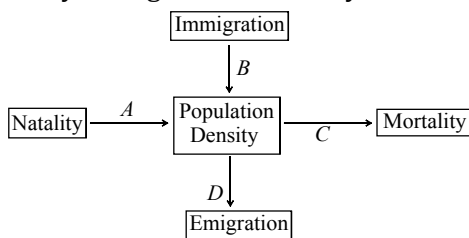


## Topic :- Organisms & Populations

1. Study the figure and identify *A* and *B*



- a) A-Increase, B-Decrease, C-Increase, D-Decrease  
b) A-Decrease, B-Increase, C-Decrease, D-Increase  
c) A-Increase, B-Increase, C-Decrease, D-Decrease  
d) A-Decrease, B-Decrease, C-Increase, D-Increase
2. Below diagram indicates
- 
- a) Exponential growth curve  
b) Logistic growth pattern  
c) J-shaped curve  
d) Both (a) and (c)
3. Examples of chemicals produced by plants as a defense against grazers and browsers
- I. Nicotine
  - II. Caffeine
  - III. Quinine
  - IV. Strychnine
  - V. Opium
- Choose the correct combination
- a) I and II  
b) I, II, III and IV  
c) I, II and III  
d) I, II, III, IV and V
4. Maximum survival and reproductive capacity shown by a population under optimal environmental conditions is called
- a) Carrying capacity  
b) Natality  
c) Biotic potential  
d) vitality

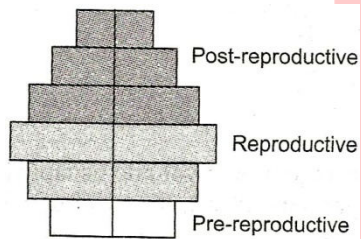
5. I. Birds            II. Family – Asteraceae  
 III. Polar bear    IV. Human  
 V. Lizards        VI. Amphibians  
 VII. Coconut  
 Identify stenothermals from the given examples  
 a) III, V, VI and VII            b) II, III, IV and VI            c) I, II, III and IV            d) VII, VI, V and I

6. Pseudo copulation occurs in  
 a) Maize                            b) Ophrys                            c) Mango                            d) Papaya

7. The age of pyramid with broad base indicates  
 a) High percentage of young individuals            b) Low percentage of young individuals  
 c) High percentage of old individuals            d) Low percentage of old individuals

8. A high density of tiger population in an area can result in  
 a) Predation                            b) Interspecific competition  
 c) Intraspecific competition            d) Proto cooperation

9. What type of human population is represented by the following age pyramid?



- a) Stable population                            b) Declining population  
 c) Expanding population                            d) Vanishing population

10. Which horizon in soil profile is known as top soil?  
 a) O-horizon                            b) A-horizon                            c) B-horizon                            d) C-horizon

11.  $A \xrightarrow{\oplus}$  Population density (N)  $\xleftarrow{\ominus} B$   
 If  $A$  increases the population density and  $B$  decreases then identify  $A$  and  $B$   
 a) A-Natality; B-Mortality                            b) A-Immigration; B-Emigration  
 c) Both (a) and (b)                            d) A-Emigration; B-Immigration

12. I. Salmon    II. Shark    III. Sting ray  
 Which of them is/are stenohaline and euryhaline?  
**Stenohaline    Euryhaline**  
 a) I, III                            II                            b) I, II                            III  
 c) II, III                            I                            d) I                            II, III

13. Plants developing in dry condition are

- a) Xerophytes                      b) Mesophytes                      c) Lithophytes                      d) Hydrophytes
14. Natality refers to the number of  
 a) Births during a given period                      b) Death during a given period  
 c) Living individuals during a given period                      d) Living individuals during their life span
15. I. Species level                      II. Population level  
 III. Individual level                      IV. Community level  
 Out of the levels given at a which level selection operates  
 a) I and II                      b) Only II                      c) III and IV                      d) Only IV
16. Association of animals belonging to different species, where both partners are benefitted, is called  
 a) Commensalism                      b) Mutualism                      c) Colony                      d) Sympathy
17. In which condition the logistic and exponential growth of population have zero growth rate  
 a) When  $r$  is 0                      b) When  $b = d$                       c) When  $K = N$                       d) All of these
18. Why no predator become proficient in acquiring prey?  
 a) Prey populations evolve antipredatory traits  
 b) Prey populations reproduce fastly  
 c) Predator populations reproduce fastly  
 d) Predators are to large to be fast enough
19. Hierarchy is  
 a) Categorisation of a group of living beings                      b) Series of ordered groupings within system  
 c) Either (a) or (b)                      d) None of the above
20. The percentage of soil volume occupied by pore space is called porosity of soil. It is minimum in  
 a) Sandy soil                      b) Clay soil                      c) Loamy soil                      d) silt