

**NEET BIOLOGY**

*Topic: Ecosystem*

- 1 What is the percentage of photosynthetically active radiation (PAR) in the incident solar radiation?
  - (a) 100%
  - (b) 50%
  - (c) 1-5%
  - (d) 2-10%
  
- 2 Secondary producers are
  - (a) Herbivores
  - (b) producers
  - (c) Top Carnivores
  - (d) Decomposers
  
- 3 The second trophic level in a lake is
  - (a) phytoplankton
  - (b) zooplankton
  - (c) benthos
  - (d) fishes
  
- 4 The largest population in a food chain is of
  - (a) producers
  - (b) primary consumers
  - (c) secondary consumers
  - (d) decomposers
  
- 5 The major reservoir of carbon on earth is
  - (a) forest (temperate)
  - (b) tropical rain forest
  - (c) atmosphere
  - (d) ocean
  
- 6 In an ecosystem dominated by trees the pyramid of number is
  - (a) inverted type
  - (b) upright type
  - (c) spindle shaped
  - (d) none of these

- 7 How much carbon is fixed in the biosphere through photosynthesis annually?
- (a)  $3 \times 10^{13}$ kg (b)  $5 \times 10^3$ kg  
(c)  $4 \times 10^{13}$ kg (d)  $6 \times 10^{13}$ kg
- 8 Succession which takes place in wetter areas and successional series progress from hydric to the mesic conditions is:-
- (a) xerarch (b) hydrarch  
(c) prammosere (d) xerosere
- 9 In primary succession in water, the pioneers are
- (a) zooplanktons (b) lichens  
(c) phytoplanktons (d) mosses
- 10 Areas where primary succession occurs are
- (a) cooled lava (b) bare rock  
(c) newly created pond/ reservoir (d) all of the above
- 11 Which of the following is the limitation of ecological pyramids?
- (a) saprophytes are not given any place  
(b) it does not accommodate a food web  
(c) it does not take into account the same species belonging to two or more trophic levels  
(d) all of the above
- 12 In an area changes lead finally to a community that is in near equilibrium with environment and that is called
- (a) pioneer community (b) pioneer species  
(c) climax community (d) seral communities

- 13 Which of the following is not included in ecological pyramids?  
(a) number of producers (b) biomass of consumers  
(c) energy of producers (d) biomass of saprophytes
- 14 Which of the following statement incorrect?  
(a) pyramid of energy is always upright  
(b) pyramid of biomass in sea is generally inverted  
(c) in sea biomass of fishes for exceeds that of phytoplanketon  
(d) energy at a higher trophic level is always more that at a lower level
- 15 A sparrow is a \_\_\_\_\_ A \_\_\_\_\_ when it eats seeds & fruits, and  
a \_\_\_\_\_ B \_\_\_\_\_ when it eats insects and worms  
(a) A-secondary consumer, B-primary consumer  
(b) A-primary consumer, B-secondary consumer  
(c) A-secondary consumer, B-tertiary consumer  
(d) A-producers, B-primary consumer
- 16 In most ecosystems all the pyramids, of number, of biomass and energy are:-  
(a) inverted (b) upright  
(c) spindle (d) cannot be defined
- 17 Each trophic level has a certain mass of living material at a particular time called as  
(a) standing state (b) standing crop  
(c) detritus (d) humus
- 18 Vertical distribution of different species occupying different levels is called:-  
(a) Fragmentation (b) humification  
(c) Stratification (d) Biorospecting

- 19 The amount of biomass or organic matter produced per unit area over a time period by plants during photosynthesis is
- (a) primary productivity
  - (b) secondary productivity
  - (c) net primary productivity
  - (d) standing crop
- 20 Dead plant remains such as leaves, bark, flowers and dead remains of animals, including fecal matter constitute
- (a) humus
  - (b) detritus
  - (c) detrivore
  - (d) saprophytes
- 21 Bacterial and fungal enzymes degrade detritus into simpler inorganic substances. This is called
- (a) fragmentation
  - (b) disintegration
  - (c) catabolism
  - (d) leaching
- 22 What percentage of PAR is captured by plants?
- (a) 1-5%
  - (b) 2-10%
  - (c) 10-15%
  - (d) 15-20%
- 23 Which of the following is incorrect?
- (a) death of organism is the beginning of the detritus food chain/web
  - (b) ecosystems are exempt from the second law of thermodynamics
  - (c) consumers are also called heterotrophs
  - (d) the primary consumers are herbivores.

- 24 Consider the following statements and choose which are correct
- (1) In aquatic ecosystem, GFC is the major conduit for energy flow
  - (2) the DFC begins with dead organic matter
  - (3) DFC never be connected with GFC
  - (4) In terrestrial ecosystem, a much larger fraction of energy flows through DFC than through the GFC
- (a) 1, 2 and 3 only                      (b) 2, 3 and 4 only  
(c) 1, 2 and 4 only                      (d) 1, 3 and 4 only
- 25 The entire sequence of communities that successively change in a given area are called
- (a) evolution                              (b) progression  
(c) nudation                              (d) sere
- 26 Which among the following have very recently tried to put price tags on nature's life support services?
- (a) Robert Constanza & colleagues      (b) Paul Ehrlich  
(c) Ramdeo Mishra                      (d) Humboldt
- 27 The number of trophic levels in the grazing food chain is restricted as transfer of energy follows
- (a) Eutrophication                      (b) Biomagnification  
(c) 10% law                              (d) 2<sup>nd</sup> law of thermodynamics
- 28 In which of the following ecological pyramid small standing crop of phytoplanktons support large standing crop of zooplankton
- (a) upright pyramid of biomass
  - (b) inverted pyramid of biomass
  - (c) spindle-shaped pyramid of number
  - (d) upright pyramid of energy

- 29 The climax community remains stable as long as the environment remains  
 (a) constant (b) unchanged  
 (c) constantly changing (d) both (a) and (b)
- 30 In primary succession on rocks, which of the following are able to secrete acids to dissolve rock, helping in weathering and soil formaton  
 (a) phytoplankton (b) lichens  
 (c) bryophytes (d) zooplankton

## ANSWER KEY

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<b>Que.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>Ans.</b>	B	A	B	A	D	B	C	B	C	D
<b>Que.</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>Ans.</b>	D	C	D	D	B	B	B	C	A	B
<b>Que.</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
<b>Ans.</b>	C	B	B	C	D	A	C	B	D	B