

BIOLOGY

BOOKS - MTG BIOLOGY (ENGLISH)

ECOSYSTEM

Bio

- **1.** Which one of the following is not correct match of the term and its description?
 - A. Ecosystem Functional unit of nature
 - B. Global ecosystem Entire biosphere
 - C. Aquatic ecosystem Wetland
 - D. Natural ecosystem Crop field

Answer: D

2. Match column I with column II and choose the correct option from the given codes.

	Column I		Column II
Α.	Population	(i)	Part of the earth consisting of all the ecosystems of the world
В.	Community	(ii)	Assemblage of all the individuals belonging to different species occurring an area
C.	Ecosystem	(iii)	Group of similar individuals belonging to the same species, found in an area
D.	Ecosphere	(iv)	Interaction between the living organisms and their physical environment
		(v)	Classification of organisms based on the type of environment

A. iii,ii,l,v

B. iv,v,iii,i

C. ii,iii,l,iv

D. iii,ii,iv,i
Answer: D
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3. Term 'ecosystem' was coined by
A. Odum
B. Tansley
C. Lindeman
D. Elton.
Answer: B
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4. Which of the following pairs is not correct?

A. E. Haecker — coined the term ,Ecology B. tansley — Coined the term 'Ecosystem C. R. Mishra — Father of indian Ecology D. None of these Answer: D **Watch Video Solution** 5. Vertical distribution of different species occupying different levels in dense vegetation is called A. stratification B. species compositon C. standing crop D. trophic structure. Answer: A

6. Which of the following aspects is not a component of functional unit of ecosystem?

A. Productivity

B. Decomposition

C. energy flow

D. Ecological pyramids

Answer: D



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7. In a comparative study of grassland ecosystem and pond ecosystem, it may be observed that

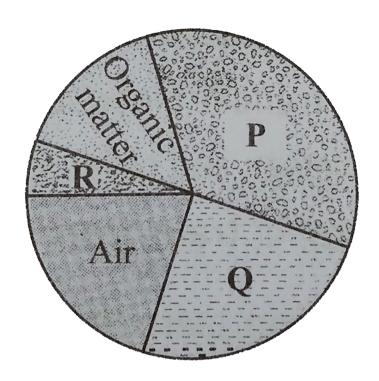
A. the abiotic components are almost similar

- B. the biotic components are almost similar C. both biotic and abiotic components are different D. primary and secondary consumers are similar. **Answer: C Watch Video Solution** 8. The movement of energy from lower to higher trophic level is A. always unidirectional
- - B. sometimes unidirectional
 - C. always bidirectional
 - D. undeterminable.

Answer: A



9. The given pie diagram represents different components of the soil. Identify P,Q and R and select the correct option



A. $\frac{P}{\text{Water}}$ $\frac{Q}{\text{Biota}}$ $\frac{R}{\text{Mineral salts}}$

B. $\frac{P}{\text{Mineral salts}}$ Biota Water

C. $\frac{P}{\text{Mineral salts}}$ $\frac{Q}{\text{Water}}$ $\frac{R}{\text{Biota}}$

D. $\frac{P}{\text{Biota}} \quad \frac{Q}{\text{Water}} \quad \frac{R}{\text{Mineral salts}}$



10. The rate of conversion of light energy into chemical energy of organic molecules in an ecosystem is

A. net primary productivity

B. gross primary productivity

C. secondary productivity.

D. gross secondary productivity.

Answer: B



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11. Read the given statements and select the correct option.

Statement 1: Net primary productivity is less than the gross primary productivity.

Statement 2: Net primary productivity is equal to the gross primary productivity minus the respiration losses.

- A. Both statements 1 and 2 are correct.
- B. Statement 1 is correct but statement 2 is incorrect.
- C. Statement 1 is incorrect but statement 2 is correct.
- D. Both statement 1 and 2 are incorrect.

Answer: A



12. The biomass available for consumption by the herbivores and the decomposers is called

A. net primary productivity

B. secondary productivity

C. standing crop

Answer: A
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3. is the rate of production of organic matter by consumers.
A. Primary productivity
B. secondary productivity
C. Net primary productivity
D. Gross primary productivity.
Answer: B
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D. gross primary productivity.

14. The rate of formation of new organic matter by rabbit in a grassland, is called.

A. net productivity

B. secondary productivity

C. Net primary productivity

D. gross primary productivity.

Answer: B



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- **15.** Primary productivity depends upon
 - A. light and temperature
 - B. water and nutrients
 - C. photosynthetic capacity of producers
 - D. all of these.

Answer: D



16. The annual net primary productivity of the whole biosphere is approximately

- A. 150 bilion tons
- B. 160 bilion tons
- C. 170 bilion tons
- D. 180 bilion tons

Answer: C



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17. Which one of the following exhibits least productivity?

A. Salty marshes B. Grasslands C. Open oceans D. Coral reefs **Answer: C Watch Video Solution** 18. Which one of the following is the most productive ecosystem? A. Temperate forest B. Grasslands C. Desert D. Tropical rainforest **Answer: D Watch Video Solution**

19. Arrange the following ecosystems in increasing order of their mean

NPP.

- (A) Tropical deciduous forest
- (B) Temperate coniferous forest
- (C) Tropical rainforest
- (D) Temperate deciduous forest

 $\operatorname{A.}B < A < D < c$

 $\operatorname{B.}D < B < A < C$

 $\mathsf{C.}\,A < C < D < B$

 $\mathsf{D}.\,B < D < A < C$

Answer: D



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- **20.** Fragmentation, leaching and catabolism are some of the important steps of decomposition. Study the following statements I , ii and iii regarding these and select the correct option.
- (i) Detritivores (e.g., earthworm) breakdown detritus into smaller particles.
- (ii) Water soluble inorganic nutrients go down into soil horizon and get precipitated as unavailable salts.
- (iii) Decomposers (e.g., bacteria and fungi) secrete digestive enzymes and degrade detritus into simpler inorganic substances.

A.	Leaching	Fragmentation (ii)	Catabolism
	(i)	(ii)	(iii)
В.	Leaching	Fragmentation (ii)	Catabolism
	(iii)	(ii)	(i)
C.	Leaching	Fragmentation (i)	Catabolism
	(ii)	(i)	(iii)
D.	Leaching	Fragmentation (iii)	Catabolism
	(ii)	(iii)	(i)

Answer: C



21. Read the given statements and select the correct option. Statement 1:

Decomposition is the physical and chemical breakdown of complex organic matter into simple inorganic substances.

Statements 2: Humification is the process of formation of humus from detritus or organic remains.

A. Both statements 1 and 2 are correct.

B. Statement 1 is correct but statement 2 is incorrect.

C. Statement 1 is incorrect but statement 2 is correct.

D. Both statement 1 and 2 are incorrect.

Answer: A



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22. which of the following is not characteristic of humus?

A. it is rich in organic matter such as lignin and cellulose.

- B. it is colloidal in nature and serves as a reservoir of nutrients.
- C. It is highly resistant to microbial action and undergoes slow decompositon
- D. it is further degraded by the process of humification.

Answer: D



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23. Match column I with column II and select the correct option from the given codes.

column I Column II

Gross primary productivity (i)Self-sustainable

Net primary productivity (ii) Aquatic ecosystem

Pond $(iii)O_2$ requiring process

Aquarium (iv)Photosynthetic production

Decomposition (v) Available to secondary consumers

A. iv,ii,I,iii,v

B. iv,v,I,ii,iii

C.	I,iii,ii,iv,v
D.	ii,I,iii,v,iv

Answer: B



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24. During the process of decompositon

A. CO_2 is consumed and O_2 is released

 $\operatorname{B.}{\cal O}_2$ is consumed and ${\cal C}{\cal O}_2$ is relesed

C. CO_2 is consumed and H_2O is released

D. None of these

Answer: B



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25. Rate of decompositon depends upon A. chemical compositon of detritus

B. temperature

C. soil moisture and soil pH

D. all of these.

Answer: D



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26. Decomposers are also called as

A. transducers

B. reducers

C. micro-consumers

D. both b and c

Answer: D



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27. The ultimate energy source of all ecosystem is

A. producers

B. organic molecules

C. carbohydrate

D. solar radiation.

Answer: D



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28. Percentage of photosynthetically active radiation (PAR) in the incident solar radiation is

A. 1-5% B. 2-10% C. less than 50% **D. approx 100% Answer: C Watch Video Solution** 29. Percentage of photosyntetically active radiation (PAR) that is captured by plants in synthesis of organic matter is A. 50-70% B. 30-40% C. 80-100% D. 2-10% **Answer: D**

30. Read the given statements and select the correct option.

Statement 1: Herbivours are also called as first order consumers.

Statement 2: Herbivores obtain their food directly from plants.

A. Both statements 1 and 2 are correct.

B. Statement 1 is correct but statement 2 is incorrect.

C. Statement 1 is incorrect but statement 2 is correct.

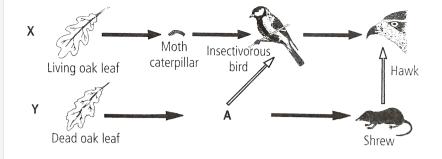
D. Both statement 1 and 2 are incorrect.

Answer: A



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31. Given figure represents two food chains (X and Y) linked together to form a food web.



Identify the types of food cahin X and Y and the organism A that interconnects these food cahins.

^	X	Y	A
A.	Detritus food chain	Grazing food chain	Bacterium

X Y A

B. Detritus food chan Greing food chain Detritivore

Grazing food chain Detitus food chain Detritivore

D. $\frac{X}{\text{Grazing food chain}}$ $\frac{Y}{\text{Detritus food chain}}$ $\frac{A}{\text{Grasshopper}}$

Answer: C



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32. Select the option that correctly identifies A,B and C in the table.

Organism	Trophic level	Food chain
Eagle	А	Grazing
Earthworm	Primary consumer	В
Frog	С	Grazing

- A. $\frac{A}{\text{Top carnivore}}$ B C Secondary consumer
- B. Top carnivore Detritus Primary consumer
- C. $\frac{A}{\text{secondary consumer}}$ $\frac{B}{\text{Grazing}}$ $\frac{C}{\text{secondary consumer}}$
- D. $\frac{A}{\text{Scavanger}}$ $\frac{B}{\text{Grazing}}$ $\frac{C}{\text{Producer}}$

Answer: A



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33. Select the incorrect food chain

A. Grass ightarrow Grasshopper ightarrow Frog ightarrow Snake ightarrow Eagle

B. Phytoplanktons $\ o$ Zooplanktons $\ o$ small fish $\ o$ Large fish

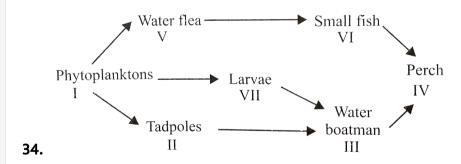
C. Diatoms $\, \rightarrow \,$ Zooplanktons $\, \rightarrow \,$ Small fish

D. Grass \rightarrow Frog \rightarrow Vulture

Answer: D



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Which of the following organisms in the given food web act both as apredator and a prey?

A. I,II and IV

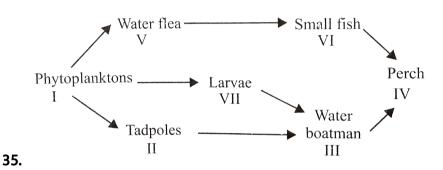
B. II,III and V

C. II,III,V,VI and VII

Answer: C



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Which of the following organisms in the given food web act as a secondary consumers?

A. II and V

B. III and VI

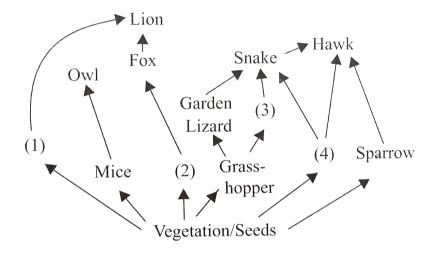
C. III and IV

D. V and VII



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36. Given food web contains some missing organisms, 1,2,3 and 4. Identify these organisms and select the correct answer?



- A. $\frac{1}{\text{Deer}}$ Rabbit Frog Rat
- $\mathsf{B.} \ \frac{1}{\mathrm{Dog}} \ \frac{2}{\mathrm{Squirrel}} \ \frac{3}{\mathrm{Bat}} \ \frac{4}{\mathrm{Frog}}$
- C. $\frac{1}{\text{Rat}}$ $\frac{2}{\text{Eagle}}$ $\frac{3}{\text{Tortoise}}$ $\frac{4}{\text{Crow}}$
- D. $\frac{1}{\text{Squirrel}}$ $\frac{2}{\text{Car}}$ $\frac{3}{\text{Peacock}}$ $\frac{4}{\text{Pigeon}}$

Answer: A



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37. Mathc column I with column II and select the correct option from the given codes.

'{:("column I","column II"),("Gross primary productivity",(i)"Geen plants"), ("Secondary productivity",(ii)"Rate of synthesis of organic matter by consumers"),("Transducers",(iii)"Total organic matter produced from solar energy"),("Food web",(iv)"Interconnection of food chains"):}

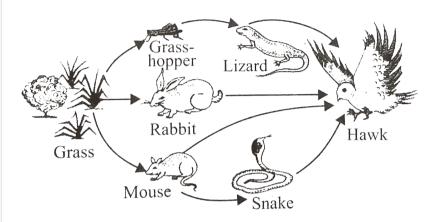
- A. I,ii,iii,iv
- B. iii,ii,l,iv
- C. iii,iv,I,ii
- D. ii,I,iv,iii

Answer: B



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38. In the given food web, and increase in the population of hawks will not result in



- A. decrease in the population of rabbits and sankes
- B. decrease in the population of mouse
- C. decrease in the population of lizards
- D. increase in the population of grasshoppers.

Answer: D



39. In an aquatic ecosystem, the organism present at the trophic level equivalent to cows in grasslands is

A. phytoplanktons

B. large fishes

C. sea gulls

D. zooplanktons.

Answer: D



- **40.** Productivity at the second trophic level is always.
 - A. greater than the productivity at the first trophic level
 - B. less than the productivity at the first trophic level
 - C. less than the productivity at the first trophic level
 - D. equal to the productivity at the first trophic level

Answer: B



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41. If 10 joules of energy is available at the producer level, then amount of energy present at the level of secondary consumer is

- A. 10J
- B. 1J
- C. 0.1J
- D. 0.01J.

Answer: C



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42. Study the following statements regarding food chains and select the correct ones.

- (i) Removal of 80% tigers from an area resulted in greatly increased growth of vegetation.
- (ii) Removal of most of the carnivores resulted in an increased population of deers.

(iii) The lenght of food chains is generally limited to 3-4 trophic levels due to energy loss.

(iv) The lenght of food chains may vary from 2 to 8 trophic levels.

A) i and ii B) ii and iii C) i and iii D) iii and iv

A. I and ii

B. ii and iii

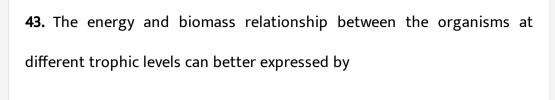
C. I and iii

D. iii and iv

Answer: B



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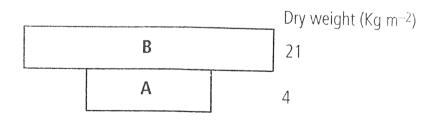


- A. food chain
- B. food web
- C. ecological pyramids
- D. energy cycle.

Answer: C



44. Given figure represents a pyramid of biomass in an aquatic ecosystem.



Identify A and B and select the correct answer.

(i) A is the crop which supporsts and B is the crop which is supported.

(ii) A is the crop which is supported and B is the crop which supports.		
(iii) A is phytoplanktons and B is zooplanktons.		
(iv) A is zooplanktons and B is phytoplanktons.		
A. I and iv B. ii and iii C. I and iii		
D. ii and iv		
Answer: C Watch Video Solution		
45. Which kind of pyramid is represented by the given figure?		
Primary consumer		
Primary producer		
A. Pyramid of numbers in terrestrial ecosystem		

- B. Pyramid of biomass in terrestrial ecosystem C. Pyramid of biomass in aquatic ecosystem D. Pyramid of numbers in aquatic ecosystem
- Answer: C



46. In an open ocean, the biomass of primary producers (microscopic algae) is often lower than the biomass of higher trophic levels (zooplanktons and fish), as illustrated below by an inverted pyramid of biomass. How can there be enough food in an open ocean to support the levels? higher trophic Fish Zooplanktons Microscopic algae

A. The microscopic primary producers are a source of food of high

quality.

B. The microscopic primary producers have high rates of growth and reproduction.

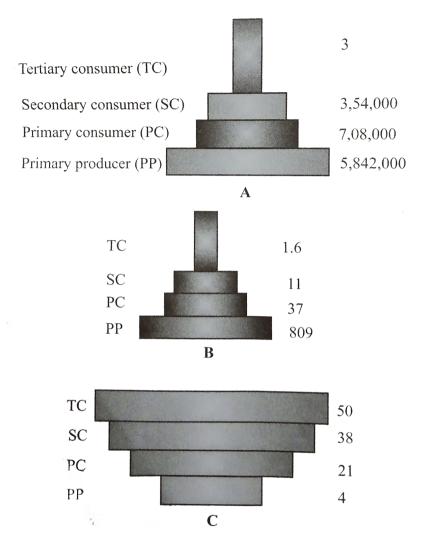
C. The microscopic primary producers are less abundant.

D. The higher trophic levels are cold-blooded animals which do not require much food.

Answer: B



47. Study the following ecological pyramids carefully.



Mathc the following statements I,ii and iii with gien pyramidsa, B and C and select the correct answer.

(i) Inverted pyramid of biomass depicting small standing crop of phytoplanktons supporintg a large standing crop of zooplanktons

- (ii) Pyramid of numbers in a grassland ecosytems showing about 6 milion producers. (iii) Upright pyramid of biomass
 - - A. ii,iii,i
 - B. ii,I,iii
 - C. I,iii,ii,iv,v
 - D. I,ii,iii

Answer: A



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ecosystem at the same time.

- 48. Read the following statements and select the correct ones.
- (i) A given species may occupy more than one trophic level in the same
- (ii) Productivity of an aquatic ecosystem is less than that of a terrestrial
- ecosystem.
- (iii) Producers constitute the first trophic level of a detritus food chain.

A) i and ii
B) ii and iii
C) i and iii
D) i, ii and iii
A. I and ii
B. ii and iii
C. I and iii
D. I,iiand iii
Answer: A
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49. Which one of the following animals may occupy more than one trophic levels in the same ecosystem at the same time?
A. Sparrow

- B. Lion
- C. Goat
- D. Frog

Answer: A



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50. Organisms which are associated with first as well as third trophic level are

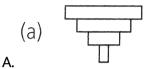
- A. macrophytes
- B. Phytoplanktons $\,
 ightarrow\,$ Zooplanktons $\,
 ightarrow\,$ small fish $\,
 ightarrow\,$ Large fish
- C. chemoautotrophs
- D. insectivorous plants

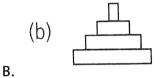
Answer: D

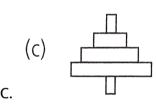


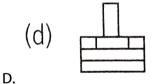
51. Which of the following representations shows the pyramid of numbers

in a forest ecosystem?









Answer: C



52. Pyramid of biomass for a grazing food chain represents

A. gradual decrease in biomass from apex to base

B. gradual decrease in biomass from producers to the tertiary consumers.

C. gradual increase of the biomass from producers to the tertiary consumers.

D. non change in biomass.

Answer: B



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53. Mr. X is eating curd/yoghut. For this food intake in a food chain he should be considered as occupying

A. first trophic level

B. second trophic level

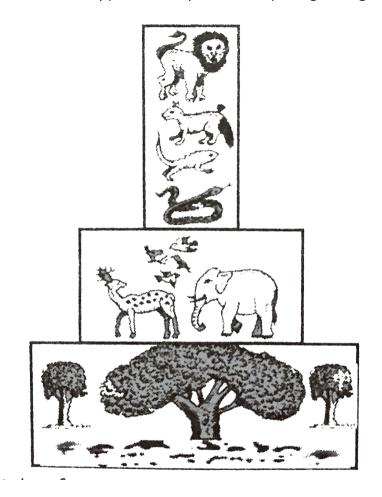
C. thrid trophic level

D. fourth trophic level.

Answer: C



54. What kind of pyramid is represented by the given figure?

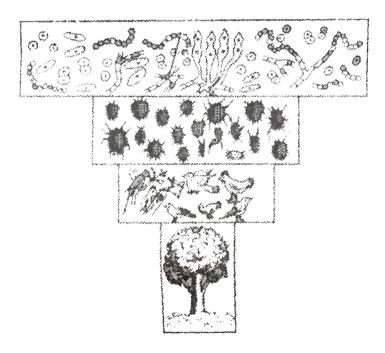


- A. Pyramid of numbers in a forest ecosystem.
- B. Pyramid of numbers in a parasitic food chain.
- C. Pyramid of biomass in a forest ecosystem.
- D. It is a wrong pyramid.

Answer: C



55. Which kind of pyramid is represented by the given figure?



A. Inverted pyramid of numbers

B. Inverted pyramid of biomass

C. Inverted pyramid of energy

D. Both a and b

Answer: A



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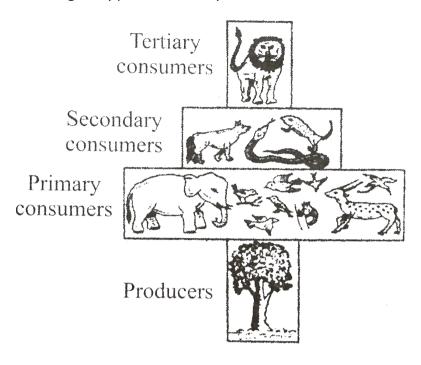
56. In a grassland ecosystem, if the number of primary producers (plants) is approximately 6 million, the number of top carnivors. Which may be supported by them will be

- A. 3 milion
- B. 30 milion
- C. 6 milion
- D. 60 milion

Answer: A



57. The given pyramid best represents



- A. Pyramid of energy in forest ecosystem
- B. pyramid of biomass in forest ecosystem
- C. pyramid of numbers in grassland ecosystem
- D. pyramid of numbers in forest ecosystem.

Answer: D



58. Read the statements and select the correct option Statement 1: In an aquatic ecosystem, pyramid of biomass is inverted.

Statement 2: Biomass depends upon reproductive potential and longevity of individuals.

- A. Both statements 1 and 2 are correct.
- B. Statement 1 is correct but statement 2 is incorrect.
- C. Statement 1 is incorrect but statement 2 is correct.
- D. Both statement 1 and 2 are incorrect.

Answer: A



- **59.** Study the following statements and select the incorrect one.
 - A. Shorter food chains provide more energy as compared to longer food chains.

- B. ecological factors connected with physical geography of earth are called topographic factors.
- C. The pyramid of biomass is upright in grassland ecosystem and the pyramid of number is upright in a parasitic food chain.
- D. None of these

Answer: C



- 60. Study the following statements and select the incorrect ones.
- (i) Pyramids of energy and yearly biomass production can never be inverted, since this would violate the laws of thermodynamics.
- (ii) Pyramids of standing crop and numbers can be inverted, since the number of organisms at a time does not indicate the amount of energy flowing through the system.
- (iii) There are certain limitations of ecological pyramids such as they do not take into account the same species belonging to two or more trophic

levels. (iv) Saprohytes are not given any place in ecological pyramids even though they play a vital role in the ecosystem. A. I and ii B. iii and iv C. ii and iii D. None of these Answer: D **Watch Video Solution** 61. The stable community during an ecological succession that would be near equilibrium with the environment is called A. climax community B. pioneer community C. sere

answer: A
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2. Primary succession occurs on
A. area destroyed due to fores fire
B. newly formed river delta
C. harvested crop field
D. all of these.
Answer: B
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D. carnivores.

63. Successions that occur on soils or areas which have recently lost their community are reffered to as

A. primary successions

B. secondary successions

C. lithoseres

D. priseres.

Answer: B



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64. Match column I with column II and select the correct option from the given codes.

 $({\rm column}\ I,\ {\rm column}\ II),\ ("Gross\ primary\ productivity",\ (i)"Geen\ plants"),$

("Secondary productivity",(ii)"Rate of synthesis of organic matter by

column I

Bacteria (i)Prisere

consumers"),("Transduc Green plants (ii)Transducers

Primary succession (iii)Lithosere

Succession on bare rock (iv)Micro-consumers

A. iv,ii,I,iii,

B. iv,iii,I,iii

C. I,iii,ii,iv

Answer: A

D. iv,ii,iii,i



65. Which one of the following statements is correct for secondary succession?

A. It begins on a bare rock.

B. It occurs on a deforested site.

C. It follows primary succession.

D. It is similar to primary succession except that primry succession has

a relatively fast pace.

Answer: B



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66. The rate of secondary succession is faster than primary succession because.

A. soil or sediment is already present

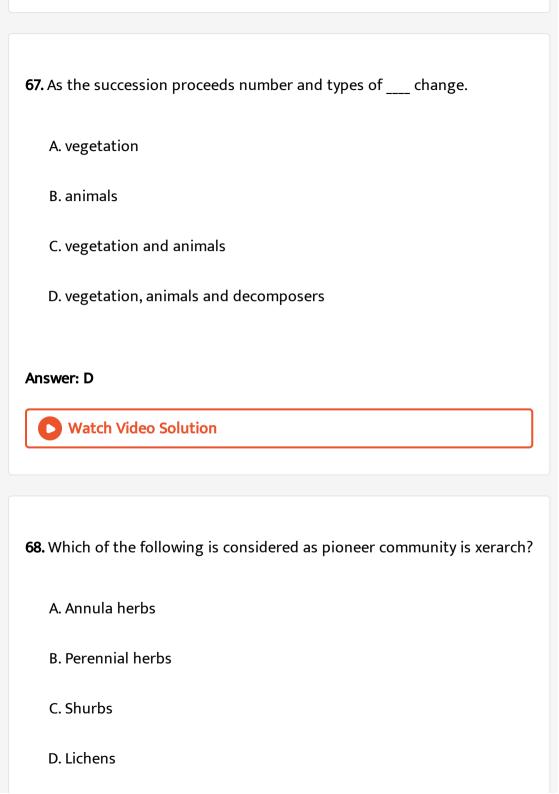
B. water is availbale in large quantity

C. climax community is already present

D. pH of sol is favorable.

Answer: A





Answer: D



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69. Correct sequence of stages of succession on a bare rock is:

- 1) Lichens → Mosses → Grasses → Shrubs → Trees
- 2) Trees → Shrubs → Lichens → Mosses → Grasses
- 3) Mosses → Shrubs → Trees → Lichens → Grasses
- 4) Mosses → Lichens → Grasses → Shrubs → Trees.
 - A. Lichens $\, o \,$ Mosses $\, o \,$ Grasses $\, o \,$ Shrubs $\, o \,$ Trees
 - B. Trees $\,\rightarrow\,$ Shrubs $\,\rightarrow\,$ Lichens $\,\rightarrow\,$ Mosses $\,\rightarrow\,$ Grasses
 - C. Mosses ightarrow Shrubs ightarrow Trees ightarrow Lichens ightarrow Grasses
 - D. Mosses \rightarrow Lichens \rightarrow Grasses \rightarrow Shrubs \rightarrow Trees.

Answer: A



70. In lithosere, foliose lichens make the conditions favourable for the growth of

A. crustose lichesn

B. mosses

C. annual grasses

D. perennial grasses.

Answer: B



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71. Read the given statements and select the correct option:

Statement 1: Pioneer community is the stable and final biotic community of an ecological succession.

Statement 2 : Pioneer community has maximum diversity and niche specialisation.

A. Both statements 1 and 2 are correct.

- B. Statement 1 is correct but statement 2 is incorrect.
- C. Statement 1 is incorrect but statement 2 is correct.
- D. Both statement 1 and 2 are incorrect.

Answer: D



- 72. Correct sequence of stages of succession of a lithosere is:
- 1) Foliose lichens $\;
 ightarrow\;$ Crustose lichens $\;
 ightarrow\;$ Mosses $\;
 ightarrow\;$ Annual grasses
 - ightarrow Perennial grasses ightarrow Shrubs ightarrow Trees.
- 2) Crustose lichens ightarrow Foliose lichens ightarrow Mosses ightarrow Perennial
- grasses ightarrow Annual grasses ightarrow Annual grasses ightarrow Shrusb ightarrow Trees
- 3) Reed swamp stage \rightarrow Sedges \rightarrow Floating plants \rightarrow Submerged
- plants
- 4) Sedges ightarrow Reed swamp stage ightarrow Floating plants ightarrow Submerged plants

A. Foliose lichens ightarrow Crustose lichens ightarrow Mosses ightarrow Annual

grasses ightarrow Perennial grasses ightarrow Shrubs ightarrow Trees.

B. Crustose lichens ightarrow Foliose lichens ightarrow Mosses ightarrow Perennial

grasses ightarrow Annual grasses ightarrow Annula grasses ightarrow Shrusb ightarrow

Trees

C. Reed swamp stage ightarrow Sedges ightarrow Floating plants ightarrow

Submerged plants

D. Sedges ightarrow Reed swamp stage ightarrow Floating plants ightarrow

Submerged plants

Answer: C



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- **73.** Select the correct sequence of succession in a pond.
- 1) Submerged plants $\;
 ightarrow\;$ Floating plants $\;
 ightarrow\;$ Reed swamp stage $\;
 ightarrow\;$

Sedges

- 2) Floating plants ightarrow Submerged plants ightarrow redd swamp stage ightarrow Sedges
- 3) Reed swamp stage ightarrow Sedges ightarrow Floating plants ightarrow Submerged
- 4) Sedges \rightarrow Reed swamp stage \rightarrow Floating plants \rightarrow Submerged plants
- A. Submerged plants $\;
 ightarrow\;$ Floating plants $\;
 ightarrow\;$ Reed swamp stage $\;
 ightarrow\;$
 - Sedges
 - B. Floating plants $\;
 ightarrow\;$ Submerged plants $\;
 ightarrow\;$ redd swamp stage $\;
 ightarrow\;$
 - C. Reed swamp stage ightarrow Sedges ightarrow Floating plants ightarrow

 - Submerged plants

Answer: A

Sedges

plants



74. Given below are some of the stages of the hydrarch.

- (A) March-meadow stage
- (B) Reed-swamp stage
- (C) submerged plant stage (D) Phyotplankton stage

Select the option that represents the correct sequence of these stages.

A.
$$D
ightarrow C
ightarrow E
ightarrow B
ightarrow A$$

$$\operatorname{B.}C \to E \to A \to B \to D$$

$$\mathsf{C}.\,B o D o C o A o E$$

$$\mathsf{D}.\,D\to E\to C\to B\to A$$

Answer: A



75. Mathc column I with column II and select the correct option from the given codes.

column I

Presence of 3-4 storeyed

A biome having grasses with scattered trees

Man made ecosystem

Pioneer in hydrosere

 $\operatorname{Column} \operatorname{II}$

- (i)Blue green angle
- (ii)Stratification
- (iii)Savannah
- (iv)Dam

A. ii,iii,iv,i

B. ii,iii,l,iv

C. I,iii,iv,ii

D. iii,iv,ii,i

Answer: A



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76. In the given figure A,B,C,D,E and F represent some stages of hydrosere, Select the correct statement regarding these.



A. Hydrilla and Potamogeton occur in stage A,

- B. Phragmites and Typha occurs in stage C, Carex and Cyperus occur in stage D.
- C. Alinus and Populus occur in stage E, Accer and Quercus occur in stage F.
- D. all of these.

Answer: D



77. The correct sequence of plants in a hydrosere is

A. Volvox $\;
ightarrow\;$ Hydrilla $\;
ightarrow\;$ Pistia $\;
ightarrow\;$ Scripus $\;
ightarrow\;$ Carex $\;
ightarrow\;$ Quercus

B. Pistia $\, o\,$ Volvox $\, o\,$ Scirpus $\, o\,$ Hydrilla $\, o\,$ Quercus $\, o\,$ Carex

C. Quercus ightarrow Carex ightarrow Volovox ightarrow Hydrilla ightarrow pistia ightarrow

Scripus

D. Quercus $\, o\,$ Scirpus $\, o\,$ Pistia $\, o\,$ Hydrilla $\, o\,$ Volvox

Answer: A



78. The second stage of hydrosere is occupied by plants like

A. Zolla

B. Typha

C. Carex

D. Vallisneria.

Answer: D



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79. An ecosystem which can be easily damaged but can recover after some time if damaging effect stops, will ba having.

- A. low stability and high resilience
- B. high stability and low resilience
- C. low statbility and low resilience
- D. high stability and high resilience.

Answer: A



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80. During the stages of succession in a given ecosystem, the following changes in characteristics may be observed.

	Characteristic	Stages in ecosystem development	
		Early	Late
Α.	Total organic matter	Low	High
В.	Species diversity	Low	High
C.	Size of organism	Small	Large
D.	Productivity	Low	High
E.	Food chains	Short	Long

Which one of the characteristics A,B,C,D or E is responsible for the apparent high degree of stability associated with a climax acosystem?

A.B

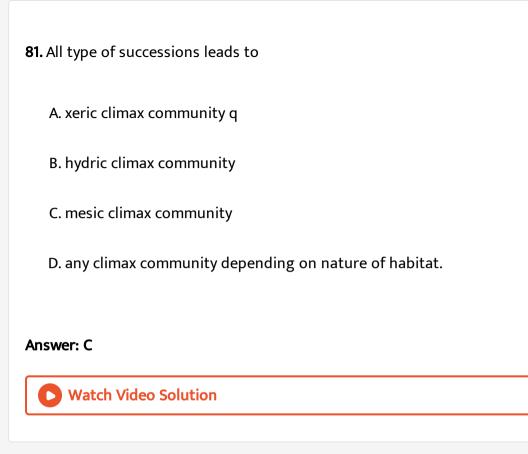
B. D

C. A

D. E

Answer: A





82. Mathc column I with column II and select the correct option from the

given codes.

	Column I		Column II		
Α.	Pioneers	(i)	Vegetation which modifies		
			its own environment and		
			thus causing its own		
_			replacement		
В.	Autogenic	(ii)	Replacement of existing		
	succession		community by external		
C	A II	/:::\	conditions		
C.	Allogenic succession	(111)	Establishment of organisms in an area into which they		
	Succession		have come by dispersal or		
			migration		
D.	Ecesis	(iv)	Primary colonisers		
υ.	ECC313	(1)	Timary colombers		
A. iv,I,ii,iii					
B. I,ii,iii,iv					
C. ii,I,iv,iii					
··,·,· ·,···					
D. I	D. I,iv,iii,ii				



Answer: A

83. Match column I with column II and select the correct option from the given codes.

column I Column II

Artermisla tridentata (i)Grows better in overgrazed area

Capparis spinosa (ii) Drominate in areas destructed by fire

Pleris aquilina and Pyronema (iii) Indicates intense soil erosion Amaranthus and Chenopodium (iv)Saline soils

A. I,ii,iii,iv

B. ii,iii,iv,i

D. iv,iii,ii,i

C. iii,I,ii,iv

Answer: D



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84. Select the pairs of sediamentary biogeochemical cycles.

I. Hydrogen cycle and water cycle

II. Phosphorus cycle and sulphur cycle

III. Calcium cycle and magnesium cycle IV. Carbon cycle and nitrogen cycle A. I and II B. II and III C. III and IV D. I and IV **Answer: B Watch Video Solution** 85. Which one of the following is not a gaseous biogeochemical cycle in ecosystem? A. Water cycle B. Phosphorus cycle C. Nitrogen cycle

D. Carbon cycle

Answer: B



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86. The function of reservoir pool is to meet with the deficit of nutrient that occurs due to

A. imbalance in rate of efflux and influx of nutrients.

B. only efflux of nutrients

C. ceased nutrient cycle

D. None of these

Answer: A



87. Mathc column I with column II and select the correct option from the given codes.

Column I Column II

Standing state (i)Fast and nearly perfect

Gaseous cycles (ii) Amount of nutrients present in soil at given time Standing crop (iii)Slow and less perfect

Sedimentary cycles (iv)Mass of living matter in a unit area

A. ii,I,iv,iii

B. iii,I,iv,ii

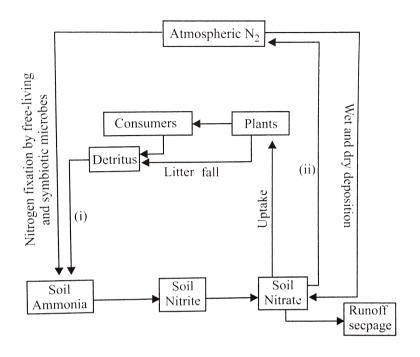
C. I,iii,ii,iv

D. ii,iii,iv,i

Answer: A



88. Study the given biogeochemical cycle and identify the steps I and ii



- (i) (ii)
- Ammonification Denitrification
- (ii)
- B. Dentirification Ammonification
- $c^{(i)}$ (ii)
- Nitrification Ammounification
- (i) (ii)
- D. Ammonification Nitrification

Answer: A



89. About 71% of total global carbon is found is
A. oceans
B. forests
C. grasslands
D. agroecosystems.

Answer: A



- **90.** What percentage of total global carbon is atomospheric carbon?
- 1) 0.0003
- 2) 0.01
- 3) 0.1
- 4) 0.3
 - A. 0.0003

- B. 0.01
- C. 0.1
- D. 0.3

Answer: B



- **91.** Which of the following processes does not contribute to the CO_2
- pool in the atmosphere?
- 1) Respiration by producers
- 2) Photosynthesis by producers
- 3) Respiration by consumers
- 4) Decomposition by decomposers.
 - A. Respiration by producers
 - B. Photosynthesis by producers
 - C. Respiration by consumers

D. Decomposition by decomposers.

Answer: B



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92. Read the given statements and select the correct option.

Statement 1: Major reservoirs of phosphorus are phosphate rocks and fossil bone deposits laid down in the past geological ages.

Statement 2: During weathring of rocks, minute amounts of these phosphates dissolve in soil solution and are absorbed by the roots of the plants.

- A. Both statements 1 and 2 are correct.
- B. Statement 1 is correct but statement 2 is incorrect.
- C. Statement 1 is incorrect but statement 2 is correct.
- D. Both statement 1 and 2 are incorrect.
 - A. Both statements 1 and 2 are correct.
 - B. Statement 1 is correct but statement 2 is incorrect.

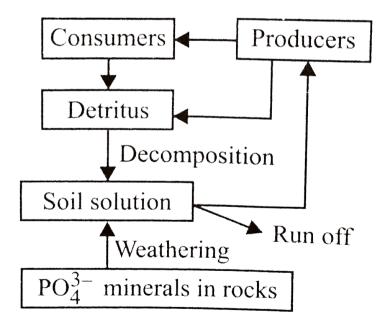
- C. Statement 1 is incorrect but statement 2 is correct.
- D. Both statement 1 and 2 are incorrect.

Answer: A



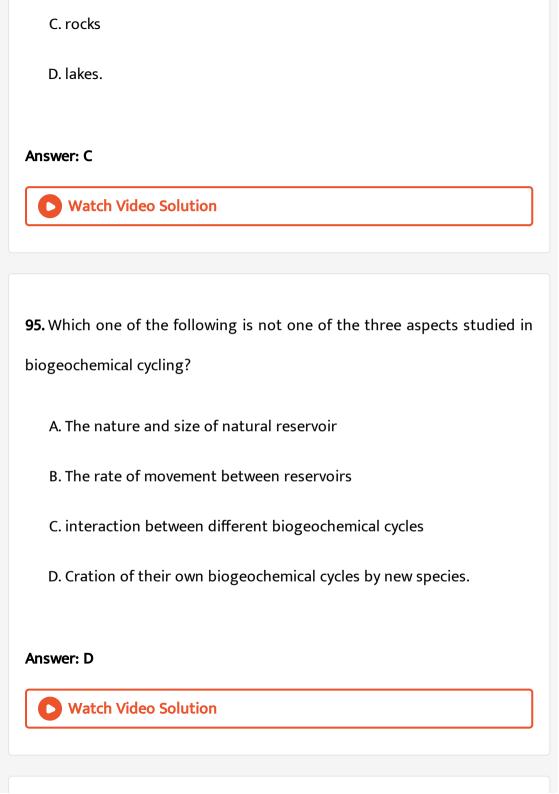
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93. Study the given flow chart and select the correct statement regarding this.



(i) It represents phosphorus cycling in a terrestrial ecosystem.

(ii) It represents phosphorus cycling in an aquatic ecosystem. (iii) Natural resenvoir of phosphorus is phosphate rocks. (iv) There is no repiratory release of phosphorus into atmosphere. exchange of phosphorus between organisms (v) Gaseous and enviornment occurs to a considereable extent. A. I,ii and v B. I,iii and iv C. ii,iii and iv D. I,iii,iv and v **Answer: B Watch Video Solution** 94. Major source of sulphur is A. oceans B. land



96. Read the given statement and select the correct option.

Statement 1: Global water cycle does not involver the living organisms.

Statement 2 : In global water cycle. Water circulates between hydrosphere and atmosphere.

- A. Both statements 1 and 2 are correct.
- B. Statement 1 is correct but statement 2 is incorrect.
- C. Statement 1 is incorrect but statement 2 is correct.
- D. Both statement 1 and 2 are incorrect.

Answer: A



- 97. Which of the following is most important in water cycle?
 - A. Transpiration through leaves
 - B. Evaporation from the oceans

- C. Percolation of water into the ground

 D. Absorption of capillary water by plants
- **Answer: B**



- **98.** The ecosystem services include
 - A. maintenance of biodiversity
 - B. pollination of crop
 - C. pollination of crop
 - D. all of these.

Answer: D



99. Out of the total proposed cost of various ecosystem services, cost of						
climate regulations and habitat for widilife are						
A. 50						
B. 10						
C. 6						
D. 25						
Answer: C						
will refer to the						
Watch Video Solution						
Watch Video Solution						
watch video Solution						
100. What is the amount of average price tag on nature's life support						
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A. 3 trillion a year

B. US`

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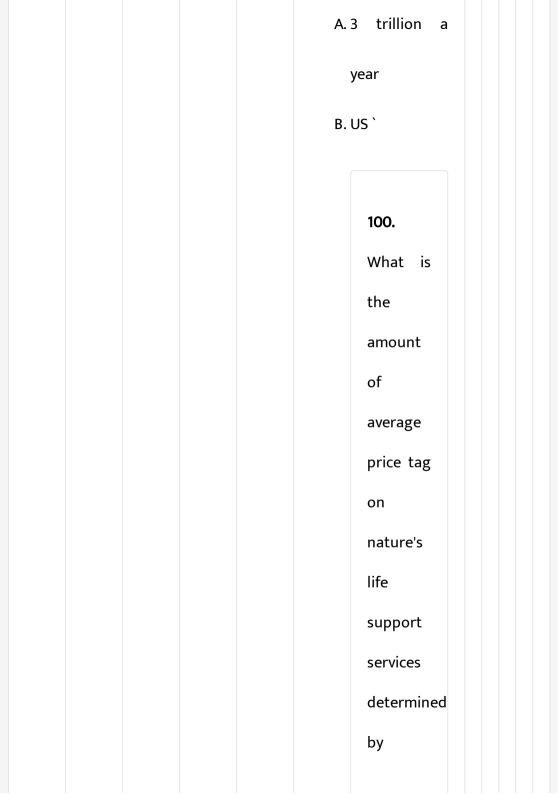
B. 13 trillion a year

C. US `

100. What is the amount ofaverage price tag on nature'slife support servicesdetermined by RobertConstanza and his colegues?

A. US `

amount of average price tag on nature's life support services determined by Robert Constanza and his colegues?



			Robert		
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			A. US		
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