

**INTERNATIONAL INDIAN SCHOOL BURAI DAH**

**CLASS 12TH BIOLOGY**

**TERM 2 REVISION Worksheet**

**Chapter: Organism and populations.**

- 1-Why are mango trees unable to grow in temperate climate? (Outside Delhi 2016)
  - 2-Give an example of an organism that enters 'diapause' and why? (Delhi 2014)
  - 3-Mention how do bears escape from stressful time in winter? (Delhi 2013C)
  - 4-Why are some organisms called as eurythermal and some others as stenohaline? (Foreign 2011)
  - 5-How do animals like fishes and snails avoid summer related unfavourable conditions? (Delhi 2010)
  - 6-Why the plants that inhabit a desert are not found in a mangrove? Give reasons. (Delhi 2016C)
  - 7-Heat loss or heat gain depends upon the surface area of the organism's body. Explain with the help of a suitable example. (All India 2016C)
- Or
- Why are small animals rarely found in the polar regions? Explain. (Foreign 2010)
- 8-How do mammals living in colder regions and seals living in polar regions able to reduce the loss of their body heat? (Delhi 2015C)
  - 9-When you go for a trek/trip to any high altitude places, you are advised to take it easy and rest for first two days. Comment, giving reason. (Foreign 2015)
- Or
- Why do people suffer from altitude sickness after reaching the high altitude regions? How does their body acclimatised after a couple of days? (Delhi 2015C)
- Or
- How does our body adapt to low oxygen availability at high altitudes? Foreign 2011
- 10-(i) 'Organisms may be conformers or regulators.' Explain this statement and give one example of each.
  - (ii) Why are there more conformer than regulators in the animal world? (All India 2017)
- 11-During a school trip to 'Rohtang Pass', one of your classmate suddenly developed 'altitude sickness'. But, he/she recovered after some time.
  - (i) Mention one symptom to diagnose the sickness.
  - (ii) What caused the sickness?
  - (iii) How could she/he recover by her/himself after some time? (Delhi 2016)
- (i) The primary symptoms of 'altitude sickness' are headache, nausea, fatigue, etc.
- (ii) Sickness was caused due to the low atmospheric pressure prevailing at high altitude. Due to this, the body gets deprived of sufficient oxygen.
- (iii) Ascending slowly is the best way to avoid altitude sickness. This way the body compensates low oxygen availability by increasing red blood cells production, decreasing the binding capacity of haemoglobin and by increasing breathing rate. Thus, she/he recovers by herself after some time.
- 12-Explain with the help of suitable examples the three different ways by which organisms overcome their stressful conditions lasting for short duration. (Delhi 2016)

Or

Explain by taking three different examples how do certain organisms pull through the adverse conditions when unable to migrate under stressful period. (Delhi 2016C)

13-How do snails, seeds, bears, zooplanktons, fungi and bacteria adapt to conditions unfavourable for their survival? (All India 2015)

14- (1) Following are the responses of different animals to various abiotic factors. Describe each one with the help of an example.

(a) Regulate

(b) Conform

(c) Migrate

(d) Suspend

(ii) If 8 individuals in a population of 80 butterflies die in a week, calculate the death of population of butterflies during that period. (2018)

15-Mention the term used to describe a population interaction between an orchid growing on a forest tree. (Delhi 2019)

Or

What is an interaction called when an orchid grows on a mango plant? (Delhi 2012)

Answer:

An orchid growing on the branch of a mango tree is an epiphyte. Epiphytes are plants growing on other plants which however, do not derive nutrition from them and use them only for support. Hence, the relationship between a mango tree and an orchid is an example of commensalism.

16-In a pond, there were 20 Hydrilla plants. Through reproduction, 10 new Hydrilla plants were added in a year. Calculate the birth rate of the population. (Delhi 2012)

17-In a pond, there were 200 frogs. 40 more were born in a year. Calculate the birth rate of the population. (Delhi 2010)

18-State Gause's 'competitive exclusion' principle. How have the recent studies modified this principle? (All India 2019)

19-Name and explain the interaction that is seen between clown fish and sea anemones. (All India 2019)

20-Construct an age pyramid which reflects an expanding growth status of human population. (All India 2014)