

## SEMESTER-ONE

### BIOLOGY

Class X

### Sample Paper—2

**Max. Marks: 50**

**Time Allowed: 90 minutes**

#### **General Instructions:**

- (i) This question paper consists of 45 questions in 5 sections.
- (ii) Section A consists of 10 Objective type questions carrying 1 mark each.
- (iii) Section B consists of 10 Fill in the blanks type questions carrying 1 mark each.
- (iv) Section C consists of 10 True or False statement type questions carrying 1 mark each.
- (v) Section D consists of 10 Very short answer type questions carrying 1 mark each.
- (vi) Section E consists of 5 Short answer type questions carrying 2 marks each.

#### **Section A**

*Select and write one most appropriate option out of the four options given for each of the questions 1 – 10.*

1. All living things are able to produce their own kind. This is called
  - (a) reproduction
  - (b) excretion
  - (c) respiration
  - (d) locomotion
2. The term 'cell' was coined by
  - (a) Robert Brown
  - (b) Robert Hooke
  - (c) J.E. Purkinje
  - (d) A.V. Leeuwenhoek

3. The power houses of the cell are
  - (a) Ribosome
  - (b) Chloroplast
  - (c) Mitochondria
  - (d) Golgi apparatus
4. The cell theory was proposed by
  - (a) Schleiden and Schwann
  - (b) Robert Hooke
  - (c) A. Van Leeuwenhoek
  - (d) Louis Pasteur
5. Which is the highest taxonomic category?
  - (a) Class
  - (b) Genus
  - (c) Species
  - (d) Kingdoms
6. What is the basic unit of classification?
  - (a) Class
  - (b) Genus
  - (c) Species
  - (d) Kingdoms
7. AIDS was first detected in—
  - (a) China
  - (b) Africa
  - (c) USA
  - (d) England
8. This causes destruction of liver cells, leading to cirrhosis:
  - (a) Alcohol
  - (b) Tobacco
  - (c) Marijuana
  - (d) None of these
9. The excessive use of marijuana may cause higher risk of developing
  - (a) mental illnesses like psychosis or schizophrenia
  - (b) liver damage
  - (c) lung cancer
  - (d) high fever
10. Lung cancer is the most common form of cancer caused by
  - (a) washing
  - (b) cooking
  - (c) smoking
  - (d) watering

### Section B

*Fill in the blanks with a suitable word for each of the questions 11 – 20.*

11. The cell theory was given by \_\_\_\_\_ and \_\_\_\_\_ .
12. Chromosomes are made up of \_\_\_\_\_ and \_\_\_\_\_ .
13. Cell wall is found only in \_\_\_\_\_.
14. .... are forms of complex tissue.
15. .... have guard cells.

16. Cells of cork, contain a chemical called .....
17. Marijuana smoke \_\_\_\_\_ the throat and lungs.
18. Tobacco is a green, leafy plant that is grown in \_\_\_\_\_ climates.
19. Chemical nature of chitin is \_\_\_\_\_.
20. \_\_\_\_\_ are called amphibions of plant kingdom.

### Section C

State whether the following statements are true or false for each of the questions 21–30.

21. Plasma membrane is present in all the cells.
22. All kinds of plastids have pigments.
23. STI gonorrhoea and syphilis are not curable.
24. AIDS is caused by a bacteria.
25. Malaria is spread by the bite of infected female *Anopheles* mosquito.
26. Epithelial cells have lot of intercellular spaces.
27. Epithelial layer is permeable layer.
28. Nicotine is the chemical that makes tobacco addictive or habit forming.
29. Compound leaves are found in many ferns.
30. Seeds contain embryo.


### Section D

Answer each of the questions 31 – 40.

31. How is a prokaryotic cell differs from an eukaryotic cell?
32. Name the process by which land plants absorb water from the soil.
33. Name the kingdoms of Whittaker's classification.
34. In which kingdom will you place an organism, which is single-celled, eukaryotic and photosynthetic.
35. What is binomial nomenclature? Who introduced it?
36. State why a numbered key is preferred to a dichotomous key.
37. State that tobacco smoking can cause chronic obstructive pulmonary disease (COPD).
38. Why are lysosomes known as 'suicidal bags' ?
39. State the function of carrier proteins in a plasma membrane.
40. What do you understand by excretion?

**Section E**

*Answer each of the questions 41 – 45.*

- 41.** What is 'First Aid'?
- 42.** What is binomial nomenclature? Explain it with the help of an example.
- 43.** Why is it necessary to classify the living organism? Explain in your own words.
- 44.** What are the salient features of two-kingdom system of classification?
- 45.** Briefly explain, why biologists classify living things?