



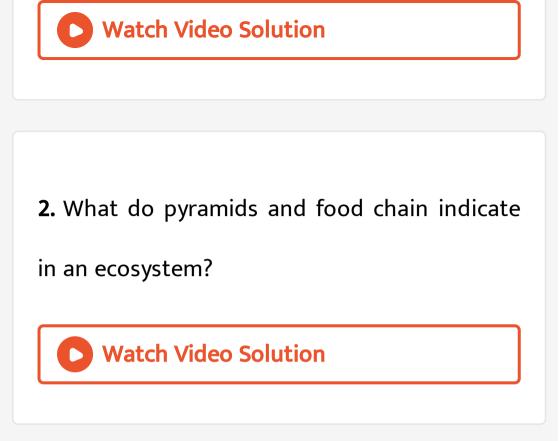
BIOLOGY

BOOKS - BEYOND PUBLICATION

OUR ENVIRONMENT



1. What happens to the amount of energy transferred from one step to the next in a food chain?



3. Write a short note on pyramid of number for any food chain. What can we conclude from this pyramid of numbers?

(i) tree

(ii) insect

(iii) woodpecker



4. Write a short note on pyramid of number for any food chain. What can we conclude from this pyramid of numbers?

(i) tree

(ii) insect

(iii) woodpecker

5. Write a short note on pyramid of number for any food chain. What can we conclude from this pyramid of numbers?

(i) tree

(ii) insect

(iii) woodpecker

Watch Video Solution

6. What is a pyramid of numbers? Write a brief

note on the pyramid of numbers with the

heplp of a block diagram.

Watch Video Solution

7. What is blomass? Draw a pyramid of biomass for the givenn food chain- (i) grass, leaves

(ii) herbivores

(iii) predators

(iv) hawk.

8. How is using of toxic material affecting the ecosystem? Write a short note on bioaccumulation and biomagnifications.

Watch Video Solution

9. Should we use pesticides as they prevent our crop and food from pests or we should think of alternatives? Write your view about this issue and give sound reason for your answer.



10. Should we use pesticides as they prevent our crop and food from pests or we should think of alternatives? Write your view about this issue and give sound reason for your answer.

Watch Video Solution

11. What is a trophic level? What does it represent in an ecological pyramid?



12. If you want to know more about flow of energy in an ecosystemm, what questions do you ask?

Watch Video Solution

13. What will happen if we remove predators

from food web?

14. Observe a plant in your kitchen garden, and write a note on producer-consumer relationship.

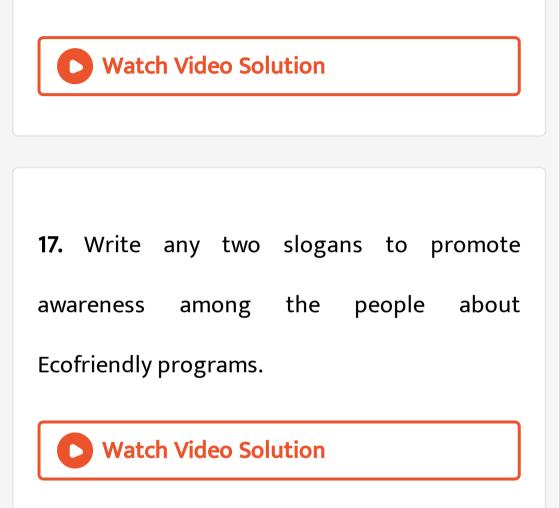


15. What type of information do you require to

explain pyramid of biomass?

16. Draw a pyramid of numbers considering

yourselff as top level consumer.



18. Suggest any three programmes for prevention off soil pollution in view of avoiding pesticides.

In your area, soil is polluted by the enormous

usage of pesticides. Suggest any two

programmes for prevention of soil pollution.

Watch Video Solution

19. Are al terrestrial ecosystems similar?

20. If we want to show a food chain consisting of grass, rabbit, snake and hawk then connect the given picture in textbook of organisms by putting arrows and make a food chain. (A). Name the producers and consumers in the above food chain.

(B) Try to guess what the arrows marked by you are indicating.

(C) Identify atleast four other food chains from

your surroundings.

21. If we want to show a food chain consisting of grass, rabbit, snake and hawk then connect the given picture in textbook of organisms by putting arrows and make a food chain.
(A). Name the producers and consumers in the above food chain.

(B) Try to guess what the arrows marked by you are indicating.

(C) Identify atleast four other food chains from

your surroundings.



22. If we want to show a food chain consisting of grass, rabbit, snake and hawk then connect the given picture in textbook of organisms by putting arrows and make a food chain.
(A). Name the producers and consumers in the above food chain.

(B) Try to guess what the arrows marked by you are indicating.

(C) Identify atleast four other food chains from your surroundings. 23. Why most of the food chains consist of

four steps?



24. Why do the number of organisms get decreased as we move from producer to different level of consumes?

25. Draw the pyramid of number for the following food chains.

(i) Banyan ightarrow insects ightarrow woodpecker

(ii) Grass ightarrow rabbit ightarrow wolf

* Are the pyramid of numbers having same structure in both of the above two cases as compare to the example given in the paragraph?



26. Draw the pyramid of number for the following food chains.

(i) Banyan ightarrow insects ightarrow woodpecker

(ii) Grass ightarrow rabbit ightarrow wolf

* Are the pyramid of numbers having same structure in both of the above two cases as compare to the example given in the paragraph?

27. Think why are the pyramids always upright?



28. Obsere the data given in the following

table.

In which year lake - water spread are is more ?

Why?

Classes	Area in 1967 (Km ²)	Area in 2004 (Km ²)
Lake - water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	. 180.38	243.03





29. Obsere the data given in the following

table.

How do you think weeds are more in the lake ?

Classes	Area in 1967 (Km ²)	Area in 2004 (Km ²)
Lake – water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	. 180.38	243.03

30. Obsere the data given in the following

table.

What are th reasons for decrease in lake area ?

Classes	Area in 1967 (Km ²)	Area in 2004 (Km ²)
Lake – water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	. 180.38	243.03

Watch Video Solution

31. Obsere the data given in the following

table.

How do the above reasons lead pollution ?

Classes	Area in 1967 (Km ²)	Area in 2004 (Km ²)
Lake – water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	. 180.38	243.03



32. Obsere the data given in the following table.

How was the threat to the lake due to

pollution discovered ?

Classes	Area in 1967 (Km ²)	Area in 2004 (Km ²)
Lake – water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	. 180.38	243.03



Watch Video Solution

33. Obsere the data given in the following table.

What could be the reasons for the migration

of birds to this lake ?

Classes	Area in 1967 (Km ²)	Area in 2004 (Km ²)
Lake – water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	. 180.38	243.03



Watch Video Solution

34. Observe the following table showing different activities in the lake and thier influence.

What are the factors that affected the number

of migratory birds to decrease ?

				(4 Marks
Problem	Agricultural practices	Aquaculture practices	Industrial activities	Human activities
Biological				
1. Decreased				
Migratory birds	-	+	-	-
2. Population loss of	-	+	-	-
flora and fauna				
Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+

Legend : (+) means has influence on the mentioned problem.

(-) means has no influence on the mentioned problem.

Watch Video Solution

35. Observe the following table showing different activities in the lake and thier influence.

Do you find any relationship between bio-

logical and physical problems ?

				(4 Marks)
Problem	Agricultural practices	Aquaculture practices	Industrial activities	Human activities
Biological				
1. Decreased				
Migratory birds	-	+	-	-
2. Population loss of	-	+	-	-
flora and fauna				
Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+

Legend : (+) means has influence on the mentioned problem.

(-) means has no influence on the mentioned problem.

Watch Video Solution

36. Observe the following table showing different activities in the lake and thier influence.

What are the reasons for chemical problems ?

				(4 Marks
Problem	Agricultural	Aquaculture	Industrial	Human
	practices	practices	activities	activities
Biological				
1. Decreased				
Migratory birds	-	+	-	-
2. Population loss of	-	+	-	-
flora and fauna				
Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	÷	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+

Legend : (+) means has influence on the mentioned problem.

(-) means has no influence on the mentioned problem.

Watch Video Solution

37. Observe the following table showing different activities in the lake and thier influence.

What happens if he dissolved oxygen reduced

in lake water?

				(4 Marks
Problem	Agricultural practices	Aquaculture practices	Industrial activities	Human activities
Biological				
1. Decreased				
Migratory birds	-	+	-	-
2. Population loss of	-	+	-	-
flora and fauna				
Pathogens	-	-	-	+
Chemical]		
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+

Legend : (+) means has influence on the mentioned problem.

(-) means has no influence on the mentioned problem.

Watch Video Solution

38. Observe the following table showing different activities in the lake and thier influence.

Is BOD of turbid and nutrient rich water high

or low ? what are it's consequences ?

				(4 Marks
Problem	Agricultural practices	Aquaculture practices	Industrial activities	Human activities
Biological				
1. Decreased				
Migratory birds	-	+	-	-
2. Population loss of	-	+	-	-
flora and fauna				
Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+

Legend : (+) means has influence on the mentioned problem.

(-) means has no influence on the mentioned problem.

Watch Video Solution

39. Observe the following table showing different activities in the lake and thier influence.

People living in catchment area of Kolleru

faced so many probles. Why?

				(4 Marks
Problem	Agricultural	Aquaculture practices	Industrial activities	Human activities
	practices	practices	activities	activities
Biological				
1. Decreased				
Migratory birds	-	+	-	-
2. Population loss of	-	+	-	-
flora and fauna				
Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+

Legend : (+) means has influence on the mentioned problem.

(-) means has no influence on the mentioned problem.

Watch Video Solution

40. Name any two pesticides/insecticides you

have heard about.

41. How are the food grains and cereals being stored in your house and how do you protect them from pests and fungus?



42. Wher from pollutants enter to the water

sources?

43. How can you say fishes living in water having heavy metals in their bodies?Watch Video Solution

44. Researchers found that pollution levels increse during monsoon season. Why they found so?

45. Why did people also suffer from various disease after consuming fishes living in local water reservoir?



46. What is the food chain that has been

discussed in the above occurrence?



47. How did the campaign disturb the food

chain in the field?

Watch Video Solution

48. How did these disturbances affect the

environment?

49. Is it right to eradicate a living organism in

an ecosystem? How is it harmful?

Watch Video Solution

50. Were the sparrows really responsible? What was the reason for the fall in crop production?

51. What was the impact of human activities

on the environment?

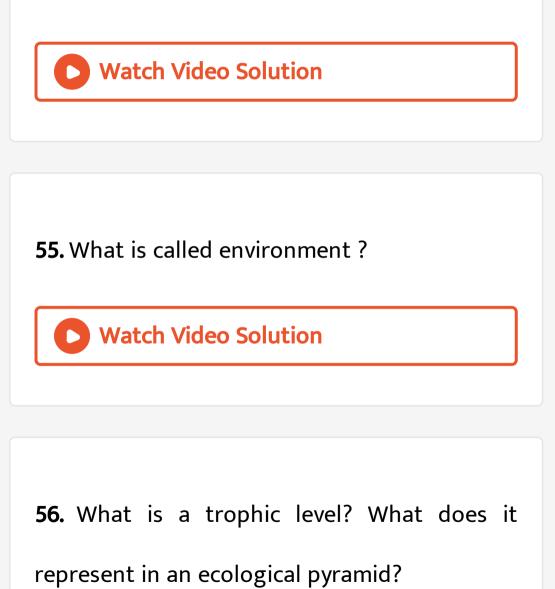
Watch Video Solution

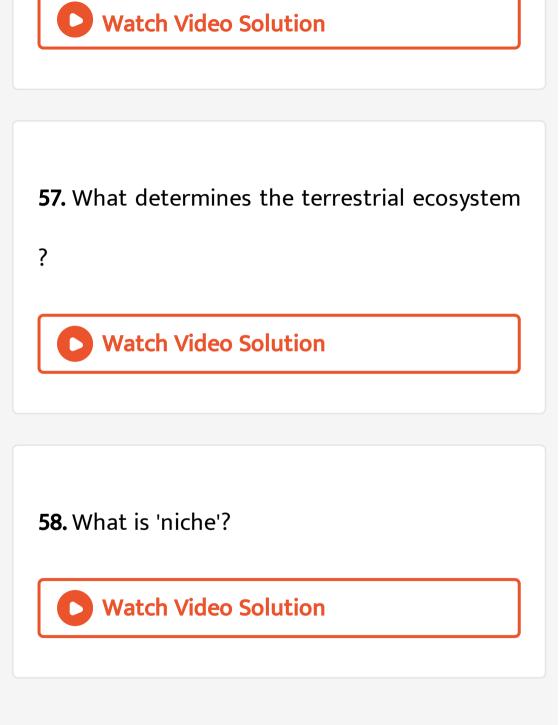
52. What is biofuel?

Watch Video Solution

53. What is biosphere?

54. What does a food chain how?





59. A food chain represents a unidirectional

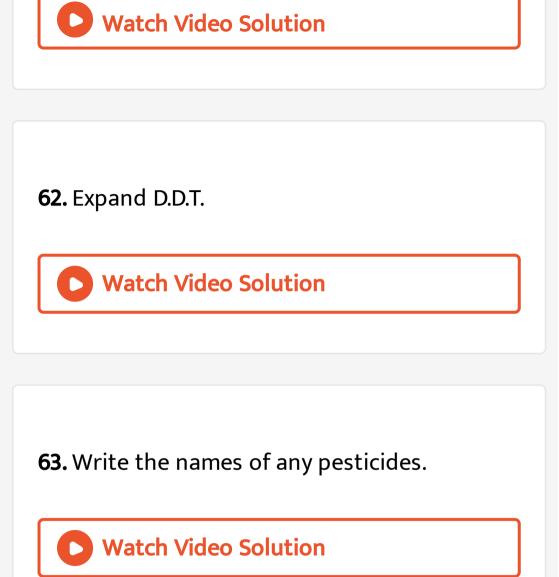
flow of 'X'. Then what is 'X'?



60. What are pesticides?

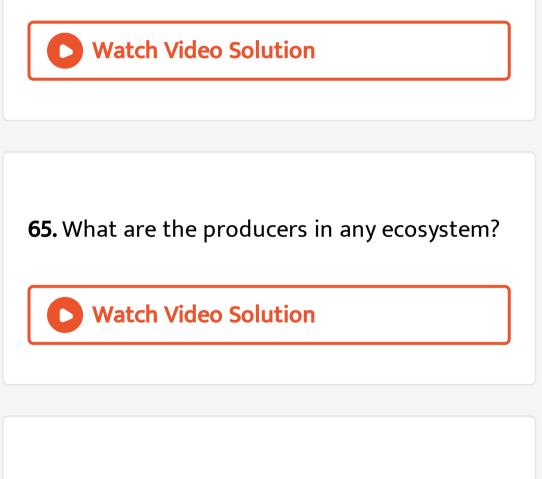
Watch Video Solution

61. What is the source of energy for all ecosystems?



64. Arrange the following in a food chain.

Big fish, Diatoms, Larvae, Small fish.



66. What is ecological efficiency?

67. Which organisms belong to the second and

fourth trophic level ?

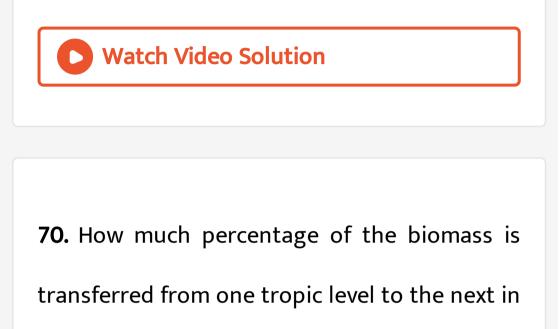
Rats, Grass, Snake, Eagle.

Watch Video Solution

68. How do pesticides show ill - effects in the

birds?

69. Give one example for "perrfect pesticide".

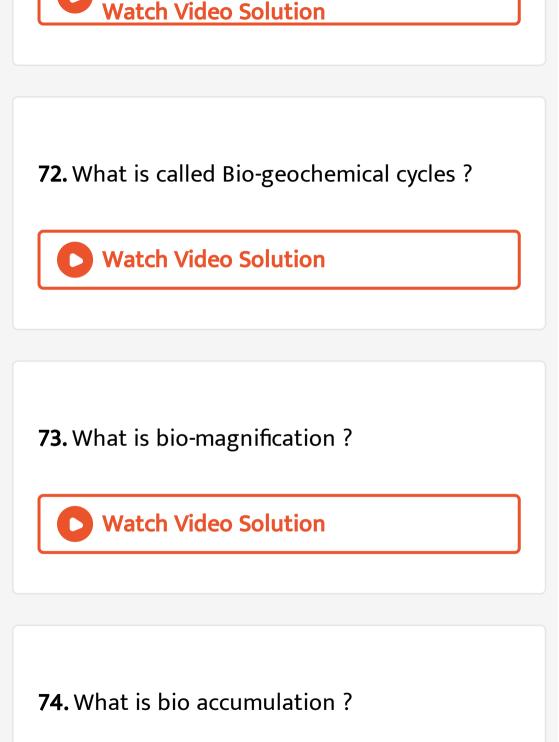


a food chain?

Watch Video Solution

71. What is 10% law ?







75. How many types of ecological pyramids are

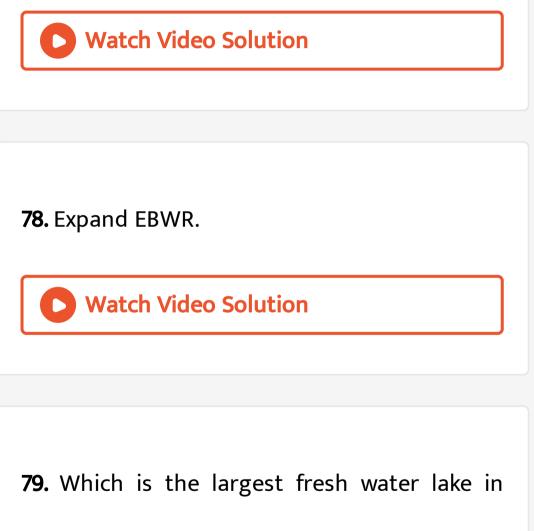
there in practice? Name them.



76. What is BOD?



77. Who started "Operation Kolleru"?



India ? Where did it exist ?

80. Who introduced 'Ecological pyramids'?

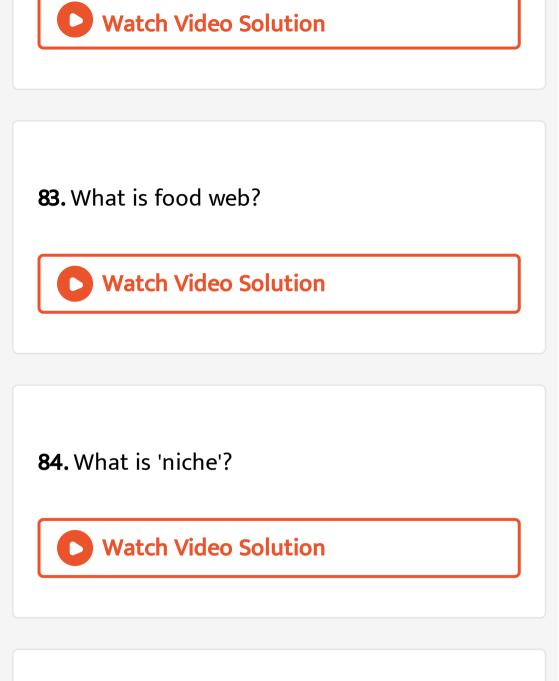
Watch Video Solution

81. Why does pyramid of numbers sometimes

does not look like a pyramid at all ?

Watch Video Solution

82. What is food web?



85. What is an ecological pyramid?



86. What is a pyramid of numbers? Write a brief note on the pyramid of numbers with the heplp of a block diagram.



87. What does the pyramid of number represent?



88. What does each bar represent in a pyramid

of number?

Watch Video Solution

89. For tree and grassland ecosystems Pyramid

of biomass is

90. An inverted pyramid of biomass can be

found in which ecosystem?

Watch Video Solution

91. When does the species at the top of the

pyramid get more energy?

Watch Video Solution

92. What is ecological efficiency?



94. Why are the temperatures very high during

the day and cold during the nights in deserts ?



95. How can we draw a food chain?



96. Which process helps to convert the solar energy into suitable form of energy for animals to consume?

97. What limits the number of trophic levels in

a fooc chiain?

Watch Video Solution

98. "Man is at the apex of most food chains ",

how could yo ujustify the statement ?

99. Which food chains are advantageous in terms of energy?
Watch Video Solution

100. Construct a food chain composing the

following : Snake, Hawk, Rats, Plants.

101. Which of the following will have the maximum concentration of harmful chemicals in its body?

Peacock, Frog, Grass, Snake, Grasshopper.

Watch Video Solution

102. To create awareness on "Water conservation" in your locality, what slogan you will suggest ?

103. Suggest one alternative method in place

of pesticides to protect crops ?

Watch Video Solution

104. What happens if decomposers are

removed from the foodweb?

105. By taking two plants of your surroundings as examples, explain how they protect themselves against the animals which eat them.

Watch Video Solution

106. Write some slogans for protection of

Environment .

107. We can't expect the world without sparrows. So how should be our concern towards their conservation?

Watch Video Solution

108. Observe the following given below. Draw

the pyramid of numbers.

$$Grass \rightarrow Goat \rightarrow Man$$



 109. What are the abiotic factors of

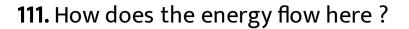
 ecosystem?

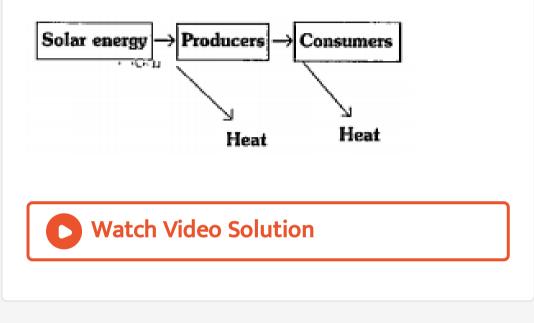
 Watch Video Solution

110. Read the following passage. Answer the

questions

What abiotic factor is more useful for plants ?





112. Draw the pyramid diagrams of the

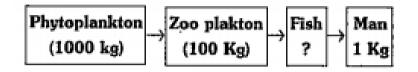
consumers of the emplty boxes.





113. How much of weight is entered into the

body of fish as per the given flow chart ?



Watch Video Solution

114. Draw the pyramid of number for the following food chains. (i) Banyan \rightarrow insects \rightarrow woodpecker

(ii) Grass ightarrow rabbit ightarrow wolf

* Are the pyramid of numbers having same structure in both of the above two cases as compare to the example given in the paragraph?

Watch Video Solution

115. Mention the major ecosystem of the earth.

116. What will happen if we remove predators

from food web?

Watch Video Solution

117. "The pyramids of biomass of terrestrial ecosystem are always upright" said Jyothsna. Do you agree with this statement or not? Give reasons.



118. A forest ecosystem , having a lot of green plants has some rabbits, wolves and leopards in it.

Write the possible food chain comprising all

the four animals.

Watch Video Solution

119. A forest ecosystem , having a lot of green plants has some rabbits, wolves and leopards in it.

Write the possible food chain comprising all

the four animals.



120. Collect the data about the bio-fertillizers

which are considered as the best alterntives to

chemical fertilizers.



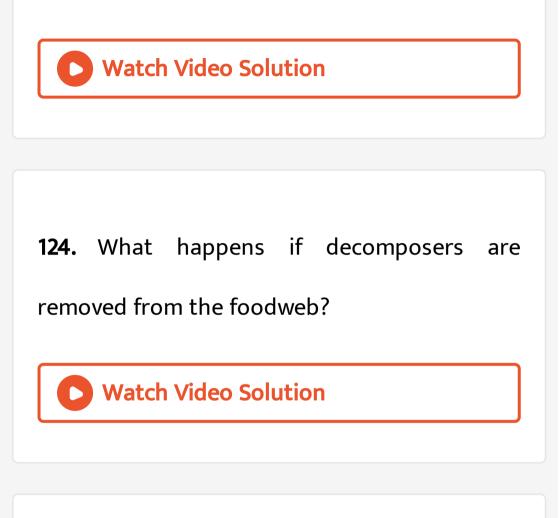
121. List out some human activities which altered the communities of plants and animals in their natural ecosystem.



122. What kind of changes may come in an ecosystem due to development of a large town?



123. Are al terrestrial ecosystems similar?



125. What will happen to grasslands if all the

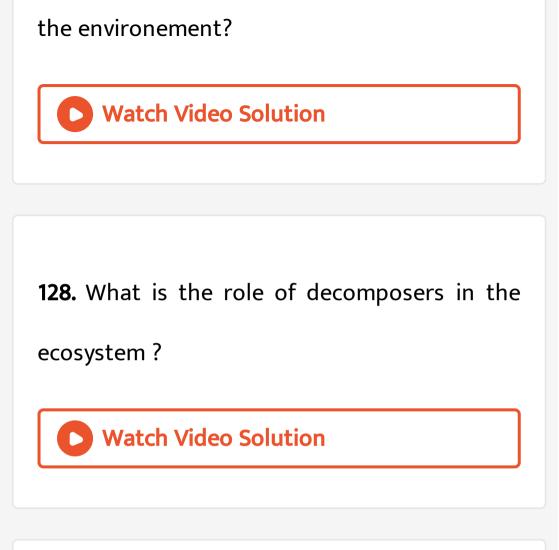
grazers are removed from there?



126. The number of malarial patients in a village increases tremendously, when a large number of frogs were exported from the village. What could be the cause for it? Explain with help of a food chain.

Watch Video Solution

127. If al the waste we generate is biodegradable, what impact may this have on



129. Can you agree that all plants are actually

producers of energy?

130. Write any 4 slogans on the necessity of

forests and on their conservation.



131. How does the given below concepts differs?

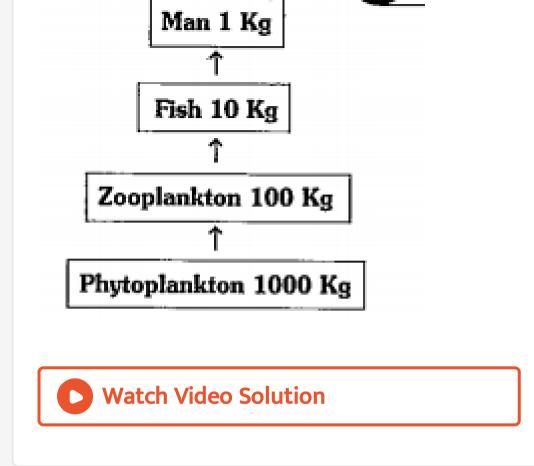
(a) Bioaccumulation

(b) Biomagnification.

132. The biomass of a producers in an ecosystem is calculated as 3500 kgs. Calculate the biomass of primary, secondary, tertiary consumers.

Watch Video Solution

133. Observe the given figure and add a note on it.



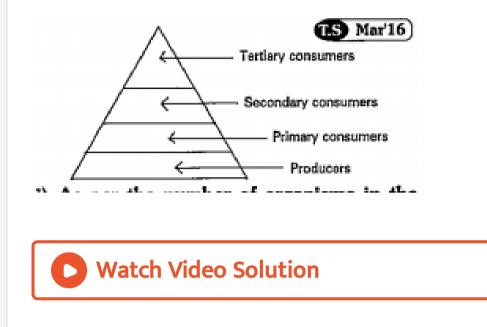
134. Correct the food pyramid and draw it in

correct manner.



135. Observe the pyramid of number which is given below and answer the questions.As per the number of organisms in the tropic level, which group of organisms are more in

number and which are less in number ?

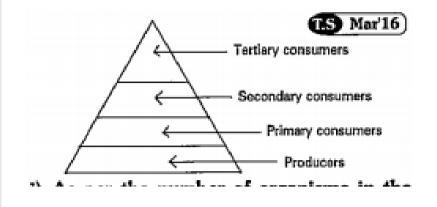


136. Observe the pyramid of number which is

given below and answer the questions.

What happens if Secondary sonsumers

disappear?

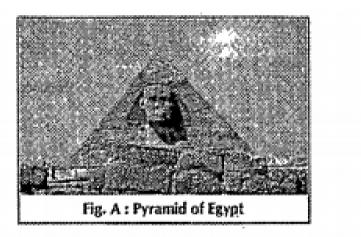




137. Draw the diagram of Pyramid of Number



138. Observe the pictures given below. Fig A indicates pyramid of Egypt and Fig B indicates Ecological pyramid. Explain which type of ecological pyramid is this . Name some kinds of ecological pyramids..



139. Taking the followin food chain as example draw pyramid of boimass.E.g: Grass- Eagle - Herbivores- Carnivores.

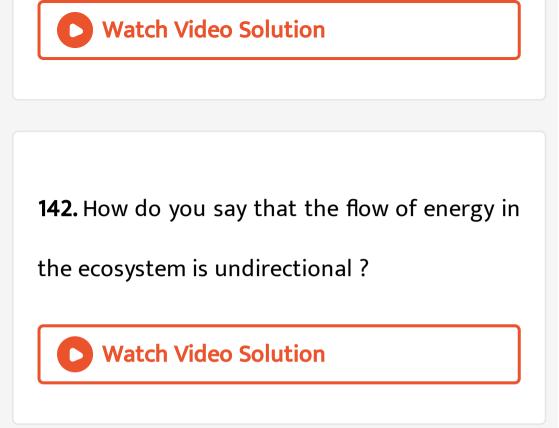
Watch Video Solution

140. Every organism has a position in a food

web . Write a poem appreciating this.

Watch Video Solution

141. Minamata disease is due to the pollutant



143. What will happen if all the herbivores are

removed from a food web?

144. shravya said to Abhijith - "The pyramid of biomass is an aquatic ecosystem is always inverted". Do you support this statement of Shravya ? Why or Why not ?

Watch Video Solution

145. Calculate the amout of energy avilable to

lion in the following food chain, if plants have

20,000j of energy availabel from the sun

 $\mathsf{Plants} \leftrightarrow \mathsf{Deer} \leftrightarrow \mathsf{Lion}$

146. Collect the information about natural pest controlling methods and pictures.

Watch Video Solution

147. How do you understand the interdependency of animals and plants ? How

do you appreciate that ?

148. Observe this flow chart and write about it.

Phytoplankton \rightarrow Zoo plankton \rightarrow Fish \rightarrow Man

1000 kg 100 kg 10 kg 1 kg



149. What determines the terrestrial

ecosystem?

150. Write a short note on food chain and food

web.

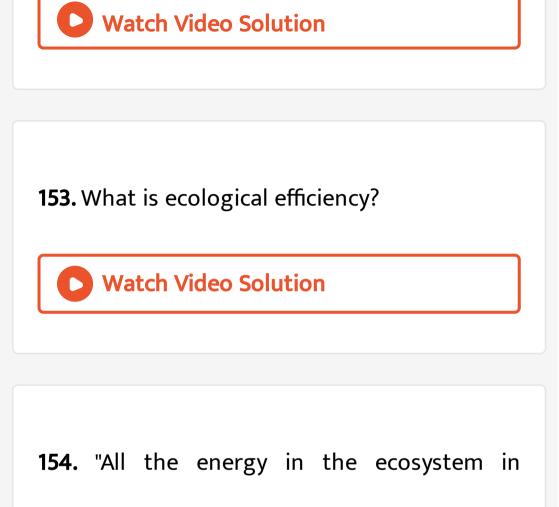


151. The organisms which are not represented

in ecological pyramids are



152. Which pyramid is always upright ? Why?



ultimately derived from sunlight." Justify.

155. Write a short note on pyramid of number for any food chain. What can we conclude from this pyramid of numbers?

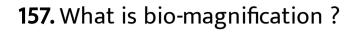
(i) tree

(ii) insect

(iii) woodpecker

Watch Video Solution

156. Write a short note on pyramid of biomass.





158. Write a comparative note on pyramid of

number and pyramid of biomass.

159. Write a comparative note on pyramid of

biomass and pyramid of energy.

Watch Video Solution

160. Write a comparative note on pyramid of

number and pyramid of energy.

161. Geetha said "a given species may occupy more than one tropic level in the same ecosystem at the same time". Do you support her or not? Explain your answer with example.



162. Draw a flow chart to describe the process

of bioaccumulation and bio magnification of

toxic pesticides in the body of eagles.



163. If we introduce a man into a forest ecosystem, at which level of food chain we will place him? Explain your answer.

Watch Video Solution

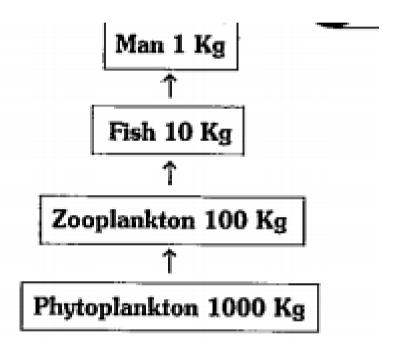
164. Draw the ecolgoical pyramids for the

given food chain.

 $\mathsf{Banyan} \to \mathsf{Herbivorous} \quad \mathsf{birds} \to \mathsf{Carnivorous}$

birds.

165. Observe the given figure and add a note on it.



166. What will happen if all the carnivores are

removed from the earth?

Watch Video Solution

167. In a grassland ecosystem, some students are trying to kill the grasshoppers for fun. You did't like this. How do you convince your friends not to do so?

168. What is number pyramid ? What does it

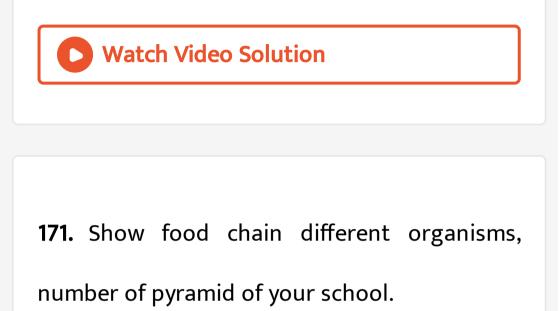
indicate ?



169. Why do the number of organisms get decreased as we move from producer to different level of consumes?



170. Draw the diagram of Pyramid of Number



Watch Video Solution

172. Write what friendly ecosystem activities you will conduct in you school.



173. Why do the number of organisms get decreased as we move from producer to different level of consumes?

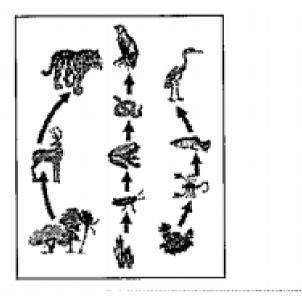
Watch Video Solution

174. What is an ecological pyramid?

175. With the help of this diagram , answer the questions.

What is the relation you observe in the

pictures. What does it denote ?





176. With the help of this diagram , answer the questions.Grass \leftrightarrow Eagle \leftrightarrow Snake \leftrightarrow Frog \leftrightarrow Grasshopper. Is it a correct order ? If not rearrange and

swrite.



177. With the help of this diagram , answer the

questions.

Name the autotroph in the diagram.

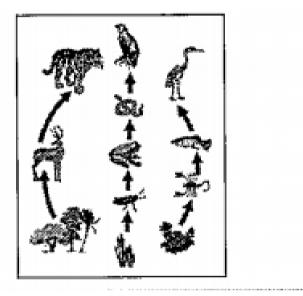




178. With the help of this diagram , answer the

questions.

What will you place in the apex ?





179. What steps you would like to follow on

your part to conserve bio-diversity?

Watch Video Solution

180. In a grassland ecosystem, some students are trying to kill the grasshoppers for fun. You did't like this. How do you convince your friends not to do so?



181. Nature is the sum of all types of ecosystem. In this every factor works with co-ordination. How can you appreciate this ?

Watch Video Solution

182. The farmers of your locality are using chemical fertilizers. You suggested them to use natural fertilizers. Prepare a pamphlet to explain the need of Bio-fertilisers.



183. Suggest one alternative method in place

of pesticides to protect crops ?

Watch Video Solution

184. Did you read the story of Kolleru Lake ? Arrange its saddest strory in the order and write it in a report form.

185. Read the passage

People started trapping, posoning and killing sparrow s in large numbers.Several free fire zones were set up for shooting the sparrows. People would beat drums to scare the birds from landing, so the sparrow ere forced to keep glying until they dropped dead from fatigue. Sparrow nests were torn down, egges were broken and nesttling were killed .Non material rewardsand recoginition were offered to school, work uits and gvernment agencies in accrdance with the number of sparrows

killed . Later some scientists who cut open the digestive system of deal sparrows found that three- fourth of the contents were of insects harmful for crops adn ony one fourth contained grains. The scientiffic findings showed that sparrow were basically beneficial birds for humans. Rather than being increased, crop yields after the campaign were substantially decreased. Why the government of China mobilized o

hunt down the sparrows ?



186. Read the passage

People started trapping, posoning and killing sparrow s in large numbers.Several free fire zones were set up for shooting the sparrows. People would beat drums to scare the birds from landing, so the sparrow ere forced to keep glying until they dropped dead from fatigue. Sparrow nests were torn down, egges were broken and nesttling were killed .Non material rewardsand recoginition were offered to school, work uits and gvernment agencies in accrdance with the number of sparrows

killed . Later some scientists who cut open the digestive system of deal sparrows found that three- fourth of the contents were of insects harmful for crops adn ony one fourth contained grains. The scientiffic findings showed that sparrow were basically beneficial birds for humans. Rather than being increased, crop yields after the campaign were substantially decreased. What is the loss caused due to the killing of

sparrows?



187. Read the passage

People started trapping, posoning and killing sparrow s in large numbers.Several free fire zones were set up for shooting the sparrows. People would beat drums to scare the birds from landing, so the sparrow ere forced to keep glying until they dropped dead from fatigue. Sparrow nests were torn down, egges were broken and nesttling were killed .Non material rewardsand recoginition were offered to school, work uits and gvernment agencies in accrdance with the number of sparrows

killed . Later some scientists who cut open the digestive system of deal sparrows found that three- fourth of the contents were of insects harmful for crops adn ony one fourth contained grains. The scientiffic findings showed that sparrow were basically beneficial birds for humans. Rather than being increased, crop yields after the campaign were substantially decreased.

What is the reason for less yield in the fields ?

188. Observe the table. Answer the follwoing

questions basing on the information.

Why the Kolleru Lake filled up with weeds ?

Classes	Area in 1967	Area in 2004
	(Sq.Km)	(Sq.Km)
Lake-water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	`15.20
Lake-liable to flood in		
rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	180.38	180.38

189. Observe the table. Answer the follwoing

questions basing on the information.

When was the aquaculuture increased in Kolleru ?

Classes	Area in 1967 (Sq.Km)	Area in 2004 (Sq.Km)
	TORONO MORE TO TO TO TO TO TO TO	2.04.400.949.949
Lake-water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	`15.20
Lake-liable to flood in		
rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	180.38	180.38

190. Observe the table. Answer the follwoing

questions basing on the information.

Which type of suggestion will you give for protection of Kolleru Lake ?

Classes	Area in 1967	Area in 2004
	(Sq.Km)	(Sq.Km)
Lake-water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	`15.20
Lake-liable to flood in		
rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Settlements	0.31	1.37
Total	180.38	180.38

Watch Video Solution

191. Why most of the food chains consist of four steps?



192. Read the flow chart and answer the following.

Name the producer and cusumer in the above

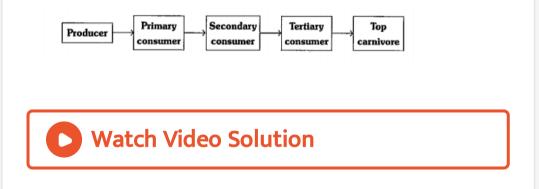
food chain ?





193. Read the flow chart and answer the following.

Guess what does the arrow s marked by you indicate ?



194. Why most of the food chains consist of four steps?
Watch Video Solution

195. Why do the number of organisms get decreased as we move from producer to different level of consumes?

Watch Video Solution

196. Read the table and answer the following

questions.

How do you think weeds are more in the lake ?

Causes	Area in 1967	Area in 2004
Lake-water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Enchrochment	0.31	1.37
Total	180.38	180.38

Watch Video Solution

197. Read the table and answer the following

questions.

How do the above reasons lead to pollution?

Causes	Area in 1967	Area in 2004
Lake-water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Enchrochment	0.31	1.37
Total	180.38	180.38



Watch Video Solution

198. Read the table and answer the following

questions.

What are the reasons for decrease in lake

area?

Causes	Area in 1967	Area in 2004
Lake-water spread area	70.70	62.65
Lake with sparse weed	0	47.45
Lake with dense weed	0	15.20
Lake-liable to flood in rainy season	100.97	0
Aquaculture ponds	0	99.74
Rice fields	8.40	16.62
Enchrochment	0.31	1.37
Total	180.38	180.38



Watch Video Solution

199. Read the table and answer the following

questions.

How was threat to the lake due to pollution of

the lake discovered ?

Causes	Area in 1967	Area in 2004	
Lake-water spread area	70.70	62.65	
Lake with sparse weed	0	47.45	
Lake with dense weed	0	15.20	
Lake-liable to flood in rainy season	100.97	0	
Aquaculture ponds	0	99.74	
Rice fields	8.40	16.62	
Enchrochment	0.31	1.37	
Total	180.38	180.38	



Watch Video Solution

200. Read the table and answer the following

questions.

What are the factors that affected the number

of migratory birds to decrease ?

Problem practices	Agricultural	Aquacultural	Industrial	Humans
	practices	practices	activities	
Biological				
1. Decreased Migratory birds	-	+	-	-
2. Population loss of floura and fauna	-	+	-	-
3. Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+



201. Read the table and answer the following

questions.

Do you find any relationship between

biological and physical problems ?

Problem practices	Agricultural	Aquacultural	Industrial	Humans
	practices	practices	activities	
Biological				
1. Decreased Migratory birds	-	+	-	-
2. Population loss of floura and fauna	-	+	-	-
3. Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+

I seemd . I () means has influence on the montioned problem



Watch Video Solution

202. Read the table and answer the following

questions.

What are the reasons for chemical problems ?

Problem practices	Agricultural practices	Aquacultural practices	Industrial activities	Humans
Biological				
1. Decreased Migratory birds	-	+	-	-
2. Population loss of floura and fauna	-	+	-	-
3. Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+



203. Read the table and answer the following

questions.

People living in catchment area of Kolleru face

many problems. Why?

Problem practices	Agricultural	Aquacultural	Industrial	Humans
	practices	practices	activities	
Biological				
1. Decreased Migratory birds	-	+	-	-
2. Population loss of floura and fauna	-	+	-	-
3. Pathogens	-	-	-	+
Chemical				
1. Eutrophication	+	+	-	+
2. Toxic contamination	+	+	+	-
Physical				
1. Siltation	+	+	-	-
2. Flooding	+	+	-	+

I seemd + / +) means has fullyones on the montlaned problem

Watch Video Solution



1. What does a food chain always start with?

A. The herbivore

B. The carnivore

C. The producer

D. None of them

Answer:

Watch Video Solution

2. Which of the following do paints not compete for?

A. Water

B. food

C. Space

D. All above

Answer:

Watch Video Solution

3. Ban al pesticides, this means that

A. Control on usage of pesticides

B. Prevention of pesticides

practices

D. Stop biochemical factories

Answer:

Watch Video Solution

4. According to charles eiton

A. Carnivores at the top of the pyramid

B. Energy trapping is high at the to the

pyramid

C. No producers at the to of the pyramid

D. A and C

Answer:

Watch Video Solution

5. The ground flora of Tundra constitute

A. Mosses

B. Herbs

C. Shrubs

D. Tall trees

Answer:

Watch Video Solution

6. Reindeer can be seen in

A. Rain forest

B. Tundra

C. Desert

D. Valleys

Answer:



7. Sporadic rainfall is present in

A. Tundra

B. Desert

C. Hills

D. Grassland

Answer:

Watch Video Solution

8. Domination of grass species can be seen in

A. Tropic forest

B. Savannah

C. Hills

D. Desert





9. Rich flora and fauna can be seen here

A. Tundra

B. Desert

C. Mountain

D. Tropical forest

Answer:



10. Desert Ship?

A. Elephant

B. Lion

C. Desert fox

D. Camel

Answer:



11. What is correct for the artificial ecosystem ?

A. Space ship

B. Aquarium

C. Terrarium

D. All the above

Answer:

Watch Video Solution

12. Which of the following acts as a primary as

well a secondary consumer in the forest eco-

system?



13. Example for non-biodegradable pesticide

A. D.D.T

B. Malathian

C. B.H.c

D. All the above

Answer:

Watch Video Solution

14. The food by its nature is

A. Physical energy

B. Chemical energy

C. Kinetic energy

D. Potential energy

Answer:



15. The amount of energy available at successive trophiclevels

A. Biomass

B. Gobargas

C. Biogas

D. Biofuel

Answer:



16. Read the following statements and select the correct option:

(a) In an aquatic ecosystem, pyramid of biomass is inverted.

(b)Biomass depends upon reproductive potential and longevity of individuals.

A. upright

B. vertical

C. inverted

D. cyclic

Answer:

Watch Video Solution

17. The following per cent of energy dissipated

at each energy transfer

A. 60-40%

B. 60-65%

C. 80-90%

D. 1

Answer:

Watch Video Solution

18. The correct path of energy flow in an ecosystem is

A. Food web

B. Ecographs

C. Ecobirds

D. Ecotones

Answer:

Watch Video Solution

19. In ecological pyramids, producers are represented here

A. I trophic level

B. II Trophic level

C. III Trophic level

D. IV Trophic level

Answer:

Watch Video Solution

20. Which of the following is an autotroph ?

A. Man

B. Elephant

C. Green plants

D. Bacteria

Answer:



21. The maximum energy is stored at following

tropical level in any ecosystem

A. Energy level

B. Population

C. Niche

D. Habitat

Answer:



22. The energy provider in an ecosystem is

A. The sun

B. Water

D. Soil

Answer: Plants

Watch Video Solution

23. Pyramid of numbers is

A. The number of producers

B. The number of carnivores

C. The number of decomposers

D. The number of organisms in a food

chain

Answer:



24. Ecological niche is

A. What it eats

B. Animal postion in food chain

C. Its mode of life

D. All the above

Answer:

Watch Video Solution

25. shravya said to Abhijith - "The pyramid of biomass is an aquatic ecosystem is always inverted". Do you support this statement of Shravya ? Why or Why not ?

A. Upright

B. Inverted

C. Partly inverted

D. None of the above

Answer:

Watch Video Solution

26. Scientist who defined ecology as the study

of interrelationships between organisms and

their environment is

- A. Mineral circulation
- B. Cycling of materials
- C. Biogeochenmiacal cycles
- D. All the above

Answer:



27. The concept of ecological pyramid was first

introduced by

A. Lindman

- B. Slobokdin
- C. Charles Elton
- D. Edward Jenner

Answer:

Watch Video Solution

28. Which of the followin is a secondary consumer in a grassland ecosystem ?

A. Grass

B. Frog

C. Insect

D. Snake

Answer:

Watch Video Solution

29. Complete the blanks.

Any type of plant or animal material that can

be converted into energy is called ____(1). The

flow of energ in an ecosystem is always (2).

A. Food chain

B. Food web

C. Biomass

D. Trophic level

Answer:

30. How much percentage of the biomass is transferred from one tropic level to the next in a food chain?

A. 12+-10%

B. 10-20%

C. 15-18 %

D. 20-25 %



31. Biomass can also be used as a

A. Diesel

B. Biofuel

C. Biogas

D. None

Answer:

32. What does the first tropic level of any ecological pyramid comprise of?

A. Secondary consumers

B. Primary consumers

C. Producers

D. Tertiary consumers

Answer:

33. In November 1999 , The Government of Andhra Pradesh had declared Kolleru lake as -

A. Plant Sanctuary

B. Animal sanctuary

C. Bird sanctuary

D. Floral sanctuary

Answer: None

34. The second trophic level in a lake is-

A. More

B. Less

C. Between

D. Above

Answer:

35. Write the proper of food chain Eagle \rightarrow rat \rightarrow snake \rightarrow grain grain \rightarrow rat \rightarrow snake \rightarrow eagle snake \rightarrow eagle \rightarrow rat \rightarrow grain $\mathsf{rat} \to \mathsf{snake} \to \mathsf{grain} \to \mathsf{eagle}$ A. Eagle \leftrightarrow rat \leftrightarrow snake \leftrightarrow grain B. Grain \leftrightarrow rat \leftrightarrow snake \leftrightarrow eagle C. Snake \leftrightarrow eagle \leftrightarrow rat \leftrightarrow grain D. Rat \leftrightarrow snake \leftrightarrow grain har eagle



36. In this food chain, the organism which belongs to the second trophic level is....

A. Snake

B. Plant

C. Grasshopper

D. Frog





37. A farmer introdued garden lizards into his agricultural fields to eradicate insects. What do you name this method ?

A. Environmental ethic method

B. biological control method

C. Bioaccumulation method

D. Biomagnifiction method





38. Many pollutantts are released into water from an industrial area. If residue appears in living organisms of a food chain, then it is called.

- A. Bio -Remediation
- B. Bio- Mimicary
- C. Bio- Pollution
- D. Bio- Magnification





39. Between grass ad grasshopper food chain ends with

A. Producer

B. Saprophyte

C. Decomposers

D. Consumers

Answer:



40. Match the items of first line with second

line.

()

- 1. Charles Elton
- 2. Charles Darwin
- 3. Lavoisier

- a) Respiration is a combustion process
- b) Ecosystem
- c) Evolution

А. 1-b,2 -с ,3-а

B. 1-b, 2-a, 3-c

D.1-c2-b-3-a

Answer:



41. Consumers are divided based on the factors given bel,ow in an ecosystem.

A. Consumed food

B. Trophic level

C. Consumed food, trophic level

D. Energy

Answer:

Watch Video Solution

42. You have prepared a work what for collecting information on observing different food chains. One of the following important component in the work sheet.

- A. Details of group members
- B. Food relationship
- C. Names of animal
- D. Number of carnivores

Answer:

Watch Video Solution

43. The primary consumer is....

A. Rabbit

B. Tiger

C. Frog

D. Snake

Answer:

Watch Video Solution

44. Find out the missing thing from the table.

AL - OCCUT MAM MODELLANEL - 2010 ()	
Base	
Number of organism	
Flow of energy	

- A. Ecological Pramid
- B. Pyramid of energy
- C. Pyramid of bio-mass
- D. Giza Pyramid

Answer:



45. Observe the following a and b statements :

The number of organisms decrease as e move

from producers to consumers.

The consumers are placed in the front

position in a food chain.

A. both a and b are true

B. a is true, b is false

C. a is false,b is true

D. both a and b are false

Answer:

46. Consider the following .

The place of organism in a food web is called "Niche".

Niche explains the living habits and food habits of organism.

A. both a and b are true

B. a is false, b is true

C. both a and b are false

D. a is true , b is false



47. Consider the following.

The amount of bio-mass decreases from producers to carnivores in terrestrial ecosystem.

The amount of bio-mass decreases from producers to carnivores in aquatic ecosystem.

A. both a and b are true

B. a is true, b is false

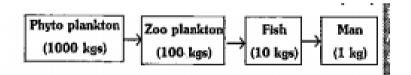
C. both a and b are false

D. a is false, b is true

Answer:



48. observe the energy flow in the flow chart



A. 1,2 correct

B. 2,3,4 correct

C. 2,4 corect

D. All are corrrect

Answer:

Watch Video Solution

49. Insectivores feed on aphids, grasshopper.We can represent the statement through one of the following.

A. Food level

B. Food chain

C. Trophic level

D. Food web

Answer:



50. The coutry which killed the sparrows by thinking they are the cause for decrease in crop harvest.

A. India

B. Pakistan

C. China

D. Japan

Answer:

Watch Video Solution

51. Rotation of crops, Genetic strains, Sterility

are the.....methods to prevent the pests.

A. Bio - accumulation

- B. Bio- magnification
- C. Biological control
- D. Environmental ethics

Answer:

Watch Video Solution

52. The sum of physical and biological factors along with their chemical ineraction that effect on organism is called......

A. Ecosystem

- B. Atmosphere
- C. Environment
- D. Food chain

Answer:

Watch Video Solution

53. Air, water, soil, sunlight are called....factors.

A. Biotic

B. Abiotic

C. Chemical

D. Physical

Answer:

Watch Video Solution

54. According to charles eiton

A. Food chain

B. Food web

C. Ecological pyramid

D. Trophic level

Answer:

Watch Video Solution

55. Pyramid : Egypt: Ecological pyramids:

A. Odum

B. Francis Bacon

C. Charles Darwin

D. Charles Elton

Answer:

Watch Video Solution

56. Kolleru lake dischares its water into the Bay of Bengal through thechannel.

A. River Narmad

B. River Godvari

C. Maddileru channel

D. Upputeru channel

Answer:

Watch Video Solution

57. In the year___(1), the government of andhra pradesh, declared kolleru lake

as ___(2).

A. Bird sanctuary

B. Wild life sanctuary

C. National park

D. Pisciculture centre

Answer:

Watch Video Solution

58. The Mercury, Arsenic and Lead in pesticides......

A. do not breakdown

B. breakdown

C. increases purity

D. can't acccumulate

Answer:

Watch Video Solution

59. What are the climatic influences that determine the ecosystem ?

A. Both A and b are correct. B is giving

correct explanation to A

B. A is correct B is not correct

C. A is wrong B is correct

D. Both A and B are wrong

Answer:

Watch Video Solution

60. Observe the a and b statements.

Producers are represented at the base of 'the

pyramid'.

The top of the pyramid is represented a sempty.

A. Both a and b are true

B. a is true, b is false

C. a is false,b is true

D. both a and b are false

Answer:

61. Observe the a and b statements.

In the pyramid of numbers, as we move to top position the numbver of organisms decreases. as the number of organisms decreases , the quantity of organisms also decrease.

A. both a and b are true

B. a is true, b is false

C. a is false,b is true

D. both a and b are false

Answer:



62. In pyramid of numbers, from the lower trophic level to higher trophic level there is progressive

A. i only

B. i,ii,iii

C. i,ii,iv

D. all are correct





63. Observe the a and b statements.

Photosynthesis is an essentioa process for the

life of organisms.

The abiotic factors like sunlight, C $O_{_2}$ and water

are not needed for organisms.

A. a, b both are true

B. a is true, b is false

C. a is false,b is true

D. a and b both are false

Answer:

Watch Video Solution

64. Consider the followin.

It would be better to reduce the reproductive

capacity of male insect organisms.

crop rotation method is the best practice.

A. a, b both are true

B. a is true, b is false

C. a is false,b is true

D. both a and b are false

Answer:

Watch Video Solution

65. Find out the consequence that occur due

to destruction of grassoppers in the ecosystem.

- A. Producers will dissappear
- B. Frog population riss
- C. secondary producers die due to lack of

food

D. Number of consumers rise in the

exosystem

Answer:

66. Indiscriminate use of pesticides is a cause

for

- 1) Killing of harmful insects
- 2) Killing of useful insects
- 3) Increase of crop yield
- 4) Reduce of crop yield
 - A. i and ii are correct
 - B. ii and iii are correct
 - C. i and iv ae correct
 - D. All are correct

Answer:



67. You observed fish in the industrial areas .Some of the followig heavy metals are found in them.

lead

cadmium

nickel

A. i only

B. i,ii only

C. i,iii only

D. All ae correct

Answer:

Watch Video Solution

68. Who is correct?

Srinu: Elements are made up of atoms.

Mohan: Atoms are made of elements.

A. bio-contol

- B. bio-accumulation
- C. bioa-remediation
- D. bio-magnification

Answer:



69. The correct way for facilitating shelter for

growing population.

A. Destruchtion of forests and making

shelter

B. Building shelters at sea shore area

C. Making habitat without destructing

eccosystem

D. Converting marshy land into habitat

Answer:

70. Thre following is not a reason imbalance inecosystem.

A. Deforestation

B. Same crop harvest

C. Crop rotation

D. Constructing dams

Answer:

71. The correct statement for insecticide

A. Insects die immediately after sprayng

B. Availael in low price and works

effeciently

C. Targetted insects are destroyed

D. Harmless to environment

Answer:

72. Sujatha asked to cut grass and green plants to keep the surroundings clean . This is opposed by Raffee. Why ?

A. Need more labour

B. Takes more time

C. Disturbs equilibrium

D. Artificial environment

Answer:

73. Consider the following

Aphids are small in size but their number is moreWood peckers eat aphids. Their number is less, but size is large.

A. both a and b are true

B. a is true, b is false

C. a is false,b is true

D. a and b are false

Answer:

74. Jahnavi's opinion is "Environmental movement needs mob of people and elaborate machinery". Justify the statement.

Watch Video Solution

75. Write about the four 'R's that can save environment.

76. Why most of the food chains consist of

four steps?

Watch Video Solution

77. Consider the following

Carnivores are on the top of pyramid of number.

These are large in number of size.

A. both a and b are true

B. a is true, b is false

C. both a and b are false

D. a is false, b is true

Answer:



78. For tree and grassland ecosystems Pyramid

of biomass is

A. both a and b are true

B. a is true, b is false

C. b is true, a is false

D. both a and b are false

Answer:



79. What happened in Kolleru lake due to over

alkalinity and mud formation?

a.) The Percentage OF $O_{_{\! \mathcal{O}}}$ decreased

b.)More increase in Biological Oxygen demand

and impact on aquatic organisms.

A. a is true

B. b is true

C. both a and b are true

D. both a and b are false

Answer:

Watch Video Solution

80. Observe the following a and b statements :

The less energy will be available for the higher

consumers.

Producers will get more energy.

A. both a and b are true

B. a is true, b is false

C. a is false,b is true

D. both a and b are false

Answer:

81. Observe the a and b statements.

Photosynthesis is an essentioa process for the

life of organisms.

The abiotic factors like sunlight, C $O_{_2}$ and water are not needed for organisms.

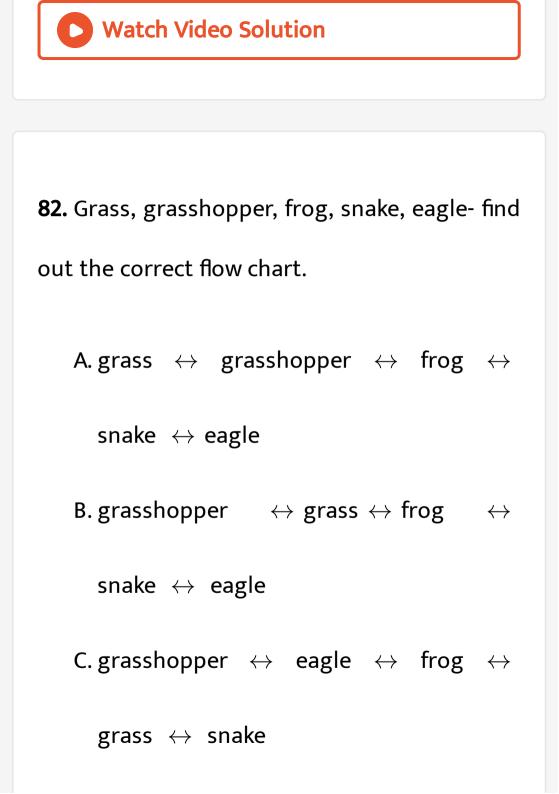
A. both a and b are tue

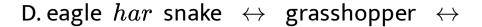
B. a is true, b is false

C. a is false,b is true

D. both a and b are fase

Answer:





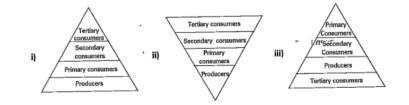
frog \leftrightarrow grass

Answer:



83. Find out the pyramid with right position of

the organisms.



A. i only

B. i,ii

C. All are correct

D. ii,iii

Answer: