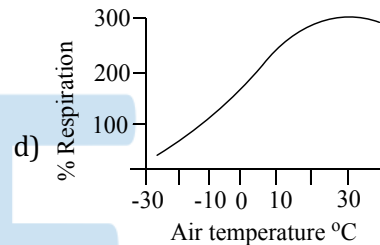
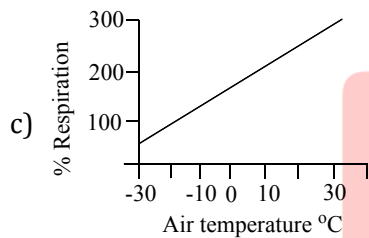
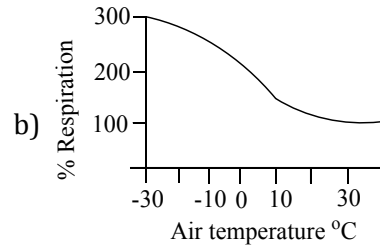
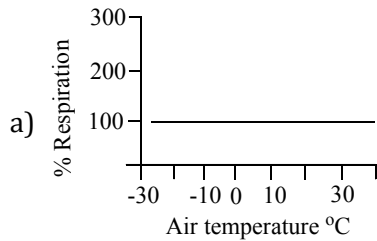


Topic :- Organisms & Populations

- The inherent maximum capacity of an organism to reproduce or increase in number is called as
a) Biotic potential b) Ecosystem c) Population d) Ecology
- The basic unit of study in ecology is
a) Population b) Organism c) Community d) Species
- Body compensates low oxygen availability at high altitudes by
I. increasing RBC
II. decreasing binding affinity of haemoglobin
III. increasing binding affinity of haemoglobin
IV. increasing breathing rate
V. decreasing breathing rate
Choose the correct option for given statement
a) I, II and III b) II, III and IV c) I, III and IV d) I, II and IV
- The species of plants that play a vital role in controlling the relative abundance of other species in a community are called
a) Edge species b) Keystone species c) Pioneer species d) Seral species
- If birth rate is 100, death rate is 10 and number of individuals in population group is 1000, then what will be the percentage of natural growth rate?
a) 0.09% b) 9.0% c) 0.9% d) 90%
- A₀ layer is rich in
a) Minerals b) Humus c) Litter d) None of these
- In most animals, the metabolic reactions proceed in a ...A... temperature range (in humans, it is 37°C). But there are microbes (archaebacteria) that flourish in hot springs and deep sea hydrothermal vents where temperature far exceed ...B...
Choose the correct option for A and B
a) A-narrow; B-100°C b) A-broad; B-100°C c) A-median; B-100°C d) A-broad; B-40°C
- How many types of age pyramid are there?
a) Two types b) Three types c) Four types d) Five types

9. Competition occurs when
- Closely related species compete for same resources
 - Unrelated species compete for same resources
 - Both (a) and (b)
 - Natural resources are unlimited

10. Which of the following graphs correctly depicts the rate of respiration of a non-hibernating mammal living in cold climate?



11. I. Some species of insects and frogs are critically coloured (camouflaged)
 II. Some animals are poisonous
 III. Monarch butterfly are distasteful
 The above adaptations are against

- Predation
- Mimicry
- Symbiosis
- Protection

12. Humus layer in soil composed of dead fresh organic matter called

- Litter
- Duff
- Real humus
- Compost

13. I. Basking by desert lizards in sun
 I. Hiding in burrow by some animals
 II. Thermal gaping

Above are the examples of

- Cursorial adaptation
- Behavioural adaptation
- Fossorial adaptation
- Scansorial adaptation

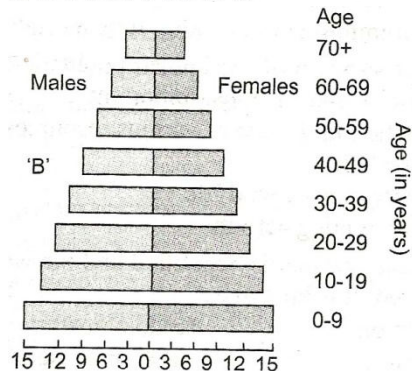
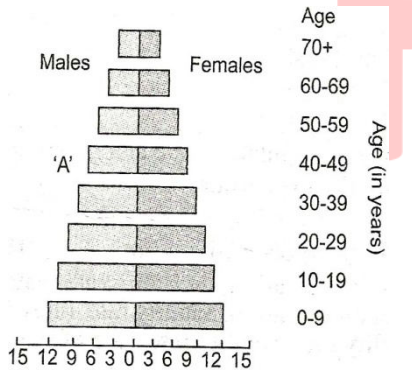
14. I. Biochemical adaptation are seen in organisms living in great depth of the ocean to face crushing pressure
 II. Allen's rule is explain mammals living in colder climates
 III. Altitude sickness is caused because of body not getting enough oxygen due to low atmospheric

pressure at high altitude

IV. Desert lizards lack behavioural means to manage to their body temperature

Choose the correct option for above adaptations

- a) I, II and III b) I, II and IV c) II, III and IV d) I, III and IV
15. Lichens represents an intimate mutualistic relationship between
a) Fungus and bacteria b) Fungus and photosynthetic algae
c) Fungus and archaeobacteria d) Fungus and plants
16. The science dealing with soil is
a) Edaphology b) Paedology c) Pedology d) All of these
17. Biological control methods adopted in agriculture pest control are based on the
a) Predator-prey interaction b) Prey feeding habitat
c) Prey interaction with other predators d) Predator-predator interaction
18. Exponential growth occurs when
a) There is only sexual reproduction b) There is only asexual reproduction
c) There is a fixed carrying capacity d) No inhibition from crowding
19. A country with a high rate of population growth took measures to reduce it. The figure below shows age sex pyramids of populations A and B twenty years apart. Select the correct interpretation about them.



- a) 'A' is more recent and shows slight reduction in the growth rate
b) 'B' is earlier pyramid and shows stabilised growth rate

- c) 'B' is more recent showing that population is very young
- d) 'A' is the earlier pyramid and no change has occurred in the growth rate

20. *Viscum album* grows on trees. This is an example of
a) symbiosis b) Parasitism c) Commensalism d) predation

PE