

Class : XIIth Date : Subject : BIOLOGY DPP No. : 5

## **Topic :- Organisms & Populations**

| 1. | Genetic drift operates in  |                                |                        |  |  |
|----|--|--------------------------------|------------------------|--|--|
|    | a) Small isolated population                                     | b) Large isolated population   |                        |  |  |
|    | c) Fast reproductive population                                  | d) Slow reproductive p         | opulation              |  |  |
| 2. | Which of the following is not true for a species?                |                                |                        |  |  |
|    | a) Members of a species can interbreed                           |                                |                        |  |  |
|    | b) Variations occur among members of a species                   |                                |                        |  |  |
|    | c) Each species is reproductively isolated from ev               | ery other species              |                        |  |  |
|    | d) Gene flow does not occur between the populations of a species |                                |                        |  |  |
|    |  |                                |                        |  |  |
| 3. | Zero growth means  |                                |                        |  |  |
|    | a) Natality balance mortality                                    | b) Natality is more thar       | n mortality            |  |  |
|    | c) Natality is less than mortality                               | d) Natality is zero            | 5                      |  |  |
|    | of 11.2.2  |                                |                        |  |  |
| 4. | Ecological age groups of a population are                        |                                |                        |  |  |
|    | I. pre-reproductive  |                                |                        |  |  |
|    | II. reproductive   |                                |                        |  |  |
|    | III. post-reproductive   |                                |                        |  |  |
|    |  |                                |                        |  |  |
|    | IV. old-age group  |                                |                        |  |  |
|    | V. adolescent age group  |                                |                        |  |  |
|    | VI. infertile age group  |                                |                        |  |  |
|    | Choose the correct option for given statements                   |                                |                        |  |  |
|    | a) I, II and III b) III, IV and V                                | c) IV, V and VI                | d) I, V and VI         |  |  |
| 5. | 5. Sigmoid growth curve is represented by                        |                                |                        |  |  |
|    | a) $dN/dt = rN$  | b) $dN/dt = rN(1 - N/L)$       | K)                     |  |  |
|    |  | dN/dt = 1 - N/K                |                        |  |  |
|    | c) $Nt = N_0 + B + I - D - K$                                    | d) '                           |                        |  |  |
| 6. | In which one of the following pairs is the specific              | characteristic of soil not con | rrectly matched?       |  |  |
|    | a) Laterite - Contains aluminium compound                        | d b) Terra - Mos               |                        |  |  |
|    | c) Chernozems - Richest soil in the world                        | d) Black Soil - Rich           | n in calcium carbonate |  |  |
|    |  |                                |                        |  |  |
| 7. | 1  |                                |                        |  |  |
|    | a) Thermoconformers b) Osmoconformers                            | c) Oxyregulators               | d) All of these        |  |  |
|    | -  |                                |                        |  |  |

| 8.  | Average temperature of thermal springs and deep sea hydrothermal vents exceeds  |  |  |                    |  |
|-----|---|--|--|--------------------|--|
|     | a) 50°C   | b) 60°C  | c) 70°C  | d) 100°C           |  |
| 9.  | In the oceans, the environ<br>a) More than 100 m  | nment is perpetually dark a b) More than 500 m | at<br>c) Less than 100 m   | d) Less than 500 m |  |
| 10. | Regulators are the their animals which<br>a) Does not maintain their body homeostasis<br>c) Can regulate their heart beat   |  | b) Can maintains their body homeostasis<br>d) Can regulate their circulation |                    |  |
| 11. | <ul> <li>Population A-Have the intrinsic rate of natural increase is 0.2</li> <li>Population B-Have the intrinsic rate of natural increase is 0.3</li> <li>Population C-Have the intrinsic rate of natural increase is 0.4</li> <li>Population D-Have the intrinsic rate of natural increase is 0.5</li> <li>Which population will increase fastest among all of the given population?</li> <li>a) D</li> <li>b) C</li> <li>c) B</li> <li>d) A</li> </ul> |  |  |                    |  |
| 12. | Humus is present in<br>a) Horizon-A   | b) Horizon-O                                   | c) Horizon-B   | d) Horizon-C       |  |
| 13. | Ecosystem components in a) Biotic   | n <mark>cludes</mark><br>b) Abiotic            | c) Both (a) and (b)  | d) Species         |  |
| 14. | Monarch butterflies are h<br>a) Its ugly look<br>c) Both (a) and (b)  | li <mark>ghly d</mark> istasteful to predat    | or due to<br>b) A special chemical pre<br>d) A poison secreted by t          | -                  |  |
| 15. | Species living in a restrict<br>a) Sympatric  | ted geographical area is<br>b) Allopatric      | c) Sibling   | d) Keystone        |  |
| 16. | Pneumatophores have lea<br>a) Excretion   | nticels for<br>b) Gaseous exchange             | c) Reproduction  | d) All of these    |  |
| 17. | Temperature gradient over earth surface is<br>a) 6.4 to 6.5°C per 1000 m altitude   |  | b) 6.4 to 6.5°C per 1000 m latitude  |                    |  |
|     | c) 7.5 to 9.5°C per 1000 m latitude   |  | 7.5 to 9.5°C per 1000 m altitude<br>d)                                       |                    |  |
| 18. | Abiotic factors affects the<br>I. Structure of organisms<br>II. Physiology of organism<br>III. Behaviour of organism<br>a) I and II   | 15   | c) I, II and III   | d) I and III       |  |

- 19. Which one of the following is a matching pair of certain organism(s) and the kind of association?
  - Commensalism

- Parasitism

- b) Red algae and fungi in liches Mutualism
- c) Orchids growing on trees

a) Shark and sucker fish

- d) *Cuscuta* (dodder) growing on other flowering plants Epiphysis
- 20. Nature and properties of soil in different places vary due to
  - a) Climate b) Weathering process c) Topography d) All of these

