. But all chordates are not vertebrates'. Justify the statements.
- 19. Write notes on any two Endomembrane system of a cell.
- 20. Draw the section of cilia/flagella showing different parts.

- 21. Draw a cell cycle indicating the formation of two cells from one cell.
- 22. Explain the mechanism of breathing in humans.
- 23. Write notes on human digestive glands.
- 24. Diagramatically represent the development of root nodules in soyabean.

### **SECTION-D**

25. Draw the floral diagram of Liliaceae and writes its floral formula and also its economic importance.

OR

Describe the parts of a flower.

- 26. Suggest a suitable term for each of the following.
  - a) Name the complex formed by a pair of synapsed homologous chromosomes.
  - b) Name the enzyme involved in crossing over.
  - c) During which stage chromosomes becomes gradually visible under the light microscope?
  - d) During which stage bivalent chromosome align on the equatorial plate?
  - e) During which stage recombination between homologous chromosomes is completed?

OR

Differentiate between Mitosis and Meiosis.

27. Explain the human Alimentary Canal. Comment on any two disorders of digestive system.

OR

Explain the process of digestion of food in humans.