



BIOLOGY

BOOKS - OSWAL PUBLICATION

NEW CHAPTERS AND QUESTIONS BASED ON LATEST TYPOLOGIES INTRODUCED BY CBSE FOR 2021-22 EXAMINATION

Life Processes Visual Case Based Questions

1. The organs A of a person have been damaged completely due to which too much of a poisonous waste material B has started accumulating in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance E which are kept in coiled form in a tank containing solution F. This solution contains

three materials G, H and I in similar proportions to those in normal blood. As the person's blood passes through long tubes of substance E, most of the wastes present in it go into solution. The clean blood is then put back into a vein in the arm of the person for circulation

- (a) What are organs A ?
- (b) Name the waste substance B
- (c) What are (i) E, and (ii) F ?
- (d) Name G, H and I
- (e) What is the process described above known as ?

A. Heart

B. Kidney

C. Lungs

D. Pancreas

Answer: B



Watch Video Solution

2. The organs A of a person have been damaged completely due to which too much of a poisonous waste material B has started accumulating in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance E which are kept in coiled form in a tank containing solution F. This solution contains three materials G, H and I in similar proportions to those in normal blood. As the person's blood passes through long tubes of substance E, most of the wastes present in it go into solution. The clean blood is then put back into a vein in the arm of the person for circulation

- (a) What are organs A ?
- (b) Name the waste substance B
- (c) What are (i) E, and (ii) F ?
- (d) Name G, H and I
- (e) What is the process described above known as ?

A. Calcareous stone

B. Salts

C. Urea

D. Clotted blood

Answer: C



Watch Video Solution

3. The organs A of a person have been damaged completely due to which too much of a poisonous waste material B has started accumulating in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance E which are kept in coiled form in a tank containing solution F. This solution contains three materials G, H and I in similar proportions to those in normal blood. As the person's blood passes through long tubes of

substance E, most of the wastes present in it go into solution. The clean blood is then put back into a vein in the arm of the person for circulation

- (a) What are organs A ?
- (b) Name the waste substance B
- (c) What are (i) E, and (ii) F ?
- (d) Name G, H and I
- (e) What is the process described above known as ?

A. Rubber, Glucose solution

B. Fibre, Serum

C. Cellulose, Dialysing solution

D. None of these

Answer: C



Watch Video Solution

4. The organs A of a person have been damaged completely due to which too much of a poisonous waste material B has started accumulating in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance E which are kept in coiled form in a tank containing solution F. This solution contains three materials G, H and I in similar proportions to those in normal blood. As the person's blood passes through long tubes of substance E, most of the wastes present in it go into solution. The clean blood is then put back into a vein in the arm of the person for circulation

- (a) What are organs A ?
- (b) Name the waste substance B
- (c) What are (i) E, and (ii) F ?
- (d) Name G, H and I
- (e) What is the process described above known as ?

A. Serum, nitrogenous compound and glucose.

B. Dissolved oxygen, glucose and alcohol

C. Water, glucose and salts

D. None of these

Answer: C



Watch Video Solution

5. The organs A of a person have been damaged completely due to which too much of a poisonous waste material B has started accumulating in his blood, making it dirty. In order to save this person's life, the blood from an artery in the person's arm is made to flow into long tubes made of substance E which are kept in coiled form in a tank containing solution F. This solution contains three materials G, H and I in similar proportions to those in normal blood. As the person's blood passes through long tubes of substance E, most of the wastes present in it go into solution. The

clean blood is then put back into a vein in the arm of the person for circulation

(a) What are organs A ?

(b) Name the waste substance B

(c) What are (i) E, and (ii) F ?

(d) Name G, H and I

(e) What is the process described above known as ?

A. Osmosis

B. Dialysis

C. Plasmolysis

D. Respiration

Answer: B



Watch Video Solution

6. The human circulatory system consist of the heart and blood vessels. By the pumping action of heart pure blood is transported from heart to the body parts and impure blood is collected from different body parts towards the lungs. The blood vessel that carry blood from heart to lungs is an exception to carry impure blood. Similarly, the blood vessel that carry blood from lungs to heart is also an exception to carry pure blood. Pumping action of heart is due to contraction and relaxation of the heart and its one complete cycle is called heart beat.

The blood vessels that carry impure blood are _____ .

A. Arteries

B. Veins

C. Capillaries

D. Pulmonary vein

Answer: B



[View Text Solution](#)

7. The human circulatory system consist of the heart and blood vessels. By the pumping action of heart pure blood is transported from heart to the body parts and impure blood is collected from different body parts towards the lungs. The blood vessel that carry blood from heart to lungs is an exception to carry impure blood. Similarly, the blood vessel that carry blood from lungs to heart is also an exception to carry pure blood. Pumping action of heart is due to contraction and relaxation of the heart and its one complete cycle is called heart beat.

The blood vessels that carry pure blood are _____.

A. Arteries

B. Veins

C. Capillaries

D. Pulmonary vein

Answer: A



[View Text Solution](#)

8. The human circulatory system consist of the heart and blood vessels. By the pumping action of heart pure blood is transported from heart to the body parts and impure blood is collected from different body parts towards the lungs. The blood vessel that carry blood from heart to lungs is an exception to carry impure blood. Similarly, the blood vessel that carry blood from lungs to heart is also an exception to carry pure blood. Pumping action of heart is due to contraction and relaxation of the heart and its one complete cycle is called heart beat.

Impure blood and pure blood are also called as:

A. Oxygenated blood and deoxygenated blood

B. Deoxygenated blood and oxygenated blood

C. Nitrated blood and filtrated blood

D. None of these

Answer: B



[View Text Solution](#)

9. The human circulatory system consist of the heart and blood vessels. By the pumping action of heart pure blood is transported from heart to the body parts and impure blood is collected from different body parts towards the lungs. The blood vessel that carry blood from heart to lungs is an exception to carry impure blood. Similarly, the blood vessel that carry blood from lungs to heart is also an exception to carry pure blood. Pumping action of heart is due to contraction and relaxation of the heart and its one complete

cycle is called heart beat.

Which gas is dissolved in the pure blood by the lungs?

- A. Nitrogen
- B. Oxygen
- C. Carbon dioxide
- D. Hydrogen

Answer: B

 [View Text Solution](#)

10. The human circulatory system consist of the heart and blood vessels. By the pumping action of heart pure blood is transported from heart to the body parts and impure blood is collected from different body parts towards the lungs. The blood vessel that carry blood from heart to lungs is an exception to carry impure blood.

Similarly, the blood vessel that carry blood from lungs to heart is also an exception to carry pure blood. Pumping action of heart is due to contraction and relaxation of the heart and its one complete cycle is called heart beat.

Average number of heart beat for a normal person at rest is about _____ .

- A. 70 to 72 per minute
- B. 60 to 70 per minute
- C. 80-90 per minute
- D. 100-110 per minute

Answer: A



[View Text Solution](#)

Reproduction Visual Case Based Questions

1. An organism is reproducing by asexual method of reproduction.

The organism splits into two identical daughter cells. This happens when the cellular organism reaches to its maximum size of growth and then the nucleus of the organism elongates and divides into two parts. After that the cytoplasm also divides into two parts along with cell.

Name the organism that divides by the above process.

- A. Yeast
- B. Amoeba
- C. Algae
- D. Fungus

Answer: B

 [Watch Video Solution](#)

2. An organism is reproducing by asexual method of reproduction.

The organism splits into two identical daughter cells. This happens when the cellular organism reaches to its maximum size of growth and then the nucleus of the organism elongates and divides into two parts. After that the cytoplasm also divides into two parts along with cell.

Name the process by which the organism reproduce

A. Binary fission

B. Budding

C. Sporulation

D. None of these

Answer: A



Watch Video Solution

3. An organism is reproducing by asexual method of reproduction.

The organism splits into two identical daughter cells. This happens when the cellular organism reaches to its maximum size of growth and then the nucleus of the organism elongates and divides into two parts. After that the cytoplasm also divides into two parts along with cell.

Such type of reproduction is seen in the organism that are

- a) Unicellular
- b) Multicellular
- c) Both unicellular and multicellular
- d) Prokaryotic

A. Unicellular

B. Multicellular

C. Both unicellular and multicellular

D. Prokaryotic

Answer: A



Watch Video Solution

4. An organism is reproducing by asexual method of reproduction.

The organism splits into two identical daughter cells. This happens when the cellular organism reaches to its maximum size of growth and then the nucleus of the organism elongates and divides into two parts. After that the cytoplasm also divides into two parts along with cell.

Such type of reproduction is the characteristics of the kingdom :

- a) Monera
- b) Protista
- c) Animalia
- d) None of these

A. Monera

B. Protista

C. Animalia

D. None of these

Answer: A



Watch Video Solution

5. An organism is reproducing by asexual method of reproduction. The organism splits into two identical daughter cells. This happens when the cellular organism reaches to its maximum size of growth and then the nucleus of the organism elongates and divides into two parts. After that the cytoplasm also divides into two parts along with cell.

Which of these statement is not a feature of asexual reproduction ?

- a) No meiosis occurs
- b) New individuals are genetically identical to the parents.
- c) Offsprings are clones of parents.
- d) Two individuals of different sexes involved.

- A. No meiosis occurs
- B. New individuals are genetically identical to the parents.
- C. Offsprings are clones of parents.
- D. Two individuals of different sexes involved.

Answer: D



Watch Video Solution

6. A woman uses pills A to prevent pregnancy for birth control. These pills prevent the ovaries from releasing ovum into oviducts. Another woman uses a chemical B that kills the sperm and prevent pregnancy.

What do the pill A contains?

- A. Antacids
- B. Sedatives

C. Enzymes

D. Hormones

Answer: D



Watch Video Solution

7. A woman uses pills A to prevent pregnancy for birth control. These pills prevent the ovaries from releasing ovum into oviducts. Another woman uses a chemical B that kills the sperm and prevent pregnancy.

Pills A are commonly known as:

A. Paracetamol

B. Oral pills

C. Morphine

D. None of these

Answer: B



Watch Video Solution

8. A woman uses pills A to prevent pregnancy for birth control. These pills prevent the ovaries from releasing ovum into oviducts. Another woman uses a chemical B that kills the sperm and prevent pregnancy.

The chemical B is :

- A. Antidepressants
- B. Sedatives
- C. Spermicides
- D. Hormones

Answer: C



Watch Video Solution

9. A woman uses pills A to prevent pregnancy for birth control. These pills prevent the ovaries from releasing ovum into oviducts. Another woman uses a chemical B that kills the sperm and prevent pregnancy.

The success of birth control programmes in controlling population growth is dependent on:

- A. Use of contraceptives
- B. Tubectomy
- C. Vasectomy
- D. Acceptability of the above by the people

Answer: D



Watch Video Solution

10. A woman uses pills A to prevent pregnancy for birth control. These pills prevent the ovaries from releasing ovum into oviducts. Another woman uses a chemical B that kills the sperm and prevent pregnancy.

What is the general name of these methods of birth control?

- A. Chemical method
- B. Barrier method
- C. Surgical method
- D. None of these

Answer: A



Watch Video Solution

Heredity Self Assessment Objective Type Questions A Multiple Choice Questions

1. Which was absent in the atmosphere at the time of origin of life ?

A. Oxygen

B. Hydrogen

C. Ammonia

D. Methane

Answer:



Watch Video Solution

2. The evidence of evolution is based on

A. palaeontology

B. embryology

C. anatomically

D. all of these

Answer:

 [Watch Video Solution](#)

3. Analogous structures are

- A. Structurally similar
- B. Functionally similar
- C. Structurally and functionally similar
- D. Normally non-functional

Answer:

 [Watch Video Solution](#)

4. The forelimbs of man, cat, bat and whale are

A. Analogous organ

B. Homologous organs

C. Missing link

D. Fossil

Answer:



Watch Video Solution

5. The wing of a bird and the wing of an insect are

A. Analogous organs

B. Vestigial organs

C. Homologous organs

D. respiratory organs

Answer:



Watch Video Solution

Heredity Self Assessment Objective Type Questions B Assertion And Reason Type Questions

1. Assertion (A) : New species develop from the existing species known as speciation.

Reason (R) : Different species can breed together and produce fertile offspring.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:



Watch Video Solution

2. Assertion (A): Archaeopteryx exhibits both reptilian and bird like characteristics.

Reason (R) : Archaeopteryx is the connecting link between reptiles and birds.

a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

b) Both assertion (A) and reason (R) are true and reason (R) is the incorrect explanation of assertion (A).

c) Assertion (A) is true but reason (R) is false.

d) Assertion (A) is false but reason (R) is true.

A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:

 [Watch Video Solution](#)

Heredity Self Assessment C Very Short Answer Type Questions

1. Write the contribution of Charles Darwin in the field of evolution.

 [Watch Video Solution](#)

2. Name two organisms which are now extinct and studied from their fossils.

 [Watch Video Solution](#)

3. What is speciation?

 [Watch Video Solution](#)

4. What are fossils?

 [Watch Video Solution](#)

Heredity Self Assessment Short Answer Type Questions I

1. Homologous organs and Analogous organs.



[Watch Video Solution](#)

2. List two differences between acquired traits and inherited traits by giving an example of each.



[Watch Video Solution](#)

Hereditiy Self Assessment Short Answer Type Questions li

1. Define evolution. How does it occur ? Explain how fossils provide evidences in support of evolution ?



[Watch Video Solution](#)

2. What is speciation ? Explain in brief the role of natural selection and genetic drift in this process.

 [Watch Video Solution](#)

Heredity Self Assessment Long Answer Type Questions

1. Name the phenomenon that governs the following:

Green beetles living in green bushes are not eaten by the crows.

 [Watch Video Solution](#)

2. Name the phenomenon that governs the following:

Number of blue beetles in green bushes increases only because the red beetles, living there, were trampled by a herd of elephants.

 [Watch Video Solution](#)

3. Name the phenomenon that governs the following:

No 'medium height plants' are obtained in F_1 generation, upon crossing pure tall and dwarf pea plants.



[Watch Video Solution](#)

4. Name the phenomenon that governs the following:

Tails of mice were surgically removed for several generations, still mice had tails in the following generations.



[Watch Video Solution](#)

5. Name the phenomenon that governs the following:

A migrant beetle reproduces with the local population, as a result genes of migrant beetle enter the new population.

 [Watch Video Solution](#)

6. What are fossils and how is age of fossils determined ?

 [Watch Video Solution](#)

7. During artificial selection, which features of wild cabbage were selected to give rise to (i) Cabbage and (ii) Cauliflower.

 [Watch Video Solution](#)

8. What is meant by speciation ? List four factors that could lead to speciation . Which of these cannot be a major factor in the speciation of a self-pollinating plant species. Give reason to justify your answer.

 [Watch Video Solution](#)

Heredity Visual Case Based Questions

1. Mendel was the first scientist to study the pattern of inheritance. He is known as the father of genetics and proposed the laws of inheritance. He selected pea plants (*Pisum sativum*) to carry out his study on the inheritance of characters from parents to offspring. Mendel carried the process of self-pollination followed by cross-pollination in his experiment.

Which of these is a dominant trait?

- A. tall
- B. white
- C. wrinkled
- D. dwarf

Answer: A



[Watch Video Solution](#)

2. Which are two major alleles for eye colour?

- A. brown and black
- B. blue and black
- C. brown and blue
- D. black and grey

Answer: c



[Watch Video Solution](#)

3. Mendel was the first scientist to study the pattern of inheritance.

He is known as the father of genetics and proposed the laws of inheritance. He selected pea plants (*Pisum sativum*) to carry out his

study on the inheritance of characters from parents to offspring. Mendel carried the process of self-pollination followed by cross-pollination in his experiment.

In the cross pollination, what was the proportion of green-wrinkled seeds?

A. $9/16$

B. $3/16$

C. $1/16$

D. $6/16$

Answer: C



Watch Video Solution

4. Mendel was the first scientist to study the pattern of inheritance.

He is known as the father of genetics and proposed the laws of

inheritance. He selected pea plants (*Pisum sativum*) to carry out his study on the inheritance of characters from parents to offspring. Mendel carried the process of self-pollination followed by cross-pollination in his experiment.

A cross between two plants, which differs in only one pair of contrasting characters is called _____

- A. monohybrid cross
- B. dihybrid cross
- C. cross-pollination
- D. self-pollination

Answer: A

 [Watch Video Solution](#)

5. Mendel was the first scientist to study the pattern of inheritance. He is known as the father of genetics and proposed the laws of inheritance. He selected pea plants (*Pisum sativum*) to carry out his study on the inheritance of characters from parents to offspring. Mendel carried the process of self-pollination followed by cross-pollination in his experiment.

_____ is a piece of DNA that codes for one protein.

- A. Gene
- B. Allele
- C. Genotype
- D. Phenotype

Answer: A



Watch Video Solution

6. Evolution is the sequence of gradual changes which takes place in the primitive organisms, over millions of years, in which new species are produced. Variations that resulted in formation of new species occurred basically due to errors in DNA copying as well as due to sexual reproduction.

Which of these is an acquired trait?

- A. stripes on a tiger
- B. a skunk's ability to spray
- C. flavour of a fruit
- D. larger muscle size from doing regular exercise

Answer: D

 [Watch Video Solution](#)

7. Evolution is the sequence of gradual changes which takes place in the primitive organisms, over millions of years, in which new species are produced. Variations that resulted in formation of new species occurred basically due to errors in DNA copying as well as due to sexual reproduction.

Which of these vegetables were not obtained from wild cabbage?

- A. onion
- B. kale
- C. cauliflower
- D. kohlrabi

Answer: A



Watch Video Solution

8. Evolution is the sequence of gradual changes which takes place in the primitive organisms, over millions of years, in which new species are produced. Variations that resulted in formation of new species occurred basically due to errors in DNA copying as well as due to sexual reproduction.

Which of these organisms have compound eyes?

- A. Flatworm
- B. Insect
- C. Human
- D. none of these

Answer: B

 [Watch Video Solution](#)

9. Evolution is the sequence of gradual changes which takes place in the primitive organisms, over millions of years, in which new species are produced. Variations that resulted in formation of new species occurred basically due to errors in DNA copying as well as due to sexual reproduction.

Which of these techniques were used in study of human fossils?

- A. excavation
- B. time dating
- C. fossil study
- D. all of these methods

Answer: D

 [Watch Video Solution](#)

1. Evolution is the sequence of gradual changes which takes place in the primitive organisms, over millions of years, in which new species are produced. Variations that resulted in formation of new species occurred basically due to errors in DNA copying as well as due to sexual reproduction.

Which of these statements is correct about the acquired and inherited traits?

- A. Acquired and Inherited traits both occur in somatic cells.
- B. Acquired and Inherited traits both occur in germs cells.
- C. Acquired traits are found in germ cells.
- D. Acquired traits occur only in somatic cells.

Answer: D

 [Watch Video Solution](#)

1. What are homologous structures ? Give an example .

 [Watch Video Solution](#)

2. "The sex of a newborn child is a matter of chance and none of the parents may be considered responsible for it." Justify this statement with the help of a flow chart showing determination of sex of a newborn.

 [Watch Video Solution](#)

3. What is variation ? How is variation created in a population ? How does the creation of variation in a species promote survival ?

(ii) Explain how, offspring and parents of organisms reproducing sexually have the same number of chromosomes.



[Watch Video Solution](#)

4. Explain how, offspring and parents of organisms reproducing sexually have the same number of chromosomes?



[Watch Video Solution](#)

5. 'Natural Selection and Speciation leads to evolution'. Justify this statement.



[Watch Video Solution](#)

6. Explain with the help of an example each how the following provide evidences in favour of evolution :

(a) Homologous organs

(b) Analogous organs

(c) Fossils



Watch Video Solution

7. Explain with the help of an example each how the following provide evidences in favour of evolution :

(a) Homologous organs

(b) Analogous organs

(c) Fossils



Watch Video Solution

8. Explain with the help of an example each how the following provide evidences in favour of evolution :

(a) Homologous organs

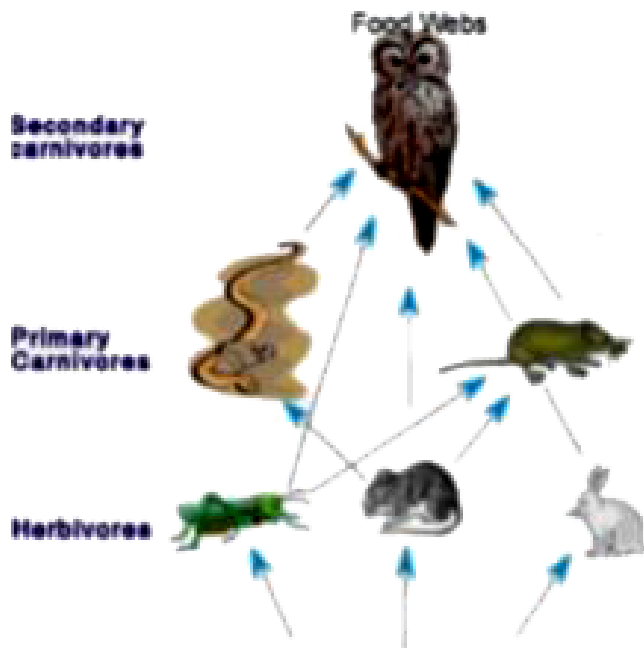
(b) Analogous organs

(c) Fossils

 [Watch Video Solution](#)

Our Environment Visual Case Based Questions

1. Food chains are very important for the survival of most species



If 10,000 J solar energy falls on green plants in a terrestrial ecosystem, what percentage of solar energy will be converted into food energy?

A. 10,000 J

B. 100 J

C. 1000 J

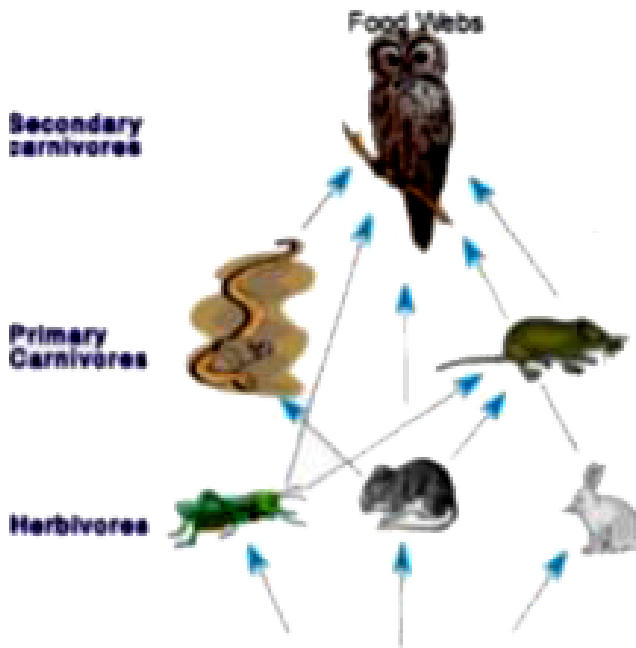
D. It will depend on the type of the terrestrial plant.

Answer: B



Watch Video Solution

2. Food chains are very important for the survival of most species



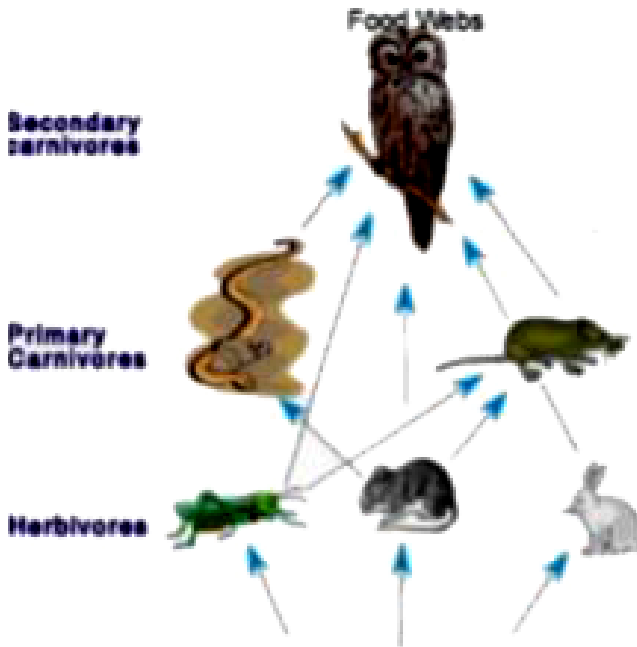
If Ravi is consuming curd/yogurt for lunch , which trophic level in a food chain he should be considered as occupying ?

- A. First trophic level
- B. Second trophic level
- C. Third trophic level
- D. Fourth trophic level

Answer: C

 Watch Video Solution

3. Food chains are very important for the survival of most species



The decomposers are not included in the food chain. The correct reason for the same is because decomposers:

A. Act at every trophic level of the food chain

B. Do not breakdown organic compounds

C. Convert organic material to inorganic forms

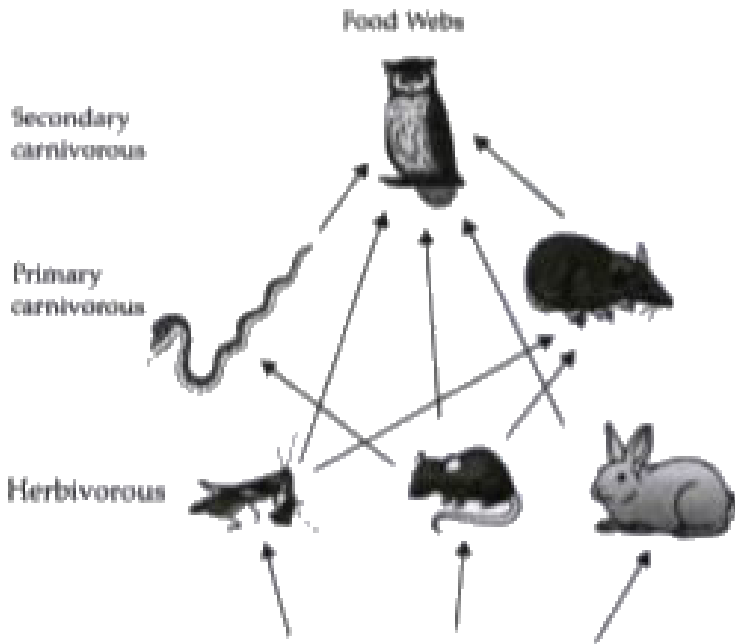
D. Release enzymes outside their body to convert organic material to inorganic forms

Answer: A



Watch Video Solution

4. Food chains are very important survival of most species.



Matter and energy are two fundamental inputs of an ecosystem.

Movement of

- A. Energy is bidirectional and matter is repeatedly circulating
- B. Energy is repeatedly circulation and matter is unidirectional.
- C. Energy is unidirectional and matter is repeatedly circulating
- D. Energy is multidirectional and matter is bidirectional.

Answer: C

 [Watch Video Solution](#)

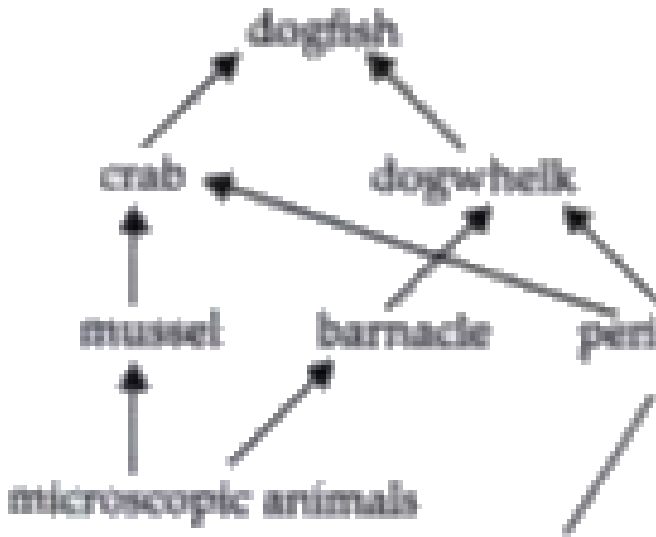
5. Which of the following limits the number of trophic levels in a food chain ?

- A. Decrease in energy at higher trophic levels
- B. Less availability of food
- C. Polluted air
- D. Water

Answer: A

 [Watch Video Solution](#)

6. Observe the food web and answer the questions given below:

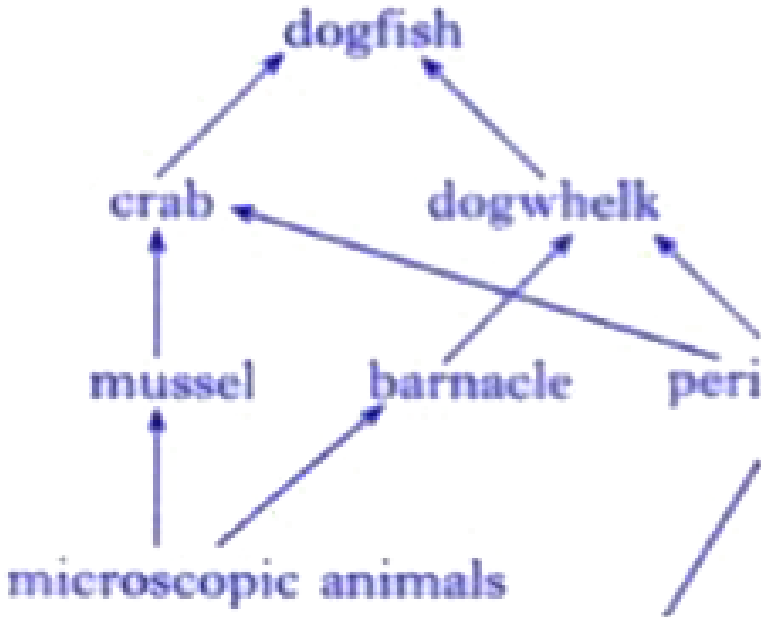


The mussel can be described as

- A. Producer
- B. Primary consumer
- C. Secondary consumer
- D. Decomposer

Answer: D

7. Observe the food web and answer the questions given below -



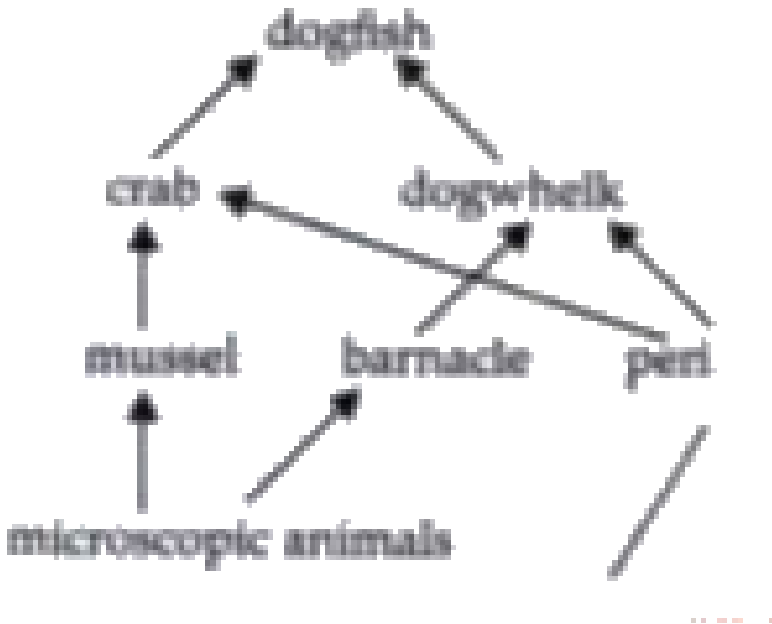
Which trophic level is incorrectly defined?

- A. Carnivores - secondary or tertiary consumers
- B. Decomposers - microbial heterotrophs
- C. Herbivores - primary consumers
- D. Omnivores - molds, yeast and mushrooms

Answer: D

 Watch Video Solution

8. Observe the food web and answer the questions given below:



The given figure best represents :



A. Grassland food chain

B. Parasitic food chain

C. Forest food chain

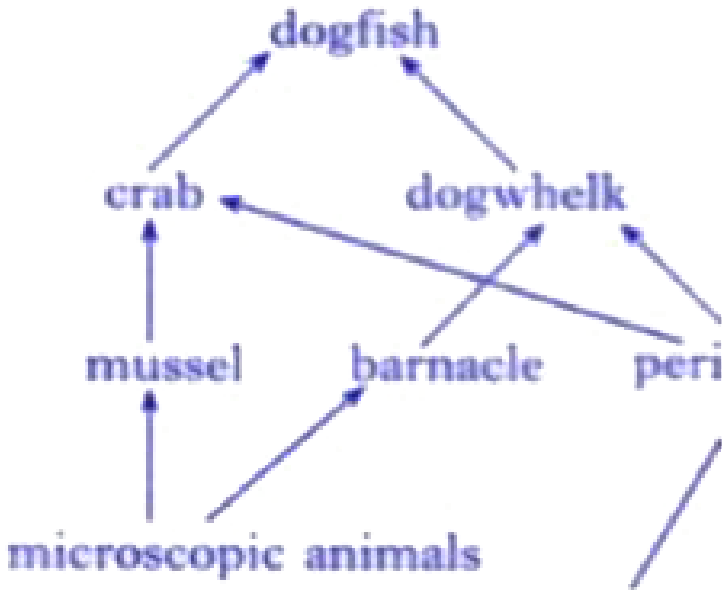
D. Aquatic food chain

Answer: A



Watch Video Solution

9. Observe the food web and answer the questions given below -



Why do all food chains start with plants?

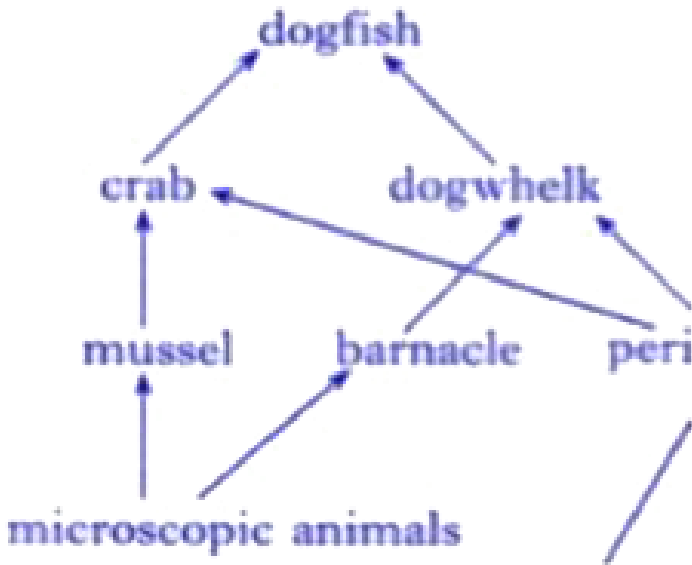
- A. Because plants are easily grown
- B. Because plants are nutritious
- C. Because plants can produce its own energy
- D. Because plants do not require energy

Answer: C

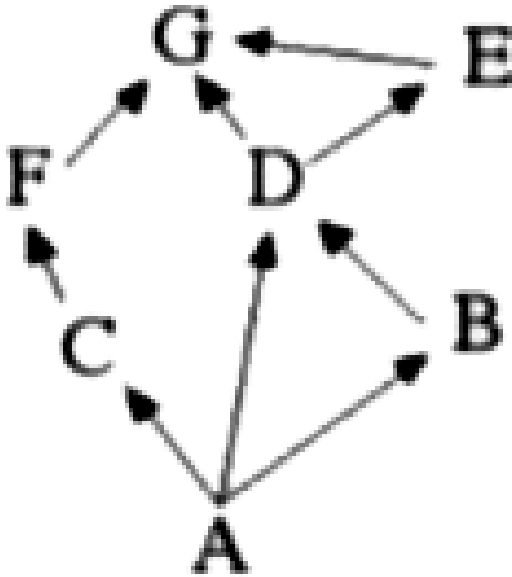


Watch Video Solution

10. Observe the food web and answer the questions given below -



In the food web, what two organisms are competing for food ?



- A. A and B
- B. D and F
- C. A and C
- D. B and D

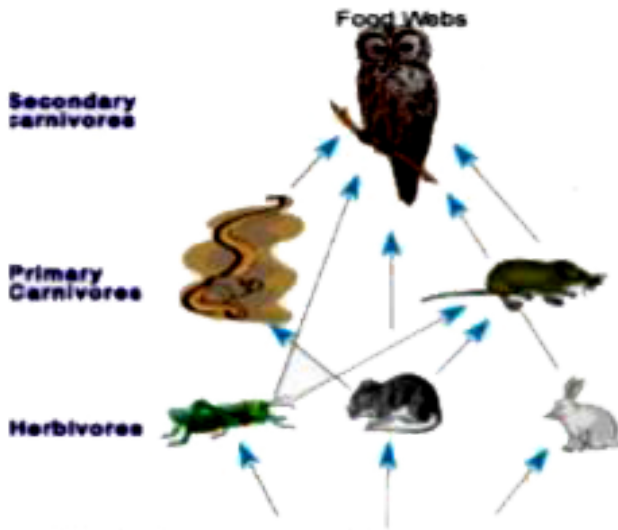
Answer: D

 [Watch Video Solution](#)

11. Food chains are very important for the survival of most species.

When only one element is removed from the food chain it can result in extinction of a species in some cases. The foundation of the food chain consists of primary producers

Primary producers, or autotrophs, can use either solar energy or chemical energy to create complex organic compounds, whereas species at higher trophic levels cannot and so must consume producers or other life that itself consumes producers. Because the sun's light is necessary for photosynthesis, most life could not exist if the sun disappeared. Even so, it has recently been discovered that there are some forms of life, chemotrophs, that appear to gain all their metabolic energy from chemosynthesis driven by hydrothermal vents, thus showing that some life may not require solar energy to thrive.



If 10,000 J solar energy falls on green plants in a terrestrial ecosystem, what percentage of solar energy will be converted into food energy?

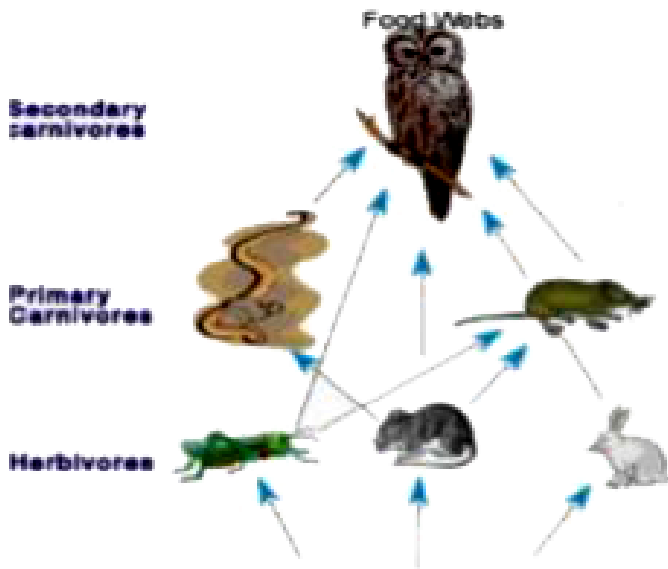
- A. 10,000 J
- B. 100 J
- C. 1000 J
- D. It will depend on the type of the terrestrial plant.

Answer: B

12. Food chains are very important for the survival of most species.

When only one element is removed from the food chain it can result in extinction of a species in some cases. The foundation of the food chain consists of primary producers

Primary producers, or autotrophs, can use either solar energy or chemical energy to create complex organic compounds, whereas species at higher trophic levels cannot and so must consume producers or other life that itself consumes producers. Because the sun's light is necessary for photosynthesis, most life could not exist if the sun disappeared. Even so, it has recently been discovered that there are some forms of life, chemotrophs, that appear to gain all their metabolic energy from chemosynthesis driven by hydrothermal vents, thus showing that some life may not require solar energy to thrive.



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

- A. First trophic level
- B. Second trophic level
- C. Third trophic level
- D. Fourth trophic level

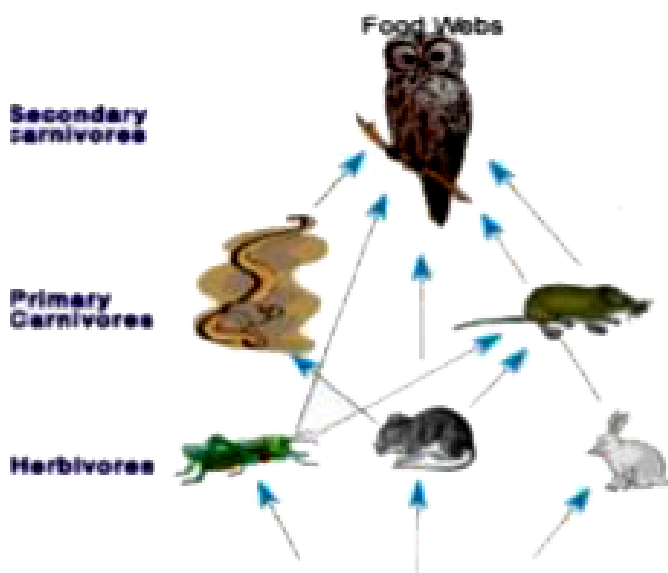
Answer: C

 [Watch Video Solution](#)

13. Food chains are very important for the survival of most species.

When only one element is removed from the food chain it can result in extinction of a species in some cases. The foundation of the food chain consists of primary producers

Primary producers, or autotrophs, can use either solar energy or chemical energy to create complex organic compounds, whereas species at higher trophic levels cannot and so must consume producers or other life that itself consumes producers. Because the sun's light is necessary for photosynthesis, most life could not exist if the sun disappeared. Even so, it has recently been discovered that there are some forms of life, chemotrophs, that appear to gain all their metabolic energy from chemosynthesis driven by hydrothermal vents, thus showing that some life may not require solar energy to thrive.



The decomposers are not included in the food chain. The correct reason for the same is because decomposers:

- A. Act at every trophic level of the food chain
- B. Do not breakdown organic compounds
- C. Convert organic material to inorganic forms
- D. Release enzymes outside their body to convert organic material to inorganic forms

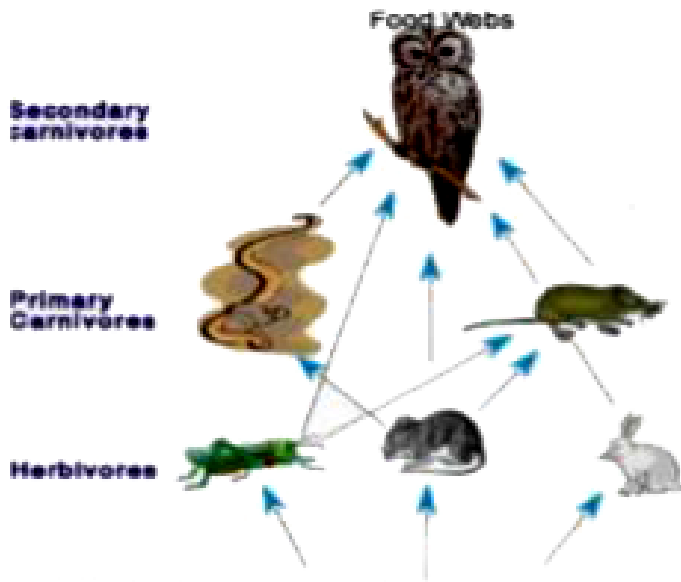
Answer: A



14. Food chains are very important for the survival of most species.

When only one element is removed from the food chain it can result in extinction of a species in some cases. The foundation of the food chain consists of primary producers

Primary producers, or autotrophs, can use either solar energy or chemical energy to create complex organic compounds, whereas species at higher trophic levels cannot and so must consume producers or other life that itself consumes producers. Because the sun's light is necessary for photosynthesis, most life could not exist if the sun disappeared. Even so, it has recently been discovered that there are some forms of life, chemotrophs, that appear to gain all their metabolic energy from chemosynthesis driven by hydrothermal vents, thus showing that some life may not require solar energy to thrive.



Matter and energy are two fundamental inputs of an ecosystem.

Movement of

- A. Energy is bidirectional and matter is repeatedly circulating
- B. Energy is repeatedly circulation and matter is unidirectional.
- C. Energy is unidirectional and matter is repeatedly circulating
- D. Energy is multidirectional and matter is bidirectional.

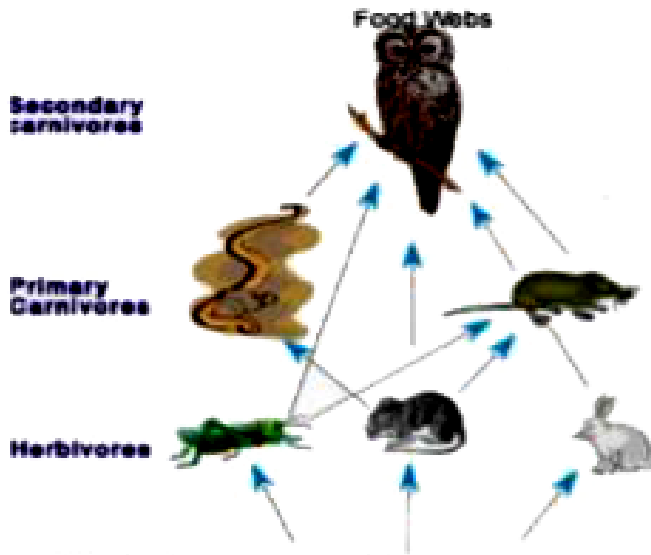
Answer: C

 [Watch Video Solution](#)

15. Food chains are very important for the survival of most species.

When only one element is removed from the food chain it can result in extinction of a species in some cases. The foundation of the food chain consists of primary producers

Primary producers, or autotrophs, can use either solar energy or chemical energy to create complex organic compounds, whereas species at higher trophic levels cannot and so must consume producers or other life that itself consumes producers. Because the sun's light is necessary for photosynthesis, most life could not exist if the sun disappeared. Even so, it has recently been discovered that there are some forms of life, chemotrophs, that appear to gain all their metabolic energy from chemosynthesis driven by hydrothermal vents, thus showing that some life may not require solar energy to thrive.



Which of the following limits the number of trophic levels in a food chain?






- A. Decrease in energy at higher trophic levels
- B. Less availability of food
- C. Polluted air
- D. Water

Answer: A

 [Watch Video Solution](#)

16. Biosphere is a global ecosystem composed of living organisms and abiotic factors from which they derive energy and nutrients. An ecosystem is defined as structural and functional unit of the biosphere comprising of living and non-living environment that interact by means of food chains and chemical cycles resulting in energy flow, biotic diversity and material cycling to form a stable, self-supporting system

Biotic vs. Abiotic Factors

| | | | |
|--|---|--|--|
| <ul style="list-style-type: none">▣ Living▣ Examples<ul style="list-style-type: none">▣ Plants▣ Animals▣ Fungi▣ Bacteria |    | <ul style="list-style-type: none">▣ Non-Living▣ Examples<ul style="list-style-type: none">▣ Water▣ Sunlight▣ Soil▣ Air▣ Temperature |   |
|--|---|--|--|

Which trophic level is incorrectly defined?

A. Carnivores - secondary or tertiary consumers

B. Decomposers - microbial heterotrophs

C. Herbivores - primary consumers

D. Omnivores – molds, yeast and mushrooms

Answer: D

 [Watch Video Solution](#)

17. Biosphere is a global ecosystem composed of living organisms and abiotic factors from which they derive energy and nutrients. And ecosystem is defined as structural and functional unit of the biosphere comprising of living and non-living environment that interact by means of food chains and chemical cycles resulting in energy flow, biotic diversity and material cycling to form a stable, self-supporting system

Biotic vs. Abiotic Factors

Living

Examples

- Plants
- Animals
- Fungi
- Bacteria



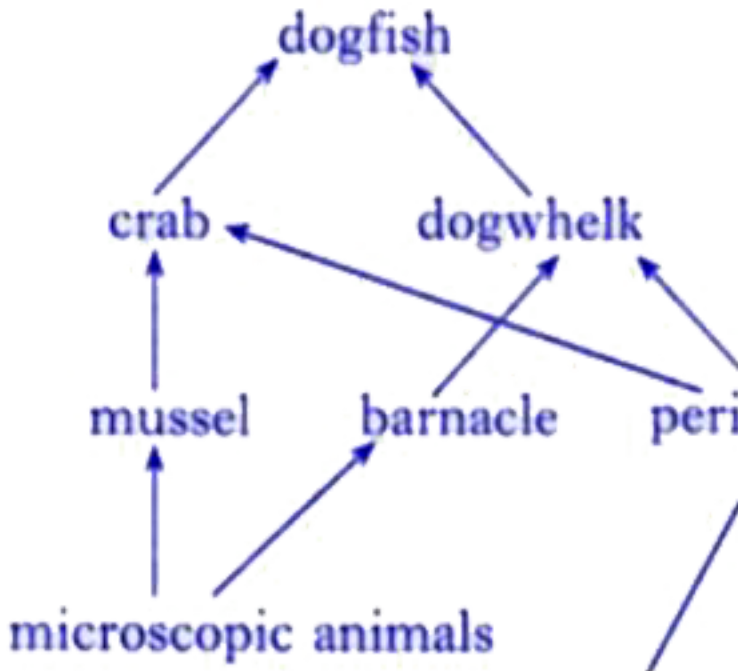
Non-Living

Examples

- Water
- Sunlight
- Soil
- Air
- Temperature



The diagram below shows a food web from the sea shore



The mussel can be described as

- A. Producer
- B. Primary consumer
- C. Secondary consumer
- D. Decomposer

Answer: C



Watch Video Solution

18. Biosphere is a global ecosystem composed of living organisms and abiotic factors from which they derive energy and nutrients. And ecosystem is defined as structural and functional unit of the biosphere comprising of living and non-living environment that interact by means of food chains and chemical cycles resulting in energy flow, biotic diversity and material cycling to form a stable, self-supporting system

Biotic vs. Abiotic Factors

Living

Examples

Plants

Animals

Fungi

Bacteria



Non-Living

Examples

Water

Sunlight

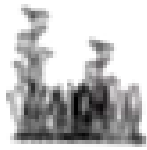
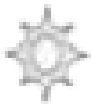
Soil

Air

Temperature



The given figure best represents:



A. Grassland food chain

B. Parasitic food chain

C. Forest food chain




D. Aquatic food chain

Answer: A

 [Watch Video Solution](#)

19. Biosphere is a global ecosystem composed of living organisms and abiotic factors from which they derive energy and nutrients. An ecosystem is defined as structural and functional unit of the biosphere comprising of living and non-living environment that interact by means of food chains and chemical cycles resulting in energy flow, biotic diversity and material cycling to form a stable, self-supporting system

Biotic vs. Abiotic Factors

| | | | |
|--|---|--|--|
| <ul style="list-style-type: none">□ Living□ Examples<ul style="list-style-type: none">□ Plants□ Animals□ Fungi□ Bacteria |    | <ul style="list-style-type: none">□ Non-Living□ Examples<ul style="list-style-type: none">□ Water□ Sunlight□ Soil□ Air□ Temperature |   |
|--|---|--|--|

Consider the following statements concerning food chains: (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 herbivores. (iii) The length of the food chains is generally limited to 3 – 4 trophic levels due to energy loss (iv) The length of the food chains may vary from 2 to 8 trophic levels

Which two of the above statements are correct?

A. (I), (IV)

B. (I), (II)

C. (II), (III)

D. (III), (IV)

Answer: C

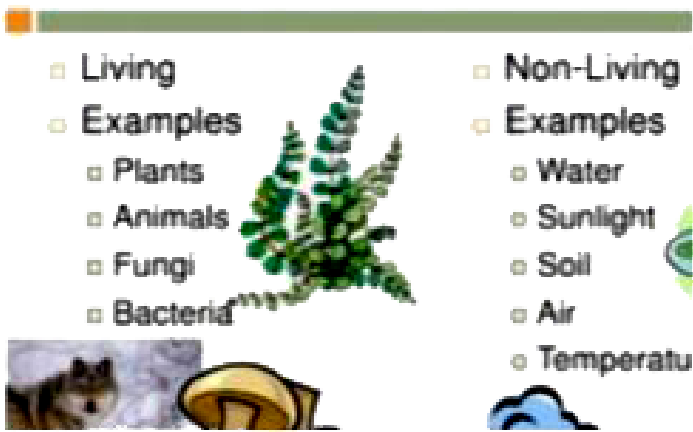


Watch Video Solution

20. Biosphere is a global ecosystem composed of living organisms and abiotic factors from which they derive energy and nutrients. And ecosystem is defined as structural and functional unit of the biosphere comprising of living and non-living environment that interact by means of food chains and chemical cycles resulting in energy flow, biotic diversity and material cycling to form a stable, self-supporting system

Biotic vs. Abiotic Factors

| | |
|---|---|
| <ul style="list-style-type: none">Living | <ul style="list-style-type: none">Non-Living |
| <ul style="list-style-type: none">Examples<ul style="list-style-type: none">PlantsAnimalsFungiBacteria | <ul style="list-style-type: none">Examples<ul style="list-style-type: none">WaterSunlightSoilAirTemperature |



Which of the following group of organisms are not included in ecological food chain?

A. Carnivores

B. Saprophytes

C. Herbivores

D. Predators

Answer: B



Watch Video Solution

21. Waste management is essential in today's society. Due to an increase in population, the generation of waste is getting doubled day by day. Moreover, the increase in waste is affecting the lives of many people.

Waste management is the managing of waste by disposal and recycling of it. Moreover, waste management needs proper techniques keeping in mind the environmental situations. For instance, there are various methods and techniques by which the waste is disposed of. You must have come across 5 R's to save the

environment: refuse, reduce, reuse, repurpose and recycle.

Choose the waste management strategy that is matched with correct example



[Watch Video Solution](#)

22. Waste management is essential in today's society. Due to an increase in population, the generation of waste is getting doubled day by day. Moreover, the increase in waste is affecting the lives of many people.

Waste management is the managing of waste by disposal and recycling of it. Moreover, waste management needs proper techniques keeping in mind the environmental situations. For instance, there are various methods and techniques by which the waste is disposed of. You must have come across 5 R's to save the environment: refuse, reduce, reuse, repurpose and recycle.

Recycling of paper is a good practice but recycled paper should not be used as food packaging because

- A. recycled papers take lots of space
- B. recycled papers can't cover food properly
- C. recycled papers can cause infection
- D. recycled papers are costly

Answer: C

 [Watch Video Solution](#)

23. Waste management is essential in today's society. Due to an increase in population, the generation of waste is getting doubled day by day. Moreover, the increase in waste is affecting the lives of many people.

Waste management is the managing of waste by disposal and

recycling of it. Moreover, waste management needs proper techniques keeping in mind the environmental situations. For instance, there are various methods and techniques by which the waste is disposed of. You must have come across 5 R's to save the environment: refuse, reduce, reuse, repurpose and recycle.

According to the 'Solid Waste Management Rule 2016', the waste should be segregated into three categories. Observe the table below and select the row that has correct information

| | Wet waste | Dry waste | Hazardous waste |
|----|-------------------------------------|---|---|
| a) | Cooked food, vegetable peels | Used bulbs, fluorescent lamps | Plastic carry bags, bottles, newspaper, cardboard |
| b) | Coffee and tea powder, garden waste | Plastic carry bags, bottles, newspaper, cardboard | Expired medicines, razors, paint cans |
| c) | Leftover food, vegetable peels | Coffee and tea powder, garden waste | Insect repellents, cleaning solutions |
| d) | Uncooked food, tea leaves | Old crockery, frying pans | Coffee and tea powder, garden waste |

 [Watch Video Solution](#)

24. Waste management is essential in today's society. Due to an increase in population, the generation of waste is getting doubled

day by day. Moreover, the increase in waste is affecting the lives of many people.

Waste management is the managing of waste by disposal and recycling of it. Moreover, waste management needs proper techniques keeping in mind the environmental situations. For instance, there are various methods and techniques by which the waste is disposed of. You must have come across 5 R's to save the environment: refuse, reduce, reuse, repurpose and recycle.

Choose the waste management strategy that is matched with correct example

- A. both (1) and (2)
- B. both (1) and (3)
- C. both (2) and (3)
- D. both (1) and (4)

Answer: B



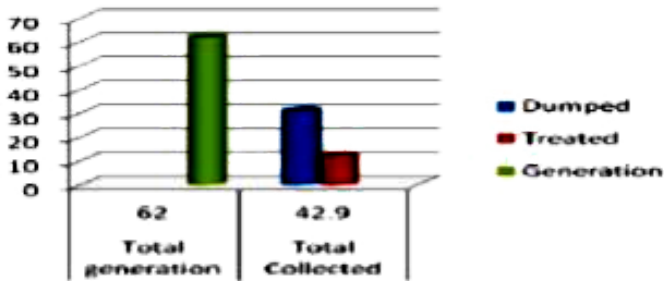
Watch Video Solution

25. Waste management is essential in today's society. Due to an increase in population, the generation of waste is getting doubled day by day. Moreover, the increase in waste is affecting the lives of many people.

Waste management is the managing of waste by disposal and recycling of it. Moreover, waste management needs proper techniques keeping in mind the environmental situations. For instance, there are various methods and techniques by which the waste is disposed of. You must have come across 5 R's to save the environment: refuse, reduce, reuse, repurpose and recycle.

The given graph shows the amount of waste generated, dumped and treated in percentage. Identify the reason of low success rate

of waste management process.

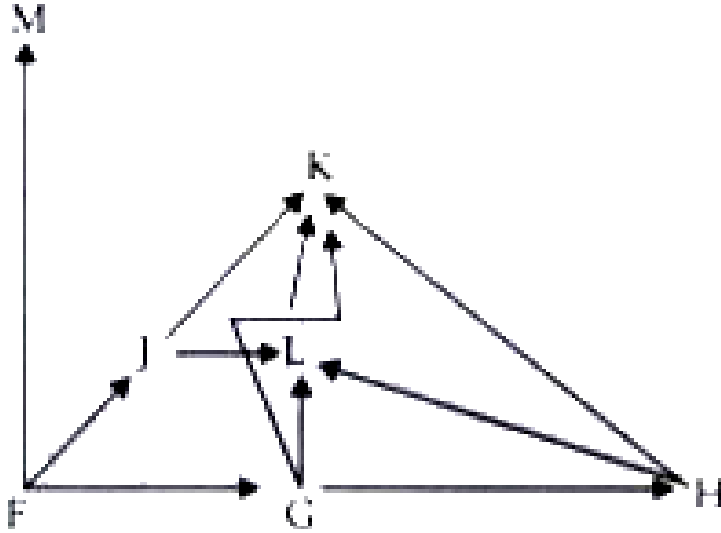


- A. only 15% of urban India's waste is processed
- B. less than 60% of waste is collected from households
- C. more than 60% of waste is collected from households
- D. both a and b

Answer: D

 [Watch Video Solution](#)

26. Study the following food web and answer any four questions from (1) to (v).



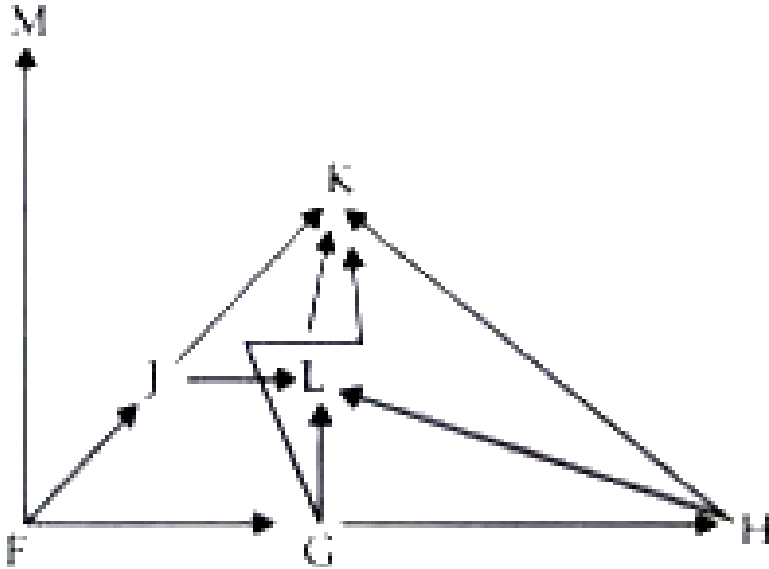
Which of these is the producer?

- A. K
- B. L
- C. M
- D. F

Answer: D

 [Watch Video Solution](#)

27. Study the following food web and answer any four questions from (1) to (v).

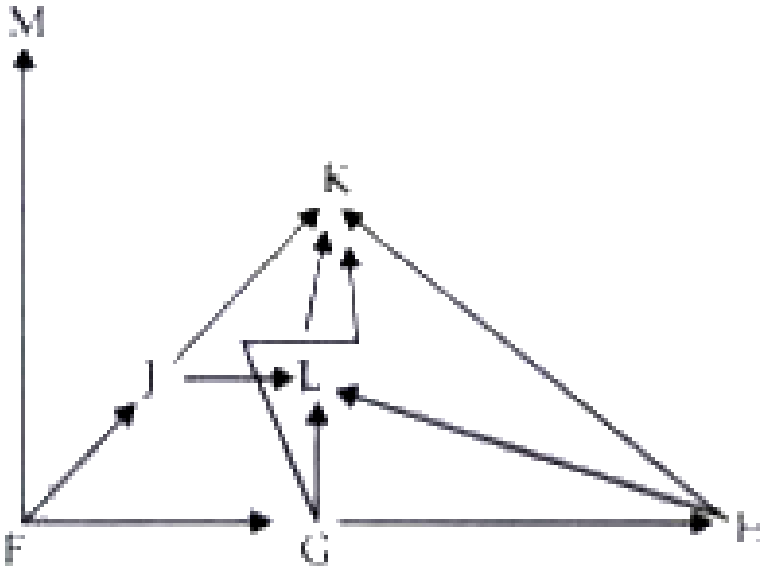


Which organisms are primary consumers?

- A. *F, L, H, K*
- B. *M, G, J, H*
- C. *J, L, K, M*
- D. *F, K, M, H*

Answer: B

28. Study the following food web and answer any four questions from (1) to (v).



Which organisms will receive maximum energy in the ecosystem?

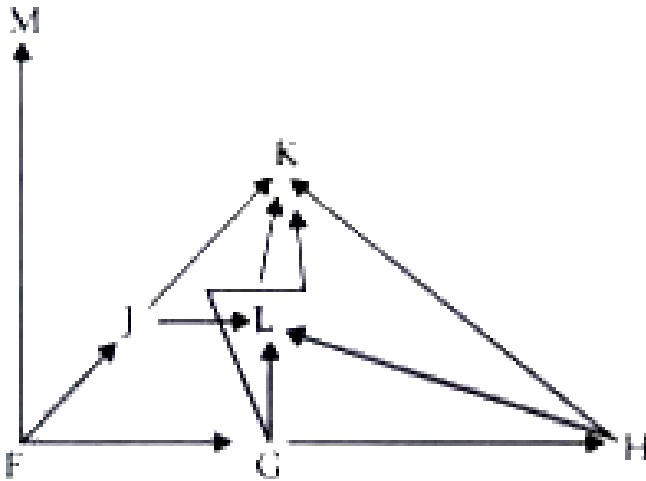
- A. M
- B. K
- C. F

D. All of these

Answer: C

 Watch Video Solution

29. Study the following food web and answer any four questions from (1) to (v).



Which organisms represent top level carnivores?

A. K

B. M

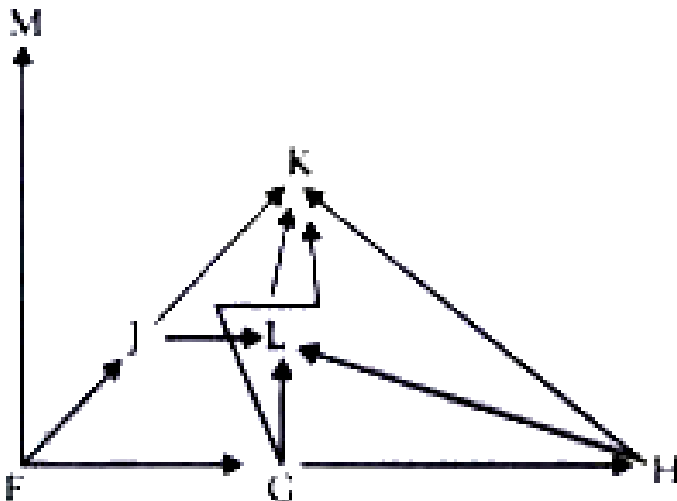
C. G

D. Both (a) and (b)

Answer: D

 [Watch Video Solution](#)

30. Study the following food web and answer any four questions from (1) to (v).



What will happen if we kill all the organisms in one trophic level?

- A. Population of organisms in previous trophic level will increase.
- B. Population of organism in previous trophic level will decrease.
- C. Population of organism in next trophic level will increase.
- D. This will not affect the population of any trophic level.

Answer: C

 [Watch Video Solution](#)

31. Unlimited exploitation of nature by man disturbed the delicate ecological balance between the living and non-living components of the biosphere. The unfavourable conditions created by man himself threatened the survival not only of him but also of the entire living organisms on the mother earth. Rehan is an active member of 'Eco club' of his school which is creating environmental awareness

amongst the school students, spreading the same in the society and also working hard for preventing environmental degradation of the surroundings. As part of this awareness programme, they are explaining the importance of using different dustbins for biodegradable and non-biodegradable wastes. Generally green dustbins are for biodegradable wastes and blue for non-biodegradable wastes.

Why is it necessary to conserve our environment?

- A. To save water, air and soil from pollution
- B. To create water and air pollution.
- C. To disturb ecological balance.
- D. To reduce soil enrichment

Answer: A



Watch Video Solution

32. Unlimited exploitation of nature by man disturbed the delicate ecological balance between the living and non-living components of the biosphere. The unfavourable conditions created by man himself threatened the survival not only of him but also of the entire living organisms on the mother earth. Rehan is an active member of 'Eco club' of his school which is creating environmental awareness amongst the school students, spreading the same in the society and also working hard for preventing environmental degradation of the surroundings. As part of this awareness programme, they are explaining the importance of using different dustbins for biodegradable and non-biodegradable wastes. Generally green dustbins are for biodegradable wastes and blue for non-biodegradable wastes.

What does the green dustbin signify?

A. For non-biodegradable wastes

B. For biodegradable wastes

C. For biodegradable and non-biodegradable wastes

D. For metallic wastes

Answer: B



Watch Video Solution

33. Unlimited exploitation of nature by man disturbed the delicate ecological balance between the living and non-living components of the biosphere. The unfavourable conditions created by man himself threatened the survival not only of him but also of the entire living organisms on the mother earth. Rehan is an active member of 'Eco club' of his school which is creating environmental awareness amongst the school students, spreading the same in the society and also working hard for preventing environmental degradation of the surroundings. As part of this awareness programme, they are explaining the importance of using different dustbins for

biodegradable and non-biodegradable wastes. Generally green dustbins are for biodegradable wastes and blue for non-biodegradable wastes.

State the importance of green and blue dustbins in the safe disposal of the household waste.

- A. It is not eco-friendly.
- B. The segregation of biodegradable and non biodegradable wastes takes time.
- C. The segregation of biodegradable and non biodegradable wastes occurs without wasting time and energy.
- D. Biodegradable and non-biodegradable wastes cannot be separated easily.

Answer: C



Watch Video Solution

34. Unlimited exploitation of nature by man disturbed the delicate ecological balance between the living and non-living components of the biosphere. The unfavourable conditions created by man himself threatened the survival not only of him but also of the entire living organisms on the mother earth. Rehan is an active member of 'Eco club' of his school which is creating environmental awareness amongst the school students, spreading the same in the society and also working hard for preventing environmental degradation of the surroundings. As part of this awareness programme, they are explaining the importance of using different dustbins for biodegradable and non-biodegradable wastes. Generally green dustbins are for biodegradable wastes and blue for non-biodegradable wastes.

In the following groups of materials, which group(s) contains only non-biodegradable items?

(I) Wood, paper, leather

(II) Polythene, detergent, PVC

(III) Plastic, detergent, grass

(IV) Plastic, bakelite, DDT

A. (III)

B. (IV)

C. (I) and (III)

D. (II) and (IV)

Answer: D



Watch Video Solution

35. Unlimited exploitation of nature by man disturbed the delicate ecological balance between the living and non-living components of the biosphere. The unfavourable conditions created by man himself threatened the survival not only of him but also of the entire living organisms on the mother earth. Rehan is an active member of 'Eco

club' of his school which is creating environmental awareness amongst the school students, spreading the same in the society and also working hard for preventing environmental degradation of the surroundings. As part of this awareness programme, they are explaining the importance of using different dustbins for biodegradable and non-biodegradable wastes. Generally green dustbins are for biodegradable wastes and blue for non-biodegradable wastes.

Which of the following statements is correct?

- A. Unlimited exploitation of nature by man has disturbed the ecological balance.
- B. Unlimited exploitation of nature by man has no effect on the ecological balance.
- C. Unlimited exploitation of nature by man will improve the ecological balance.

D. Human beings should not at all consider the terms such as ecological balance.

Answer: A

 [Watch Video Solution](#)

36. A water body characterized by nutrient rich water supports abundant growth of phytoplankton and other water plants on its surface. Over time, the water body gets filled with a large number of such plants and the process is called Eutrophication. In such water bodies, dissolved oxygen content is nil or very less.

Eutrophicated water usually looks turbid green in colour because of

A. excessive growth of phytoplankton

B. accumulation of minerals and nutrients

C. water body becoming polluted

D. release of degraded plant chlorophyll in water

Answer: A



Watch Video Solution

37. A water body characterized by nutrient rich water supports abundant growth of phytoplankton and other water plants on its surface. Over time, the water body gets filled with a large number of such plants and the process is called Eutrophication. In such water bodies, dissolved oxygen content is nil or very less.

In eutrophicated waler body, growth rate of phytoplankton is high because of:

A. Light penetrating the lower surfaces of water body

B. Enrichment of nutrients in the water body

C. Less of dissolved oxygen in the water body.

D. Aquatic fauna flourishes well in eutrophicated water body.

Answer: B

 [Watch Video Solution](#)

38. A water body characterized by nutrient rich water supports abundant growth of phytoplankton and other water plants on its surface. Over time, the water body gets filled with a large number of such plants and the process is called Eutrophication. In such water bodies, dissolved oxygen content is nil or very less.

Which of the following statement is correct?

A. In eutrophic water bodies, dissolved oxygen content is more.

B. Eutrophication does not have any effect on the dissolved oxygen in the water body.

C. In eutrophic water bodies, dissolved oxygen content is nil or very less.

D. We should encourage eutrophication for improving dissolved oxygen in a water body.

Answer: C



Watch Video Solution

39. A water body characterized by nutrient rich water supports abundant growth of phytoplankton and other water plants on its surface. Over time, the water body gets filled with a large number of such plants and the process is called Eutrophication. In such water bodies, dissolved oxygen content is nil or very less.

There is an extremely low level of dissolved oxygen in a eutrophicated water body because :

- A. Excessive growth of bacterial decomposers feeding on dead material which consume the dissolved oxygen.
- B. Plants grow to such a great extent that they do not allow free flow of water and hence oxygen in the atmosphere does not get mixed with water.
- C. The dissolved oxygen in water reacts with minerals and nutrients to form compounds and hence greatly reduces the quantity of oxygen.
- D. Oxygen released is consumed by fishes in the eutrophicated water and hence the quantity of dissolved oxygen is very low.

Answer: A



Watch Video Solution

40. A water body characterized by nutrient rich water supports abundant growth of phytoplankton and other water plants on its surface. Over time, the water body gets filled with a large number of such plants and the process is called Eutrophication. In such water bodies, dissolved oxygen content is nil or very less.

The enrichment of water bodies by inorganic plant nutrients is known as _____

- A. oligotrophy
- B. neutralisation
- C. degradation
- D. eutrophication

Answer: D



Watch Video Solution

Sources Of Energy Self Assessment 1 Objective Type Questions A

Multiple Choice Questions

1. Which of the following is ultimately not derived from the sun's energy (or solar energy)

- A. Wind energy
- B. Geothermal energy
- C. Fossil fuel
- D. Biomass

Answer:

 [Watch Video Solution](#)

2. A hydropower plant converts

- A. Solar energy into electrical energy
- B. Potential energy into electrical energy
- C. Electrical energy into potential energy
- D. Muscular energy into electrical energy

Answer:



Watch Video Solution

3. Biogas is a mixture of

- A. Methane, Carbon dioxide, Hydrogen and Hydrogen sulphide
- B. Methane, Carbon dioxide, and Hydrogen sulphide only
- C. Methane and Carbon dioxide only
- D. Carbon dioxide and Hydrogen sulphide only

Answer:



Watch Video Solution

Sources Of Energy Self Assessment 1 Objective Type Questions B Assertion And Reason Type Questions

1. Assertion (A): Charcoal is better fuel than wood.

Reason (R) : Wood is smokeless and leaves no residue.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:





Watch Video Solution

2. Assertion (A): Biogas is a boon to the farmers.

Reason (R): Spent slurry is used as manure and can be used to generate electricity.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:



Watch Video Solution

Sources Of Energy Self Assessment 1 Objective Type Questions C Very Short Answer Type Questions

1. What is a wind energy farm?

 [Watch Video Solution](#)

2. State any four characteristics of a good source of energy.

 [Watch Video Solution](#)

3. Name the two major components present in the left-over slurry of a biogas plant.

 [Watch Video Solution](#)

Sources Of Energy Self Assessment 1 Objective Type Questions Short Answer Type Questions

1. What is biogas ? Describe the steps involved in obtained biogas.



[Watch Video Solution](#)

Sources Of Energy Self Assessment 2 Objective Type Questions A Multiple Choice Questions

1. The material contained in the bodies of plants and animals is called

A. Dung cakes

B. Biogas

C. Charcoal

D. Biomass

Answer:

 [Watch Video Solution](#)

2. Write the full form of OTE.

- A. Ocean Thermal Energy
- B. Ocean Transition Energy
- C. Ocean Thermal Effect
- D. Operated Technical Element

Answer:

 [Watch Video Solution](#)

3. Which of these is not a way to harness energy from oceans?

- A. Tidal energy
- B. Ocean Thermal Energy
- C. Wave energy
- D. Hydroelectric energy

Answer:

 [Watch Video Solution](#)

Sources Of Energy Self Assessment 2 Objective Type Questions B Assertion And Reason Type Questions

1. Assertion (A) : Solar heating devices are painted black.

Reason (R) : Black bodies are good absorbers of heat, so temperature rises quickly.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:



Watch Video Solution

**Sources Of Energy Self Assessment Objective Type Questions B
Assertion And Reason Type Questions**

1. Assertion (A) : Solar heating devices are painted black.

Reason (R) : Black bodies are good absorbers of heat, so

temperature rises quickly.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:

 [Watch Video Solution](#)

Sources Of Energy Self Assessment 2 C Very Short Answer Type Questions

1. Mention the purpose of blacking the interior of a solar cooker.



[Watch Video Solution](#)

2. State the necessary conditions to operate an ocean thermal energy conversion plant.



[Watch Video Solution](#)

3. Write two forms in which solar energy manifests itself in sea.



[Watch Video Solution](#)

Sources Of Energy Self Assessment 2 Short Answer Type Questions

1. Why is there a need to harness non-conventional sources of energy ? Give two main reasons.



[Watch Video Solution](#)

2. What is meant by nuclear waste ? State the main hazard of this waste on the living beings. How is this waste disposed off ?

 [Watch Video Solution](#)

Sources Of Energy Ncert Exemplar Intext Questions

1. What is good source of energy ?

 [Watch Video Solution](#)

2. What is a good fuel ?

 [Watch Video Solution](#)

3. If you could use any source of energy for heating your food, which one would you use and why ?

 [Watch Video Solution](#)

4. What are the disadvantages of fossil fuels ?

 [Watch Video Solution](#)

5. Why are we looking at alternate sources of energy ?

 [Watch Video Solution](#)

6. How has the traditional use of wind and water energy been modified for our convenience ?

 [Watch Video Solution](#)

7. What kind of mirror-concave, convex or plane-would be best suited for use in a solar cooker ? Why ?

 [Watch Video Solution](#)

8. What are the limitations of energy that can be obtained from the oceans ?

 [Watch Video Solution](#)

9. What is geo-thermal energy?

 [Watch Video Solution](#)

10. What are the advantages of nuclear energy?



 [Watch Video Solution](#)

11. Can any source of energy be pollution-free ? Why or why not ?

 [Watch Video Solution](#)

12. Hydrogen has been used as a rocket fuel. Would you consider it a cleaner fuel *CNG* ? Why or why not ?

 [Watch Video Solution](#)

13. Name two energy sources that you would consider to be renewable. Give reasons for your choices.

 [Watch Video Solution](#)

14. Give the names of two energy sources that you would consider to be exhaustible. Give reasons for your choices.



[Watch Video Solution](#)

Sources Of Energy Ncert Exemplar Exercise Questions

1. A solar water heater cannot be used to get hot water on :

- A. a sunny day
- B. a cloudy day
- C. a hot day.
- D. a windy day

Answer: B



[Watch Video Solution](#)

2. Which of the following is not an example of a biomass energy source ?

- A. Wood
- B. Gobar-gas
- C. Nuclear energy
- D. Coal

Answer: C

 [Watch Video Solution](#)

3. Most of the sources of energy that we use represent stored solar energy. Which of the following is not ultimately derived from the sun's energy ?

A. Geothermal energy

B. Wind energy

C. Nuclear energy

D. Biomass

Answer: C



[Watch Video Solution](#)

4. Compare and contrast fossil fuels and the sun as sources of energy.



[Watch Video Solution](#)

5. Compare and contrast bio-mass and hydro-electricity as sources of energy.



 [Watch Video Solution](#)

6. What are the limitations of extracting energy from :

(a) the wind

(b) waves

(c) tides ?

 [Watch Video Solution](#)

7. On what basis would you classify energy sources as :

(a) renewable and non-renewable ?

(b) exhaustible and inexhaustible ?

Are the options given in (a) and (b) the same ?

 [Watch Video Solution](#)

8. What are the qualities on an ideal source of energy ?

 [Watch Video Solution](#)

9. What are the disadvantages of using a solar cooker ? Are there places where solar cookers would have limited utility ?

 [Watch Video Solution](#)

10. What are the environmental consequences of the increasing demand for energy ? What steps would you suggest to reduce energy consumption ?

 [Watch Video Solution](#)

1. Which of the following is a non-renewable source of energy ?

A. Wood

B. Sun

C. Fossil fuels

D. Wind

Answer: C



[Watch Video Solution](#)

2. Acid rain happens because :

A. Sun leads to heating of upper layer of atmosphere.

B. burning of fossil fuels release oxides of carbon, nitrogen and sulphur in the atmosphere.

C. electrical charges are produced due to friction amongst clouds.

D. The Earth atmosphere contains acids.

Answer: B

 [Watch Video Solution](#)

3. Fuel used in thermal power plants is :

A. water

B. uranium

C. biomass

D. fossil fuels

Answer: D

 [Watch Video Solution](#)

4. In a hydro power plant :

- A. potential energy possessed by stored water is converted into electricity.
- B. kinetic energy possessed by stored water is converted into potential energy.
- C. electricity is extracted from water.
- D. water is converted into steam to produce electricity.

Answer: A



Watch Video Solution

5. Which is the ultimate source of energy ?

- A. Water
- B. Sun
- C. Uranium
- D. Fossil fuels

Answer: B



Watch Video Solution

6. Which one of the following forms of energy leads to least environmental pollution in the process of its harnessing and utilisation ?

- A. Nuclear energy
- B. Thermal energy
- C. Solar energy

D. Geo-thermal energy

Answer: C

 [Watch Video Solution](#)

7. Ocean thermal energy is due to :

- A. energy stored by waves in the ocean.
- B. temperature difference at different levels in the ocean.
- C. pressure difference at different levels in the ocean.
- D. tides arising out in the ocean.

Answer: B

 [Watch Video Solution](#)

8. The major problem in harnessing nuclear energy is how to :

A. split nuclei ?

B. sustain the reaction ?

C. dispose of spent fuel safely?

D. convert nuclear energy into electrical energy?

Answer: C



[Watch Video Solution](#)

9. Which part of the solar cooker is responsible for greenhouse effect ?

A. Coating with black colour inside the box

B. Mirror

C. Glass sheet

D. Outer cover of the solar cooker

Answer: C



Watch Video Solution

10. The main constituent of biogas is :

A. methane.

B. carbon dioxide.

C. hydrogen.

D. hydrogen sulphide.

Answer: A



Watch Video Solution

11. The power generated in a windmill :

- A. is more in rainy season since, damp air would mean more air mass hitting the blades.
- B. depends on the height of the tower.
- C. depends on wind velocity.
- D. can be increased by planting tall trees close to the tower.

Answer: C

 [Watch Video Solution](#)

12. Choose the correct statement :

- A. Sun can be taken as an inexhaustible source of energy.
- B. There is infinite storage of fossil fuel inside the Earth.

C. Hydro energy and wind energy plants are non polluting sources of energy.

D. Waste from a nuclear power plant can be easily disposed off.

Answer: A

 [Watch Video Solution](#)

13. In a hydroelectric power plant more electrical power can be generated if water falls a greater height because :

A. its temperature increases.

B. larger amount of potential energy is converted into kinetic energy.

C. the electricity content of water increases with height.

D. more water molecules dissociate into ions.

Answer: B

 [Watch Video Solution](#)

14. Choose the incorrect statement regarding wind power.

- A. It is expected to harness wind power to minimum in open space.
- B. The potential energy content of wind blowing at high altitudes is the source of wind power.
- C. Wind hitting at the blades of a windmill causes them to rotate. The rotation thus achieved can be utilised further.
- D. One possible method of utilising the energy of rotational motion of the blades of a windmill is to run the turbine of an electric generator.

Answer: A::B::D



Watch Video Solution

15. Choose the incorrect statement :

- A. We are encouraged to plant more trees so as to ensure clean environment and also provide biomass fuel.
- B. Gobar gas is produced when crops, vegetable wastes, etc., decompose in the absence of oxygen.
- C. The main ingredient of biogas is ethane and it gives a lot of smoke and also produces a lot of residual ash.
- D. Biomass is a renewable source of energy.

Answer: C



Watch Video Solution

Sources Of Energy Ncert Exemplar Short Answer Type Questions

1. Why is there a need to harness non-conventional sources of energy ? Give two main reasons.

 [Watch Video Solution](#)

2. Write two different ways of harnessing energy from ocean.

 [Watch Video Solution](#)

3. What steps would you suggest to minimise environmental pollution caused by burning of fossil fuels ?

 [Watch Video Solution](#)

4. What is the role of a plane mirror and a glass sheet in a solar cooker?

 [Watch Video Solution](#)

5. Mention three advantages of a solar cell ?

 [Watch Video Solution](#)

6. What is biomass ? What can be done to obtain bio-energy using biomass ?

 [Watch Video Solution](#)

7. What are the limitations on obtaining energy from wind ?

 [Watch Video Solution](#)

Sources Of Energy Ncert Exemplar Long Answer Type Questions

1. Which is the process used to harness nuclear energy these days ?

Explain it briefly.

 [Watch Video Solution](#)

2. How can solar energy be harnessed ? Mention any two limitations in using solar energy. How are these limitations overcome ?

 [Watch Video Solution](#)

3. Make a list of conventional and non-conventional sources of energy. Give a brief description harnessing one non-conventional source of energy.



[Watch Video Solution](#)

4. Why is there a need to harness non-conventional sources of energy ? How can energy be harnessed from the sea in different ways ?



[Watch Video Solution](#)

5. What are the environmental consequences of using fossil fuels ? Suggest the steps to minimize the pollution caused by various sources of energy including non-conventional sources of energy.



[Watch Video Solution](#)

6. Energy from various sources is considered to have been derived from the Sun. Do you agree ? Justify your answer.

 [Watch Video Solution](#)

7. What is biomass ? Explain the principle and working of a biogas plant using a labelled schematic diagram.

 [Watch Video Solution](#)

Sources Of Energy Board Corner Very Short Answer Type Questions

1. Why is biogas considered an excellent fuel?

 [Watch Video Solution](#)

2. Write the name of the main constituent of biogas. Also state its percentage.

 [Watch Video Solution](#)

3. If you could use any source of energy for heating your food, which one would you use and why ?

 [Watch Video Solution](#)

4. Write the energy conversion that place in a hydropower plant.

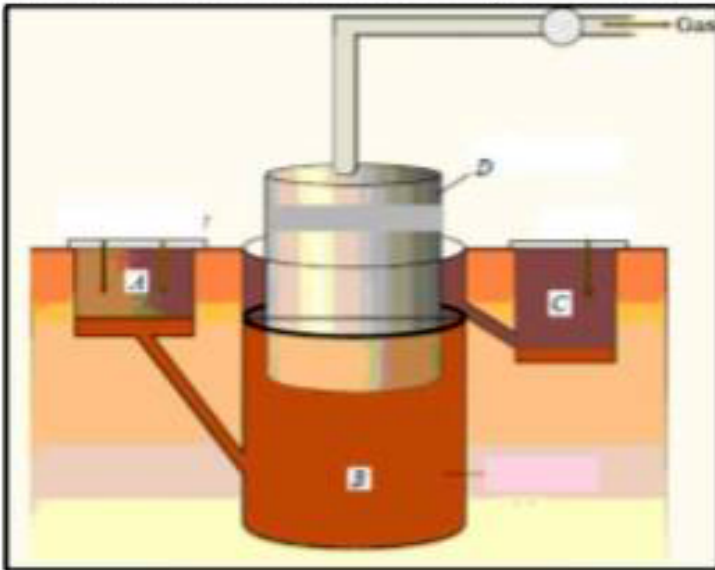
 [Watch Video Solution](#)

Sources Of Energy Board Corner Short Answer Type Questions

1. What are solar cells ? Explain the structure of solar panel. List two principal advantages associates with solar cells.

 [Watch Video Solution](#)

1. A biogas plant is where biogas is produced by fermenting biomass



In which of the parts would you find anaerobic bacteria ?

A. A

B. B

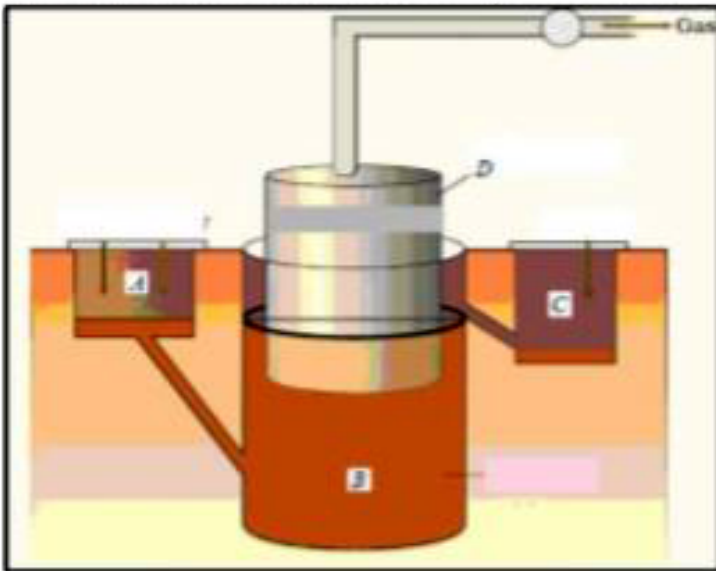
C. C

D. D

Answer: B

 Watch Video Solution

2. A biogas plant is where biogas is produced by fermenting biomass



Which one of the following is NOT correct for biogas

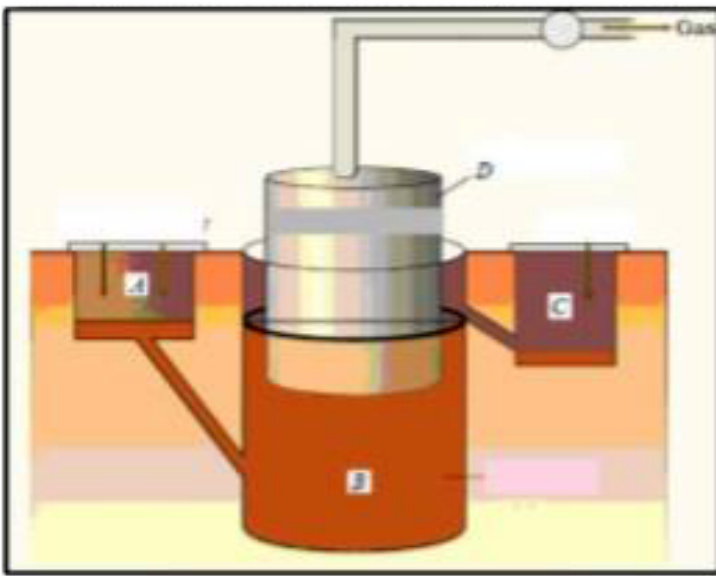
- A. its carbon neutral
- B. its non-renewable
- C. it depends on micro-organisms
- D. yields rich manure

Answer: B



Watch Video Solution

3. A biogas plant is where biogas is produced by fermenting biomass



Which of the following best indicates the steps of anaerobic digestion?

- A. Waste water feed biogas storage → generator → biogas
- B. Waste water feed → digester → biogas → biogas storage generator
- C. Generator → waste water feed → digester → biogas → biogas storage

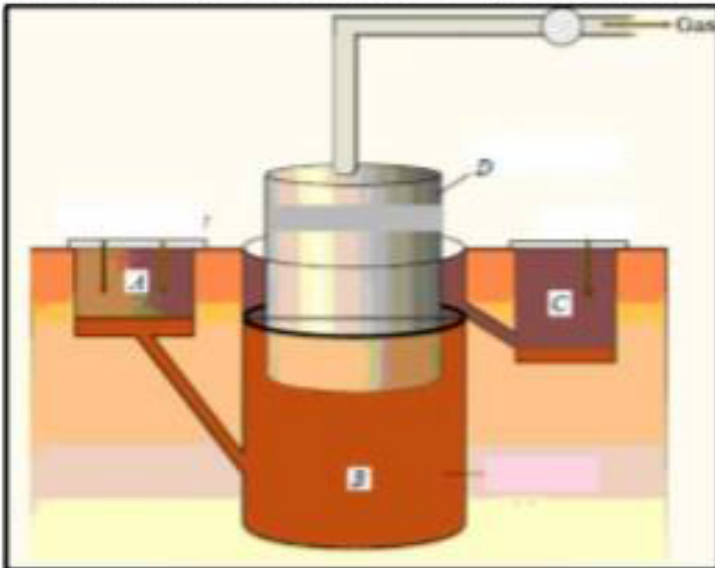
D. Waste water feed → biogas → digester → biogas

storage ® generator

Answer: B

 [Watch Video Solution](#)

4. A biogas plant is where biogas is produced by fermenting biomass



Biogas is a better fuel than animal dung cake because q

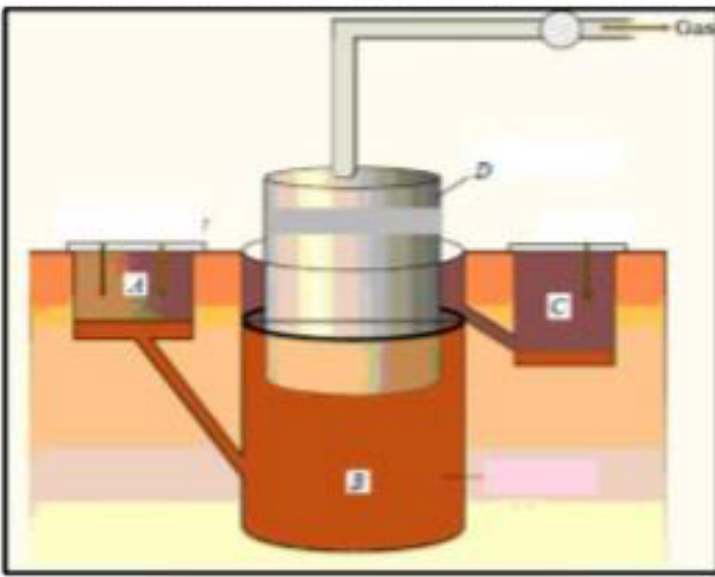
- (a) Biogas is a renewable source of energy
- (b) Animal dung cake has higher calorific value
- (c) Biogas has high heating capacity
- (d) Biogas burns without smoke

- A. (1) only
- B. (2) only
- C. (3) and (4)
- D. (1) and (2)

Answer: C

 [Watch Video Solution](#)

5. A biogas plant is where biogas is produced by fermenting biomass



Biogas is formed in the

- A. presence of air only
- B. presence of water only
- C. presence of air and absence of water
- D. presence of water and absence of air.

Answer: D

 [Watch Video Solution](#)

6. In Kunjpura village, located in Karnal district, Haryana, Aditya Aggarwal and his older brother Amit Aggarwal run Tee Cee Industries, a steel plant set up by their ancestors in 1984. Along with this, they also run a gaushala that houses 1,200 cows that can no longer produce milk.

The cow shelter was manageable but running the steel plant was turning out to be expensive because they spent a whopping Rs 5 lakh every month on electricity

The brothers struck upon an idea. Why not run the factory with the biogas produced from cow dung from the shelter and other gaushalas , along with bio and agri-waste like sewage , etc this led Aditya and Amit to start Amrit Fertilisers, a biogas project, in 2014, without any government support.

Biogas is a mixture of the following gases.

A. Ethane, Carbon monoxide, Nitrogen and A Butane

B. Methane, Hydrogen, Carbon dioxide and Nitrogen

C. Butane, Carbon monoxide, Propane and Hydrogen

D. Carbon monoxide, Sulphur dioxide and Hydrogen

Answer: B

 [Watch Video Solution](#)

7. In Kunjpura village, located in Karnal district, Haryana, Aditya Aggarwal and his older brother Amit Aggarwal run Tee Cee Industries, a steel plant set up by their ancestors in 1984. Along with this, they also run a gaushala that houses 1,200 cows that can no longer produce milk.

The cow shelter was manageable but running the steel plant was turning out to be expensive because they spent a whopping Rs 5 lakh every month on electricity

The brothers struck upon an idea. Why not run the factory with the biogas produced from cow dung from the shelter and other

gaushalas , along with bio and agri-waste like sewage , etc this led Aditya and Amit to start Amrit Fertilisers, a biogas project, in 2014, without any government support.

Raw material used in bio gas plant is

- A. Animal dung
- B. crop residue
- C. Food waste
- D. All of the above

Answer: D

 [Watch Video Solution](#)

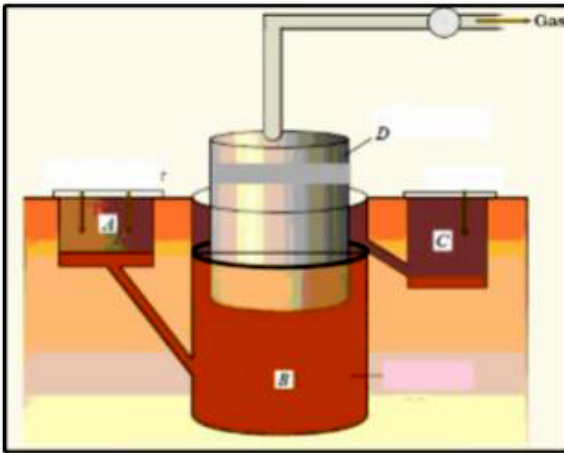
8. In Kunjpura village, located in Karnal district, Haryana, Aditya Aggarwal and his older brother Amit Aggarwal run Tee Cee Industries, a steel plant set up by their ancestors in 1984. Along

with this, they also run a gaushala that houses 1,200 cows that can no longer produce milk.

The cow shelter was manageable but running the steel plant was turning out to be expensive because they spent a whopping Rs 5 lakh every month on electricity

The brothers struck upon an idea. Why not run the factory with the biogas produced from cow dung from the shelter and other gaushalas , along with bio and agri-waste like sewage , etc this led Aditya and Amit to start Amrit Fertilisers, a biogas project, in 2014, without any government support.

The correct labelling in a biogas plant is given in



- | | | | |
|-----------------|------------|------------|-------------|
| (a) A- Manure | B- slurry | C-Gas tank | D-Digester |
| (b)A- Slurry | B-Digester | C-Manure | D- Gas tank |
| (c) A-Gas tank | B-Manure | C-Digester | D- Slurry |
| (d) A- Digester | B-Gas tank | C-Slurry | D-Manure. |

A. A-Manure B-Slurry C-Gas tank D-Digester

B. A-Slurry B-Digester C-Manure D-Gas tank

C. A-Gas tank B-Manure C-Digester D-Slurry

D. A-Digester B-Gas tank C-Slurry D-Manure

Answer: C



Watch Video Solution

9. In Kunjpura village, located in Karnal district, Haryana, Aditya Aggarwal and his older brother Amit Aggarwal run Tee Cee Industries, a steel plant set up by their ancestors in 1984. Along with this, they also run a gaushala that houses 1,200 cows that can no longer produce milk.

The cow shelter was manageable but running the steel plant was turning out to be expensive because they spent a whopping Rs 5 lakh every month on electricity

The brothers struck upon an idea. Why not run the factory with the biogas produced from cow dung from the shelter and other gaushalas , along with bio and agri-waste like sewage , etc this led Aditya and Amit to start Amrit Fertilisers, a biogas project, in 2014, without any government support.

Biogas is a better fuel than animal dung cake because (i) Biogas has lower calorific value. (ii) Animal dung cake has higher calorific value. (iii) Biogas has high heating capacity. (iv) Biogas burns without smoke

A. (1) only

B. (2) only

C. (3) and (4)

D. (1) and (2)

Answer: C

 [Watch Video Solution](#)

10. In Kunjpura village, located in Karnal district, Haryana, Aditya Aggarwal and his older brother Amit Aggarwal run Tee Cee Industries, a steel plant set up by their ancestors in 1984. Along with this, they also run a gaushala that houses 1,200 cows that can no longer produce milk.

The cow shelter was manageable but running the steel plant was turning out to be expensive because they spent a whopping Rs 5 lakh every month on electricity

The brothers struck upon an idea. Why not run the factory with the biogas produced from cow dung from the shelter and other gaushalas , along with bio and agri-waste like sewage , etc this led Aditya and Amit to start Amrit Fertilisers, a biogas project, in 2014, without any government support.

Biogas is formed in the

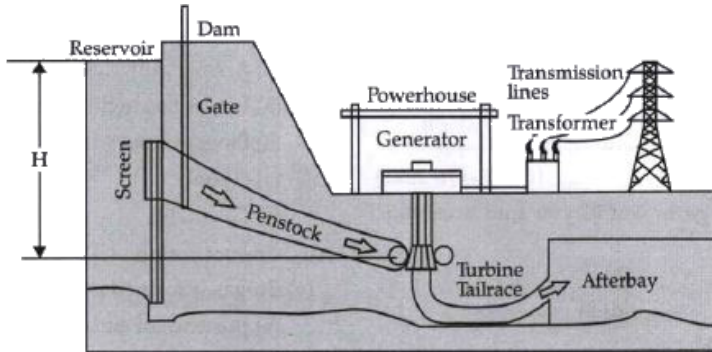
- A. presence of air only.
- B. presence of water only
- C. absence of air only
- D. presence of water and absence of air.

Answer: D



Watch Video Solution

11. Study the given diagram answer the question



Identify the given picture

a) Nuclear power plant

b) The hydropower plant

c) The solar panel

d) Thermal power plant

A. Nuclear power plant

B. The hydropower plant

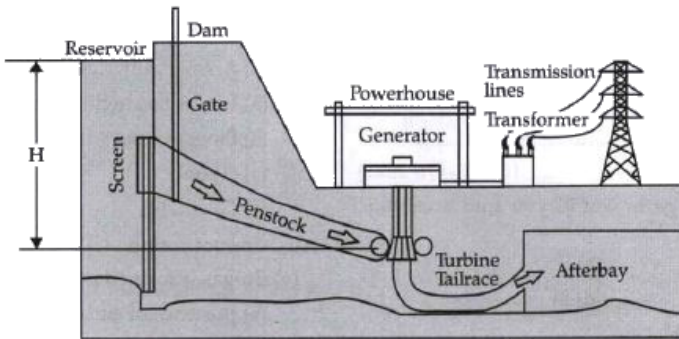
C. The solar panel

D. Thermal power plant

Answer: B

 Watch Video Solution

12. Study the given diagram answer the question



State the energy conversion that takes place in the given plant.

- a) Kinetic energy of flowing water into mechanical energy
- b) Kinetic energy of flowing water into electrical energy.
- c) Potential energy of flowing water into heat energy.
- d) Kinetic energy of flowing water into thermal energy.

A. Kinetic energy of flowing water into mechanical energy

B. Kinetic energy of flowing water into electrical energy.

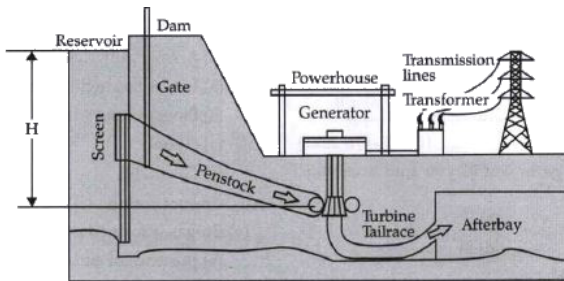
C. Potential energy of flowing water into heat energy.

D. Kinetic energy of flowing water into thermal energy.

Answer: B

 [Watch Video Solution](#)

13. Study the given diagram answer the question



Why this plant is considered as renewable source of energy?

A. As it is easily available.

B. As it is natural resource.

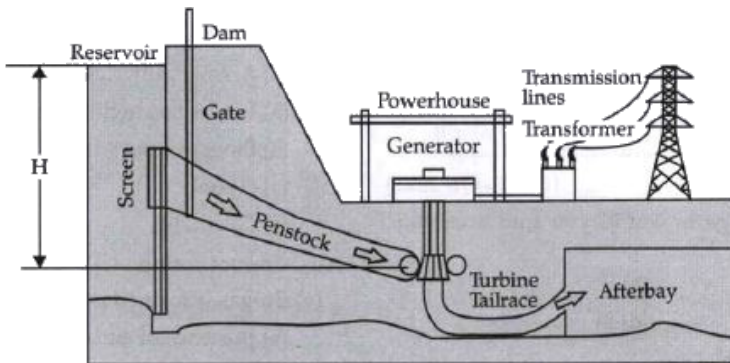
C. It is because water can be replenished by water cycle

D. It is economical resource.

Answer: C

 Watch Video Solution

14. Study the given diagram answer the question



State the negative impact of this plant on the ecosystem?

A. A large variety of plants get submerged in water.

B. It decreases the fertility of the soil in the downstream area and affect crops.

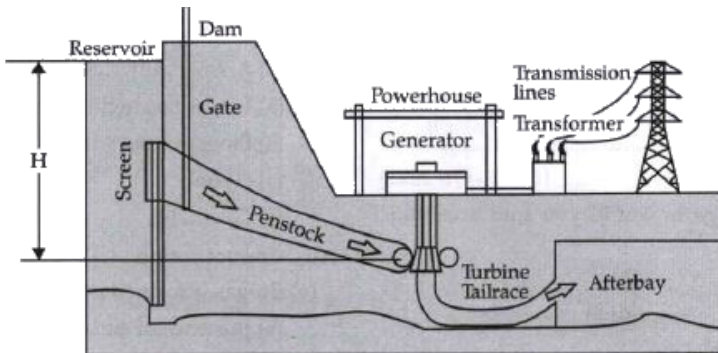
C. A large variety get submerged in water.

D. All of the above

Answer: D

 [Watch Video Solution](#)

15. Study the given diagram answer the question



Which of the following is another example of renewable source of energy?

A. Petroleum

B. Coal

C. Wind tot

D. Oil

Answer: C



Watch Video Solution

16. The energy which we obtain from the sun is called solar energy or radiant energy. The sun's energy is stored in coal, natural gas, water and wind. Coal, oil, and natural gas are known as fossil fuels.

Fossil fuels were formed over millions of years ago when the remains and fossils of prehistoric plants and animals sank to the bottom of swamps and oceans. These animal and plant remain were slowly covered and crushed by layers of rock, mud, sand, and water.

The pressure of all those layers caused the plants and animals to break down and change into coal, oil and natural gas. We use the energy in these fossil fuels to make electricity. As of the year 2019,

most of the energy we use comes from fossil fuels. However, fossil fuels are known as non-renewable sources of energy. They cannot be used over and over again. This means that one day they will run out!

Which of the following statements is correct?

- A. Energy obtained from fossil fuels is renewable.
- B. Energy obtained from the sun is solar energy.
- C. Coal and natural gas are examples of nuclear energy
- D. Wind energy is not renewable.

Answer: B



[Watch Video Solution](#)

17. The energy which we obtain from the sun is called solar energy or radiant energy. The sun's energy is stored in coal, natural gas,

water and wind. Coal, oil, and natural gas are known as fossil fuels.

Fossil fuels were formed over millions of years ago when the remains and fossils of prehistoric plants and animals sank to the bottom of swamps and oceans. These animal and plant remain were slowly covered and crushed by layers of rock, mud, sand, and water. The pressure of all those layers caused the plants and animals to break down and change into coal, oil and natural gas. We use the energy in these fossil fuels to make electricity. As of the year 2019, most of the energy we use comes from fossil fuels. However, fossil fuels are known as non-renewable sources of energy. They cannot be used over and over again. This means that one day they will run out!

Which among the following is not a renewable source of energy?

A. Solar energy

B. Biomass energy

C. Hydro-power

D. Geothermal energy

Answer: B

 [Watch Video Solution](#)

18. The energy which we obtain from the sun is called solar energy or radiant energy. The sun's energy is stored in coal, natural gas, water and wind. Coal, oil, and natural gas are known as fossil fuels. Fossil fuels were formed over millions of years ago when the remains and fossils of prehistoric plants and animals sank to the bottom of swamps and oceans. These animal and plant remain were slowly covered and crushed by layers of rock, mud, sand, and water. The pressure of all those layers caused the plants and animals to break down and change into coal, oil and natural gas. We use the energy in these fossil fuels to make electricity. As of the year 2019, most of the energy we use comes from fossil fuels. However, fossil

fuels are known as non-renewable sources of energy. They cannot be used over and over again. This means that one day they will run out!

The energy source that uses collectors to heat water or air in buildings is

- A. Solar energy
- B. Biomass energy
- C. Hydro-power
- D. Geothermal energy

Answer: A



Watch Video Solution

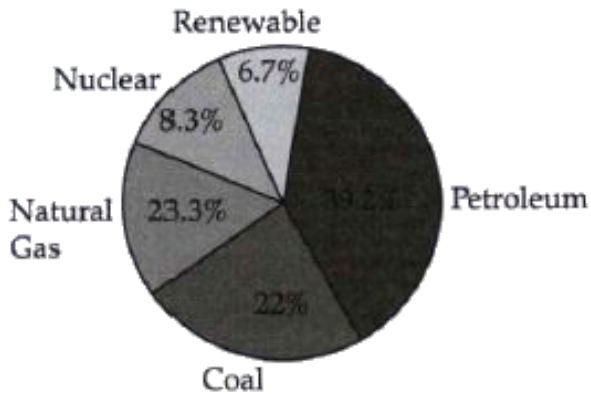
19. The energy which we obtain from the sun is called solar energy or radiant energy. The sun's energy is stored in coal, natural gas,

water and wind. Coal, oil, and natural gas are known as fossil fuels.

Fossil fuels were formed over millions of years ago when the remains and fossils of prehistoric plants and animals sank to the bottom of swamps and oceans. These animal and plant remain were slowly covered and crushed by layers of rock, mud, sand, and water. The pressure of all those layers caused the plants and animals to break down and change into coal, oil and natural gas. We use the energy in these fossil fuels to make electricity. As of the year 2019, most of the energy we use comes from fossil fuels. However, fossil fuels are known as non-renewable sources of energy. They cannot be used over and over again. This means that one day they will run out!

The pie chart below shows the consumption of various energy sources in the USA. Depending on the data given, if we consider that the quantity of all these sources are equal, then which source

of energy is most likely to exhaust first?



- A. Natural gas
- B. Coal
- C. Petroleum
- D. Water

Answer: C

[Watch Video Solution](#)

20. The energy which we obtain from the sun is called solar energy or radiant energy. The sun's energy is stored in coal, natural gas, water and wind. Coal, oil, and natural gas are known as fossil fuels.

Fossil fuels were formed over millions of years ago when the remains and fossils of prehistoric plants and animals sank to the bottom of swamps and oceans. These animal and plant remain were slowly covered and crushed by layers of rock, mud, sand, and water.

The pressure of all those layers caused the plants and animals to break down and change into coal, oil and natural gas. We use the energy in these fossil fuels to make electricity. As of the year 2019, most of the energy we use comes from fossil fuels. However, fossil fuels are known as non-renewable sources of energy. They cannot be used over and over again. This means that one day they will run out!

_____ formed over millions of years ago from the remains of prehistoric plants and animals.

A. Fossil fuels

B. Biogas

C. Water

D. Nuclear energy

Answer: A



[Watch Video Solution](#)

21. Fossil fuels are at the verge of getting exhausted. It is because of their non-replenishment, increasing demand, increasing population and more energy dependent technologies. Therefore, one has to look up to the sources which can be regenerated and cause the minimum possible environmental damage.

"I" am a fossil fuel that is very important for daily use. I am non-renewable source and regarded as the cleanest source of energy. I am found deep inside the earth in the gaseous state. Who am "I"?

A. Petroleum

B. Gasoline

C. Geothermal

D. Natural Gas

Answer: D



Watch Video Solution

22. Fossil fuels are at the verge of getting exhausted. It is because of their non-replenishment, increasing demand, increasing population and more energy dependent technologies. Therefore, one has to look up to the sources which can be regenerated and cause the minimum possible environmental damage.

Ramesh and Suresh are good friends. They live in the same colony and work in the same company. They both use their cars to go to office which run on petrol. As petrol is a non-renewable resource it

cannot be replenished within a short duration of time. As a common friend of both what best advise will you give them to save petrol.

- A. Go to office by bus/public transport
- B. Use cycle
- C. They can do car pool
- D. All of the above

Answer: D



Watch Video Solution

23. Fossil fuels are at the verge of getting exhausted. It is because of their non-replenishment, increasing demand, increasing population and more energy dependent technologies. Therefore, one has to look up to the sources which can be regenerated and

cause the minimum possible environmental damage.

Which of the following options is correct?

- A. Burning of fossil fuel may cause water pollution.
- B. Burning of fossil fuel causes air pollution.
- C. Burning of fossil fuels may cause soil pollution.
- D. All of these

Answer: D

 [Watch Video Solution](#)

24. Fossil fuels are at the verge of getting exhausted. It is because of their non-replenishment, increasing demand, increasing population and more energy dependent technologies. Therefore, one has to look up to the sources which can be regenerated and cause the minimum possible environmental damage.

Which of the following are the major effects of global warming caused due to burning of fossil fuels?

- A. Changes in weather.
- B. Melting of all the glaciers into water
- C. Deforestation

- A. A and C
- B. A, B and C
- C. A and B only
- D. B and C only

Answer: C



Watch Video Solution

25. Fossil fuels are at the verge of getting exhausted. It is because of their non-replenishment, increasing demand, increasing

population and more energy dependent technologies. Therefore, one has to look up to the sources which can be regenerated and cause the minimum possible environmental damage.

Which of the following is a reason for increasing demand of fossil fuels?

- A. Increasing population
- B. Increase in energy dependent technologies
- C. Increasing urbanization
- D. All of these

Answer: D



[Watch Video Solution](#)

Management Of Natural Resources Self Assessment 1 Objective Type Questions A Multiple Choice Questions

1. It was found that water from a river was contaminated with Coliform bacteria. Which one of the following pollutant might have got mixed with the water?

- A. Fertilizer run off
- B. Industrial waste
- C. Pesticides
- D. Human faecal matter

Answer:

 [Watch Video Solution](#)

2. Which one of the following stakeholders of forests causes the maximum damage to forest?

- A. People who live in or around the forest.

B. The forest department of the government.

C. The wildlife and native enthusiasts.

D. The industrialists.

Answer:



Watch Video Solution

3. Amrita Devi Bishnoi was associated with :

A. khejri

B. Keekar

C. Khejrail

D. Khajoor

Answer:



Watch Video Solution

Management Of Natural Resources Self Assessment 1 Objective Type Questions B Assertion And Reason Type Questions

1. Assertion (A) : We need to conserve natural resources. Reason (R) : Natural resources are limited.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:

 [Watch Video Solution](#)

2. Assertion (A) : Chipko Andolan was done by women of Reni village.

Reason (R) : Chipko Andolan was done to protect wild life.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:



Watch Video Solution

Management Of Natural Resources Self Assessment 1 Very Short Answer Type Questions

1. The presence of a particular group of bacteria in water bodies indicates contamination. Identify the group.

 [Watch Video Solution](#)

2. List two items which can be easily recycled, but we generally throw them in the dustbins.

 [Watch Video Solution](#)

3. List the benefits which Chipko movement brought to local population.

 [Watch Video Solution](#)

Management Of Natural Resources Self Assessment 2 Objective Type Questions A Multiple Choice Questions

1. Which gas is produced due to incomplete combustion of fuel?

A. Oxides of nitrogen

B. Methane

C. Carbon monoxide

D. Carbon dioxide

Answer:



[Watch Video Solution](#)

2. Which of the following statements is not the reason for depletion of ground water?

- A. Deforestation
- B. Afforestation
- C. Decreased rainfall
- D. Industrial waste discharge

Answer:



[Watch Video Solution](#)

3. Which of the following is not a measure for controlling CO_2 level in atmosphere?

- A. Decreased consumption of petrol in vehicles.
- B. Use of alternative fuels such as CNG, instead of coal and petroleum.
- C. Planting more and more trees.

D. Burning of garbage.

Answer:



[Watch Video Solution](#)

Management Of Natural Resources Self Assessment 2 Objective Type Questions B Assertion And Reason Type Questions

1. Assertion (A): Coal and petroleum are categorized as natural resources, so should be used judiciously.

Reason (R): They are formed from the degradation of bio-mass subjected to various biological and geological processes over a million of years.

A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

C. Assertion (A) is true but reason (R) is false.

D. Assertion (A) is false but reason (R) is true.

Answer:



Watch Video Solution

2. Assertion (A) : Water harvesting is the method to capture every trickle of water that falls on the land.

Reason (R) : Water harvesting recharges wells and ground water.

A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

C. Assertion (A) is true but reason (R) is false.

D. Assertion (A) is false but reason (R) is true.

Answer:

 [Watch Video Solution](#)

Management Of Natural Resources Self Assessment 2 C Very Short Answer Type Questions

1. List two measures that you would suggest for the better management of water resources.

 [Watch Video Solution](#)

2. Mention one reason of discontentment among the people who have been displaced by building dams.

 [Watch Video Solution](#)

3. Name the dam on the river Narmada, whose height Government wanted to raise ?

 [Watch Video Solution](#)

Management Of Natural Resources Self Assessment 2 Long Answer Type Questions

1. What do you understand by "Watershed Management" ? List any two advantages of watershed management.

 [Watch Video Solution](#)

2. 'Human beings occupy the top level in any food chain.' What are the consequences of this on our body?

 [Watch Video Solution](#)

Management Of Natural Resources Ncert Corner Intext Questions

1. What changes can you make in your habits to become more environment- friendly?

 [Watch Video Solution](#)

2. What would be the advantages of exploiting resources with short-term aims?

 [Watch Video Solution](#)

3. How would these advantages differ from the advantages of using a long-term perspective in managing our resources ?

 [Watch Video Solution](#)

4. Why do you think that there should be equitable distribution of resources? What forces would be working against an equitable distribution of our resources?

 [Watch Video Solution](#)

5. Why should we conserve forests and wildlife?

 [Watch Video Solution](#)

6. Suggest some approaches towards the conservation of forests.



[Watch Video Solution](#)

7. Find out about the traditional systems of water harvesting/management in your region.



[Watch Video Solution](#)

8. Compare the above system with the probable systems in hilly/mountainous areas or plains or plateau regions



[Watch Video Solution](#)

9. Find out the source of water in your region/locality. Is water from this source available to all people living in that area?



[Watch Video Solution](#)

1. What changes would you suggest in your home in order to be environment-friendly?



[Watch Video Solution](#)

2. Can you suggest some changes in your school which would make it environmentfriendly?



[Watch Video Solution](#)

3. We saw in this chapter that there are four main stakeholders when it comes to forests and wildlife. Which among these should have the authority to decide the management of forest produce? Why do you think so?



[Watch Video Solution](#)

 [Watch Video Solution](#)

4. How can you as an individual contribute or make a difference to the management of (a) forests and wildlife, (b) water resources and (c) coal and petroleum?

 [Watch Video Solution](#)

5. How can you as an individual contribute or make a difference to the management of (a) forests and wildlife, (b) water resources and (c) coal and petroleum?

 [Watch Video Solution](#)

6. How can you as an individual contribute or make a difference to the management of (a) forests and wildlife, (b) water resources and (c) coal and petroleum?



[Watch Video Solution](#)

7. What can you as an individual do to reduce your consumption of the various natural resources?



[Watch Video Solution](#)

8. List five things you have done over the last one week to —

- (a) conserve our natural resources.
- (b) increase the pressure on our natural resources.



[Watch Video Solution](#)

9. List five things you have done over the last one week to —

- (a) conserve our natural resources.
- (b) increase the pressure on our natural resources.

 [Watch Video Solution](#)

Management Of Natural Resources Ncert Exemplar Multiple Choice Type Questions

1. On the basis of the issues raised in this chapter, what changes would you incorporate in your lifestyle in a move towards a sustainable use of our resources?

 [Watch Video Solution](#)

2. From the list given below pick the item that is not natural resource

A. soil

B. water

C. electricity

D. air

Answer: C



Watch Video Solution

3. The most rapidly dwindling natural resource in the world is :

A. water

B. forest

C. wind

D. sunlight

Answer: B



Watch Video Solution

4. The most appropriate definition of a natural resource is that it is a substance/commodity that is

- A. present only on land.
- B. a gift of nature which is very useful to mankind.
- C. a man-made substance placed in nature.
- D. available only in the forest.

Answer: B



[Watch Video Solution](#)

5. The main reason for the abundant colidorm bacteria in the water of river Ganga is :

- A. disposal of unburnt corpses into water.
- B. discharge of effluents from electroplating industries.

C. washing of clothes.

D. immersion of ashes.

Answer: A

 [Watch Video Solution](#)

6. The pH of water sample collected from a river was found to be acidic in the range of 3.5-4.5, on the banks of the river were several factories that were discharging effluents into the river. The effluents of which one of the following factories is the most cause for lowering the pH of river water ?

A. Soap and detergent factory

B. Lead battery manufacturing factory

C. Plastic cup manufacturing factory

D. Alcohol distillery

Answer: B

 [Watch Video Solution](#)

7. The pH range most conducive for life of freshwater plants and animals is

A. 6.5 – 7.5

B. 2.0 – 3.5

C. 3.5 – 5.0

D. 9.0– 10.5

Answer: A

 [Watch Video Solution](#)

8. The three R's that will help us to conserve natural resources for long term use are

- A. recycle, regenerate, reuse
- B. reduce, regenerate, reuse
- C. reduce, reuse, redistribute
- D. reduce, recycle, reuse

Answer: D



Watch Video Solution

9. Given below are a few statements related to biodiversity. Pick those that correctly describe the concept of biodiversity

(i) Biodiversity refers to the different species of flora and fauna present in an area.

(ii) Biodiversity refers to only the flora of a given area.

(iii) Biodiversity is greater in a forest.

(iv) Biodiversity refers to the total number of individuals of a particular species living in an area.

A. (i) and (ii)

B. (ii) and (iv)

C. (i) and (iii)

D. (ii) and (iii)

Answer: C

 [Watch Video Solution](#)

10. Among the statements given below select the ones that correctly describes the concept of sustainable development

(i) planned growth with minimum damage to the environment.

- (ii) growth irrespective of the extent of damage caused to the environment.
- (iii) stopping all development work to conserve the environment.
- (iv) growth that is acceptable to all the stakeholders.

- A. (i) and (iv)
- B. (ii) and (iii)
- C. (ii) and (iv)
- D. (iii) only A

Answer: A

 [Watch Video Solution](#)

11. In our country, vast tracts of forests are cleared and a single species of plant is cultivated. This practice promotes

- A. biodiversity in the area.

- B. mono-culture in the area.
- C. growth of natural forest.
- D. to preserve the natural ecosystem in the area.

Answer: B



Watch Video Solution

12. A successful forest conservation strategy should involve

- A. protection of animals at the highest trophic level.
- B. protection of only consumers.
- C. protection of only herbivores.
- D. comprehensive programme to protect all the physical and biological components.

Answer: D



[Watch Video Solution](#)

13. The important message conveyed by the 'Chipko Movement' is
- A. to involve the community in forest conservation efforts.
 - B. to ignore the community in forest conservation efforts.
 - C. to cut down forest trees for developmental activities.
 - D. government agencies have the unquestionable right to order destruction of trees in forests.

Answer: A



[Watch Video Solution](#)

14. In our country, there are attempts to increase the height of several existing dams like Tehri and Almati, dams across Narmada.

Choose the correct statements among the following that are a consequence of raising the height of dams

- (i) Terrestrial flora and fauna of the area is destroyed completely.
- (ii) Dislocation of people and domestic animals living in the area.
- (iii) Valuable agricultural land may be permanently lost.
- (iv) It will generate permanent employment for people.

A. (i) and (ii)

B. (i), (ii) and (iii)

C. (i) and (iv)

D. all of the above

Answer: B



Watch Video Solution

15. Expand the abbreviation GAP

A. Governmental Agency for Pollution Control

B. Gross Assimilation by Photosynthesis

C. Ganga Action Plan

D. Governmental Agency for Animal Protection

Answer: C



Watch Video Solution

16. Select the incorrect statement :

A. Economic development is linked to environmental conservation

B. Sustainable development encourages development for current generation and conservation of resources for future generations

C. Sustainable development does not consider the view points of stakeholders

D. Sustainable development is a long planned and persistent development

Answer: C



Watch Video Solution

17. Which of the following is not a natural resource?

A. Mango tree

B. Snake

C. Wind

D. Wooden house

Answer: D



[Watch Video Solution](#)

18. Select the wrong statement:

- A. Forests provide variety of products.
- B. Forests have greater plant diversity.
- C. Forests do not conserve soil.
- D. Forests conserve water.

Answer: C



[Watch Video Solution](#)

19. Arabari forests of Bengal is dominated by

- A. Teak

B. Sal

C. Bamboo

D. Mangrove

Answer: B



Watch Video Solution

20. Ground water will not be depleted due to

A. afforestation

B. thermal power plants.

C. loss of forest, and decreased rainfall.

D. cropping of high water demanding crops.

Answer: a



Watch Video Solution

21. Opposition to the construction of large dams is due to

- A. social reasons.
- B. economic reasons.
- C. environmental reasons.
- D. all the above.

Answer: d

 [Watch Video Solution](#)

22. Khadins, Bundhis, Ahara and Kattas are ancient structures that are examples for

- A. grain storage.

B. wood storage.

C. water harvesting

D. soil conservation.

Answer: c



Watch Video Solution

23. Pick the right combination of terms which has no fossil fuel.

A. Wind, ocean and coal

B. Kerosene, wind and tide

C. Wind, wood, sun

D. Petroleum, wood, sun

Answer: c



Watch Video Solution

24. Select the eco-friendly activity among the following

- A. Using car for transportation.
- B. Using polybags for shopping.
- C. Using dyes for colouring clothes.
- D. Using windmills to generate power for irrigation.

Answer: d



[Watch Video Solution](#)

25. It is important to make check dams across the flooded gullies because they

- (i) hold water for irrigation
- (ii) hold water and prevent soil erosion

(iii) recharge ground water

(iv) hold water permanently

A. (i) and (iv)

B. (i) and (ii)

C. (iii) and (iv)

D. (i) and (iv)

Answer: b



[Watch Video Solution](#)

Management Of Natural Resources Ncert Exemplar Short Answer Type Questions

1. Prepare a list of five items that you use daily in the school.

Identify from the list such items that can be recycled.

 [Watch Video Solution](#)

2. List two advantages associated with water harvesting at the community level.

 [Watch Video Solution](#)

3. In a village in Karnataka, people started cultivating crops all around a lake which was always filled with water. They added fertilisers to their field in order to enhance the yield. Soon they discovered that the waterbody was completely covered with green floating plants and fishes started dying in large numbers. Analyse the situation and give reasons for excessive growth of plants and death of fish in the lake.

 [Watch Video Solution](#)

4. What measures would you take to conserve electricity in your house?

 [Watch Video Solution](#)

5. Although coal and petroleum are produced by degradation of bio-mass, yet we need to conserve them. Why?

 [Watch Video Solution](#)

6. Suggest a few measures for controlling carbon dioxide levels in the atmosphere.

 [Watch Video Solution](#)

7. Locate and name the water reservoirs in Figures (a) and (b).

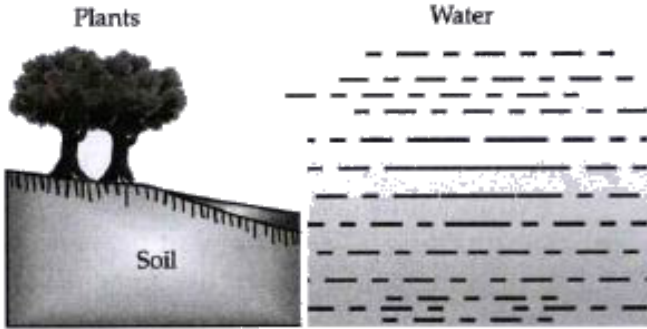


Fig. (a)

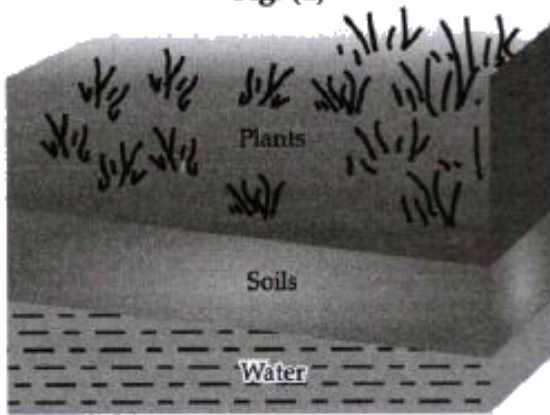


Fig. (b)



Watch Video Solution

8. Which has an advantage over the other and why?

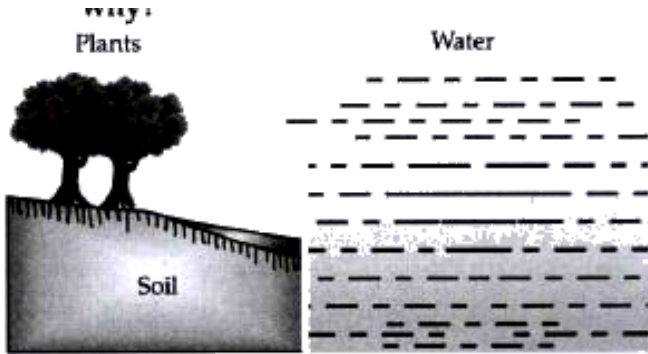


Fig. (a)

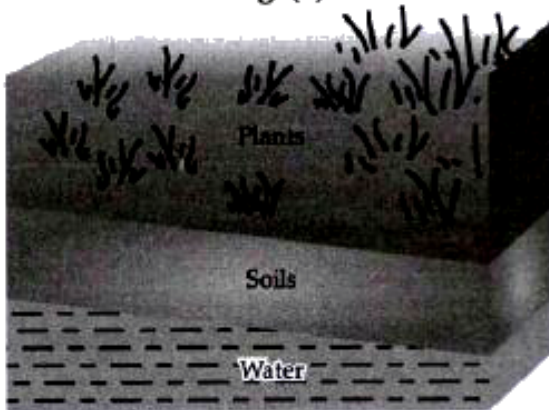


Fig. (b)



Watch Video Solution

Management Of Natural Resources Ncert Exemplar Long Answer Type Questions

1. In the context of conservation of natural resources, explain the terms reduce, recycle and reuse. From among the materials that we use in daily life, identify two materials for each category.

 [Watch Video Solution](#)

2. Prepare a list of five activities that you perform daily in which natural resource can be conserved or energy utilisation can be minimised.

 [Watch Video Solution](#)

3. Is water conservation necessary? Give reasons.

 [Watch Video Solution](#)

4. Suggest a few useful ways of utilising waste water.

 [Watch Video Solution](#)

5. What is the importance of forest as a resource?

 [Watch Video Solution](#)

6. Why are the Arabari forests of Bengal known to be a good example of conserved forest?

 [Watch Video Solution](#)

**Management Of Natural Resources Board Corner Very Short Answer
Type Questions**

1. Name two industries based on forest produce.

 [Watch Video Solution](#)

2. List two advantages associated with water harvesting at the community level.

 [Watch Video Solution](#)

Management Of Natural Resources Board Corner Short Answer Type Questions

1. What is sustainable management ? Why is reuse considered better in comparison to recycle ?

 [Watch Video Solution](#)

2. Management of forest and wild life resources is a very challenging task. Why ? Give any two reasons.

 [Watch Video Solution](#)

3. Explain how the involvement of local people would be useful for successful management of forests.

 [Watch Video Solution](#)

4. List three advantages each of:

(i) exploiting resources with short term aims, and

(ii) using a long term perspective in managing our natural resources.

 [Watch Video Solution](#)

5. What is meant by wildlife? How is it important for us?

 [Watch Video Solution](#)

6. State two advantages of conserving: (i) forests and (ii) wild life.

 [Watch Video Solution](#)

7. List two advantages associated with water harvesting at the community level.

 [Watch Video Solution](#)

8. Why do you think that there should be equitable distribution of resources? What forces would be working against an equitable distribution of our resources?



 [Watch Video Solution](#)

9. Why must we conserve our forests ? List two factors responsible for causing deforestation.

 [Watch Video Solution](#)

10. What can you as an individual do to reduce your consumption of the various natural resources?

 [Watch Video Solution](#)

11. Why are coal and petroleum categorised as natural resources? Give a reason as to why they should be used judiciously.

 [Watch Video Solution](#)

12. Although coal and petroleum are produced by degradation of bio-mass, yet we need to conserve them. Why?

 [Watch Video Solution](#)

13. What is water harvesting ? List two main advantages associated with water harvesting at the community level. Write two causes for the failure of sustained availability of groundwater.

 [Watch Video Solution](#)

14. Why do you think that there should be equitable distribution of resources? What forces would be working against an equitable distribution of our resources?

 [Watch Video Solution](#)

15. List three advantages each of:

(i) exploiting resources with short term aims, and

(ii) using a long term perspective in managing our natural resources.



Watch Video Solution

16. What are the environmental consequences of using fossil fuels ?

Suggest the steps to minimize the pollution caused by various sources of energy including non-conventional sources of energy.



Watch Video Solution

17. What is dam ? Why do we need to build large dams ? While building large dams, which three main problems should particularly be addressed to maintain peace among local people ? Mention them .



[Watch Video Solution](#)

18. Water is an elixir of life, a very important natural resource. Your Science teacher wants you to prepare a plan for a formative assessment activity, "How to save water, the vital natural resource". Write any two ways that you will suggest to bring awareness in your neighbourhood, on 'how to save water.



[Watch Video Solution](#)

19. Name and explain any one way by which the underground water table does not go down further.



[Watch Video Solution](#)



1.

Choose the waste management strategy that is matched with correct example.

| | | |
|-----|-----------|--|
| (a) | Refuse | Choose products that use less packaging |
| (b) | Reduce | Give unwanted toys and books to hospitals or schools |
| (c) | Reuse | Not using single use plastic |
| (d) | Repurpose | Making flower pot from used plastic bottle |

 [Watch Video Solution](#)



2.

Recycling of paper is a good practice but recycled paper should not be used as food packaging because

- A. recycled papers may release color /dyes on food items
- B. recycled papers are not absorbent
- C. recycled papers can cause infection due to release of methane
- D. recycled papers are costly

Answer: C



Watch Video Solution



3.

According to the ‘Solid Waste Management Rule 2016’, the waste should be segregated into three categories. Observe the table below and select the row that has correct information

| | Wet waste | Dry waste | Hazardous waste |
|----|-------------------------------------|---|---|
| a) | Cooked food, vegetable peels | Used bulbs, fluorescent lamps | Plastic carry bags, bottles, newspaper, cardboard |
| b) | Coffee and tea powder, garden waste | Plastic carry bags, bottles, newspaper, cardboard | Expired medicines, razors, paint cans |
| c) | Leftover food, vegetable peels | Coffee and tea powder, garden waste | Insect repellents, cleaning solutions |
| d) | Uncooked food, tea leaves | Old crockery, frying pans | Coffee and tea powder, garden waste |



Watch Video Solution



4.

Effective segregation of wastes at the point of generation is very important. Select the appropriate statements giving the importance of waste segregation.

- (i) less waste goes to the landfills
- (ii) better for public health and the environment
- (iii) help in reducing the waste
- (iv) resulting in deterioration of a waste picker's health

A. both (1) and (2)

B. (b) both (1) and

C. (c) both (2) and (3)

D. both (1) and (4)

Answer: A

 [Watch Video Solution](#)



5.

When recycling a plastic water bottle, what should you do with the cap?

- A. The cap goes into a garbage can and the bottle goes in a recycling bin
- B. Screw the cap back on the bottle, then put the bottle and cap in a recycling bin
- C. Screw the cap back on the bottle, then put the bottle and cap in the garbage can
- D. Recycle the cap separately.

Answer: A

 [Watch Video Solution](#)

6. The Ganga runs its course of over 2500 km from Gangotri in the Himalayas to Ganga Sagar in the Bay of Bengal. It is being turned into a drain by more than a hundred towns and cities in Uttar Pradesh, Bihar and West Bengal that pour their garbage and

excreta into it. Largely untreated sewage is dumped into the Ganges everyday. In addition, think of the pollution caused by other human activities like bathing, washing of clothes and immersion of ashes or unburnt corpses. And then, industries contribute chemical effluents to the Ganga's pollution load and the toxicity kills fish in large sections of the river.

Namami Gange Programme is an Integrated Conservation Mission approved as a Flagship Programme by the Union Government in June, 2014. It was launched to accomplish the twin objectives of effective abatement of pollution conservation and rejuvenation of River Ganga.

Which glacier is a source of Ganga river ?

- A. Ganga sagar
- B. Gangotri
- C. Bay of Bengal
- D. Arabian sea

Answer: B



Watch Video Solution

7. The Ganga runs its course of over 2500 km from Gangotri in the Himalayas to Ganga Sagar in the Bay of Bengal. It is being turned into a drain by more than a hundred towns and cities in Uttar Pradesh, Bihar and West Bengal that pour their garbage and excreta into it. Largely untreated sewage is dumped into the Ganges everyday. In addition, think of the pollution caused by other human activities like bathing, washing of clothes and immersion of ashes or unburnt corpses. And then, industries contribute chemical effluents to the Ganga's pollution load and the toxicity kills fish in large sections of the river.

Namami Gange Programme is an Integrated Conservation Mission approved as a Flagship Programme by the Union Government in June, 2014. It was launched to accomplish the twin objectives of

effective abatement of pollution conservation and rejuvenation of River Ganga.

Which of these is responsible for polluting Ganga river?

A. Excreta

B. Untreated sewage

C. Garbage

D. All of these

Answer: D

 [Watch Video Solution](#)

8. The Ganga runs its course of over 2500 km from Gangotri in the Himalayas to Ganga Sagar in the Bay of Bengal. It is being turned into a drain by more than a hundred towns and cities in Uttar Pradesh, Bihar and West Bengal that pour their garbage and

excreta into it. Largely untreated sewage is dumped into the Ganges everyday. In addition, think of the pollution caused by other human activities like bathing, washing of clothes and immersion of ashes or unburnt corpses. And then, industries contribute chemical effluents to the Ganga's pollution load and the toxicity kills fish in large sections of the river.

Namami Gange Programme is an Integrated Conservation Mission approved as a Flagship Programme by the Union Government in June, 2014. It was launched to accomplish the twin objectives of effective abatement of pollution conservation and rejuvenation of River Ganga.

What happens due to the toxicity created?

- A. It increases number of fish in the river.
- B. It makes the river water clean and healthy.
- C. It makes the river water potable.
- D. It kills fish in large sections of the river.

Answer: D



Watch Video Solution

9. The Ganga runs its course of over 2500 km from Gangotri in the Himalayas to Ganga Sagar in the Bay of Bengal. It is being turned into a drain by more than a hundred towns and cities in Uttar Pradesh, Bihar and West Bengal that pour their garbage and excreta into it. Largely untreated sewage is dumped into the Ganges everyday. In addition, think of the pollution caused by other human activities like bathing, washing of clothes and immersion of ashes or unburnt corpses. And then, industries contribute chemical effluents to the Ganga's pollution load and the toxicity kills fish in large sections of the river.

Namami Gange Programme is an Integrated Conservation Mission approved as a Flagship Programme by the Union Government in June, 2014. It was launched to accomplish the twin objectives of

effective abatement of pollution conservation and rejuvenation of River Ganga.

Which of the following statement is correct?

- A. The river becomes more holy due to the garbage poured.
- B. The river is being turned into a drain due to the pouring of garbage into it.
- C. The river is becoming more and more clean due to the garbage poured.
- D. The river water is becoming more suitable for healthy aquatic life due to pollution.

Answer: B



Watch Video Solution

10. The Ganga runs its course of over 2500 km from Gangotri in the Himalayas to Ganga Sagar in the Bay of Bengal. It is being turned into a drain by more than a hundred towns and cities in Uttar Pradesh, Bihar and West Bengal that pour their garbage and excreta into it. Largely untreated sewage is dumped into the Ganges everyday. In addition, think of the pollution caused by other human activities like bathing, washing of clothes and immersion of ashes or unburnt corpses. And then, industries contribute chemical effluents to the Ganga's pollution load and the toxicity kills fish in large sections of the river.

Namami Gange Programme is an Integrated Conservation Mission approved as a Flagship Programme by the Union Government in June, 2014. It was launched to accomplish the twin objectives of effective abatement of pollution conservation and rejuvenation of River Ganga.

Name the programme undertaken by the government to improve the condition of the river Ganga.

- A. Nama Gange
- B. Har Gange
- C. Namami Gange
- D. Holy river

Answer: C



Watch Video Solution

11. Visualize the following figures and answer the question .

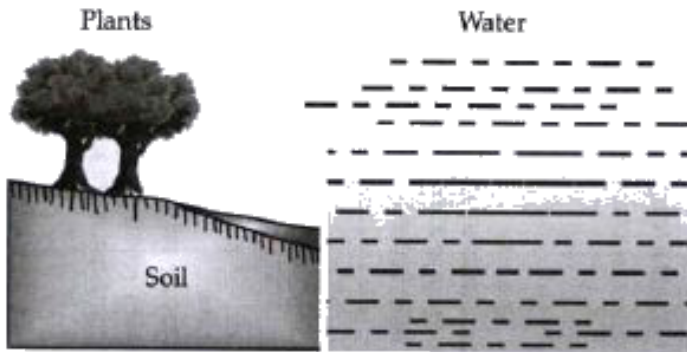


Fig. 1

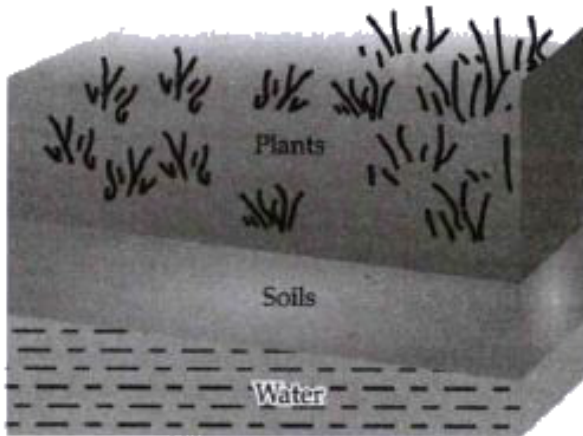


Fig. 2

Which figure shows underground water body?

A. Fig. 1

B. Fig. 2

C. Fig.1 and 2

D. None of them

Answer: B



Watch Video Solution

12. Visualize the following figures and answer the question .

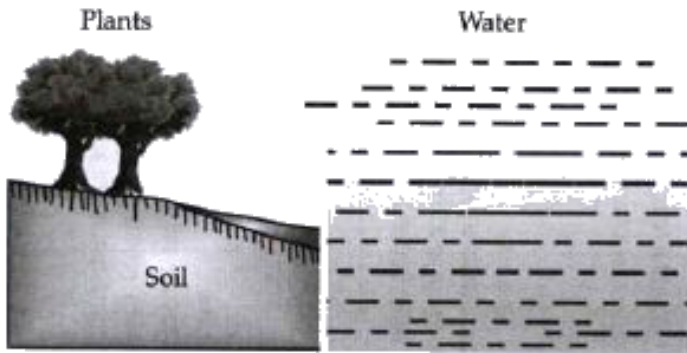


Fig. 1

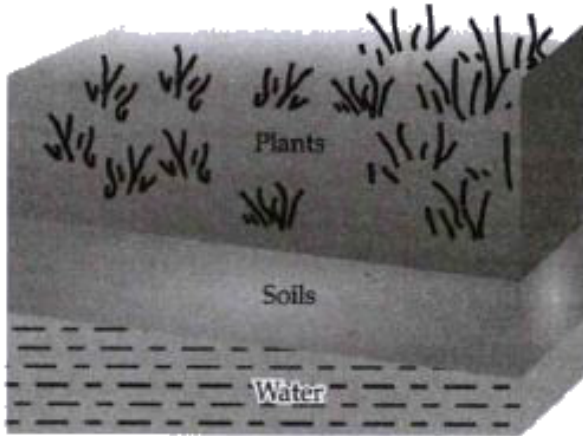


Fig. 2

Which figure shows water reservoir in the form of a pond?

A. Fig. 1

B. Fig. 2

C. Both of these

D. None of them

Answer: A



Watch Video Solution

13. Visualize the following figures and answer the question .

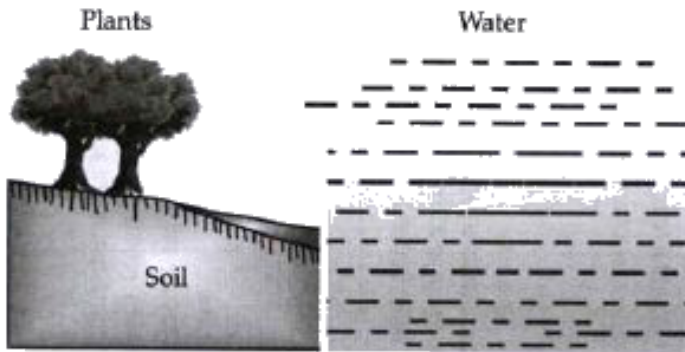


Fig. 1

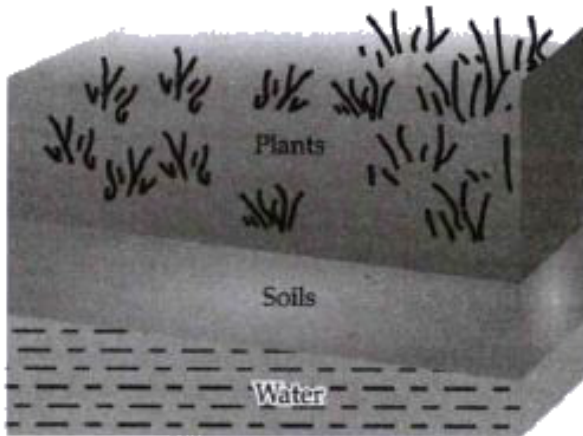


Fig. 2

Which has an advantage over the other?

- A. The Pond has advantage over the underground water body.
- B. The underground water body has advantage over the pond.

C. Both of them do not have any advantage.

D. Both of them are equally advantageous.

Answer: B



Watch Video Solution

14. Visualize the following figures and answer the question .

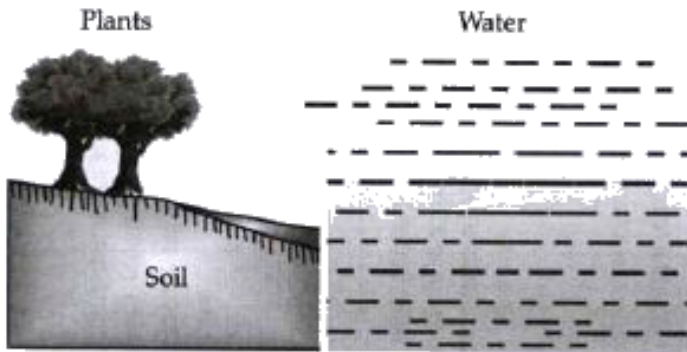


Fig. 1

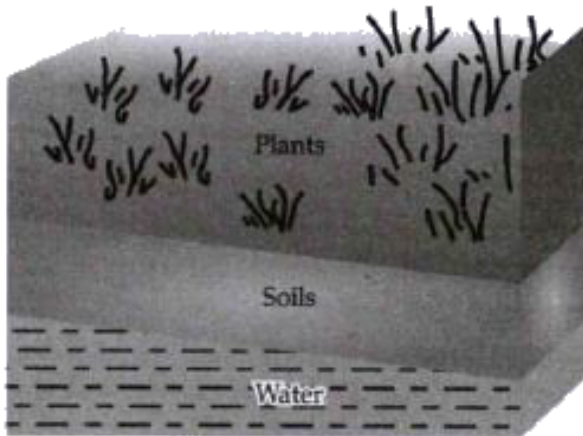


Fig. 2

A village is suffering from chronic water shortage because most of the water is made available to the surrounding water theme park.

What should be done in such a case?

- A. Authorities should first provide adequate supply of water to people.
- B. Requirement of water for theme park has to be given preference.
- C. It is not at all necessary to take the water shortage in the village into consideration.
- D. More attention should be given on the water supply to the water theme park as it is a recreational centre.

Answer: A



Watch Video Solution

15. Visualize the following figures and answer the question .

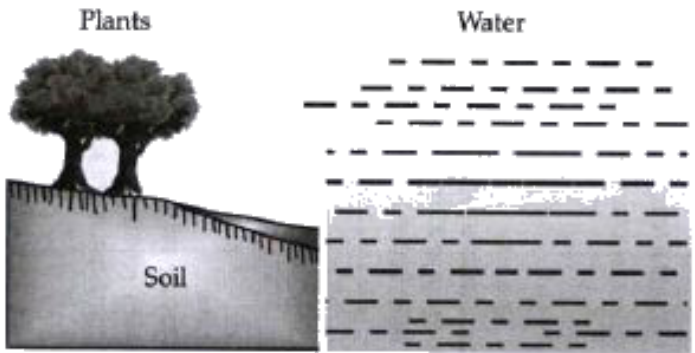


Fig. 1

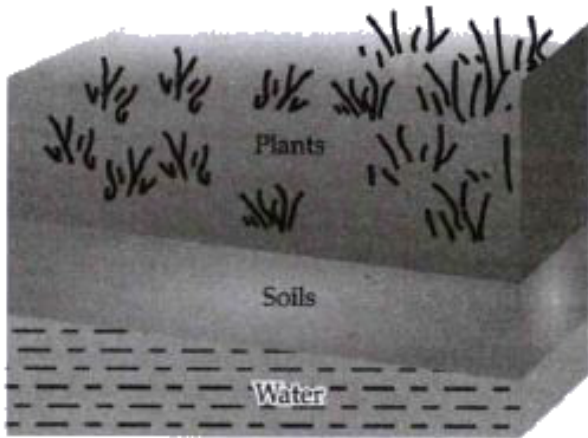


Fig. 2

Which of the following statement is correct?

A. Deforestation will save ground water from getting depleted.

B. Afforestation (plantation of trees) will save ground water from getting depleted.

C. Deforestation will not have any effect on ground water.

D. Afforestation will not be able to save ground water from getting depleted.

Answer: B



[Watch Video Solution](#)

16. Management and conservation of natural resources means the scientific utilization of resources. This method yields the greatest sustainable benefit of available resources to the present generations, while maintaining its potential to meet the needs and aspirations of future generations. In recent years, it has been observed that most of our natural resources are being depleted. It

is mainly due to the over exploitation of resources as a result of changing lifestyle, over population and technological development. Thus the need of the hour is to wisely manage our natural resources and minimize their wastage. For this, we should remember the 3 R's that can save environment.

Which of the following R's is not used to save the environment?

- A. Reduce
- B. Revolve
- C. Recycle
- D. Reuse

Answer: B



[Watch Video Solution](#)

17. Management and conservation of natural resources means the scientific utilization of resources. This method yields the greatest sustainable benefit of available resources to the present generations, while maintaining its potential to meet the needs and aspirations of future generations. In recent years, it has been observed that most of our natural resources are being depleted. It is mainly due to the over exploitation of resources as a result of changing lifestyle, over population and technological development. Thus the need of the hour is to wisely manage our natural resources and minimize their wastage. For this, we should remember the 3 R's that can save environment.

Why proper management of natural resources is essential?

- A. For judicial use and conservation of natural resources.
- B. For depletion of natural resources
- C. To create imbalance in the environment
- D. For deforestation for industrial purposes

Answer: A



Watch Video Solution

18. Management and conservation of natural resources means the scientific utilization of resources. This method yields the greatest sustainable benefit of available resources to the present generations, while maintaining its potential to meet the needs and aspirations of future generations. In recent years, it has been observed that most of our natural resources are being depleted. It is mainly due to the over exploitation of resources as a result of changing lifestyle, over population and technological development. Thus the need of the hour is to wisely manage our natural resources and minimize their wastage. For this, we should remember the 3 R's that can save environment.

If we are using discarded items of paper, plastic and sending them

to the respective industries for making useful objects. Then which R to save the environment we are following?

- A. Reduce
- B. Revolve
- C. Recycle
- D. Reuse

Answer: C

 [Watch Video Solution](#)

19. Management and conservation of natural resources means the scientific utilization of resources. This method yields the greatest sustainable benefit of available resources to the present generations, while maintaining its potential to meet the needs and aspirations of future generations. In recent years, it has been

observed that most of our natural resources are being depleted. It is mainly due to the over exploitation of resources as a result of changing lifestyle, over population and technological development. Thus the need of the hour is to wisely manage our natural resources and minimize their wastage. For this, we should remember the 3 R's that can save environment.

Which one out of the following is easier to practise in our daily life more?

- A. Reduce
- B. Revolve
- C. Recycle
- D. Reuse

Answer: D



[Watch Video Solution](#)

20. Management and conservation of natural resources means the scientific utilization of resources. This method yields the greatest sustainable benefit of available resources to the present generations, while maintaining its potential to meet the needs and aspirations of future generations. In recent years, it has been observed that most of our natural resources are being depleted. It is mainly due to the over exploitation of resources as a result of changing lifestyle, over population and technological development. Thus the need of the hour is to wisely manage our natural resources and minimize their wastage. For this, we should remember the 3 R's that can save environment.

Which of the following is an example of 'Reuse'?

- A. Making new plastic items from older ones
- B. Saving petrol by car pooling
- C. Making quilts out of used clothes
- D. Making compost out of garbage

Answer: C

 [Watch Video Solution](#)

Control And Coordination Self Assessment 1 Objective Type Questions A Multiple Choice Questions

1. Which one is not a reflex action ?

- A. Change in size of pupil in response to light intensity.
- B. Beating of heart
- C. Withdrawal of hand on touching a hot object
- D. Pulling of leg when foot falls on sharp objects

Answer:

 [Watch Video Solution](#)

2. Flow of signals in a synapse is from

- A. Axonal end of one neuron to dendritic end of another neuron.
- B. Dendritic end of one neuron to axonal end of another neuron
- C. Both the sides- axonal or dendritic end.
- D. None of these

Answer:



[Watch Video Solution](#)

3. Which gland secretes digestive enzymes as well as hormones?

- A. Adrenal gland
- B. Pancreas
- C. Testis

D. Thyroid gland

Answer:



Watch Video Solution

Control And Coordination Self Assessment 1 Objective Type Questions B Assertion And Reason Type Questions

1. Assertion (A) : Our body maintains blood sugar level.

Reason (R) : Pancreas secretes insulin which helps to regulate blood sugar levels in the body.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

C. Assertion (A) is true but reason (R) is false.

D. Assertion (A) is false but reason (R) is true.

Answer:



Watch Video Solution

2. Assertion (A) : Males have more stature than females during puberty.

Reason (R): This is because of presence of thyroxin in the blood of females.

A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

C. Assertion (A) is true but reason (R) is false.

D. Assertion (A) is false but reason (R) is true.

Answer:

 [Watch Video Solution](#)

Control And Coordination Self Assessment C Very Short Answer Type Questions

1. What is feedback mechanism of hormonal regulation? Take the example of insulin to explain this phenomenon.

 [Watch Video Solution](#)

2. (a) Name the part of brain which controls
(i) voluntary action, (ii) involuntary action.

(b) What is the significance of the peripheral nervous system?

Name the components of this nervous system and distinguish between the origin of the two.

 [Watch Video Solution](#)

3. How is our body designed to protect brain and spinal cord?

 [Watch Video Solution](#)

Control And Coordination Self Assessment 1 Short Answer Type Questions

1. Pertaining to endocrine system, what will you interpret if

You observe swollen neck in people living in the hills

 [Watch Video Solution](#)

2. Hyper secretion of growth hormone in childhood causes _____.

 [Watch Video Solution](#)

3. Pertaining to endocrine system, what will you interpret if Facial hair develops in boys aged 13.

 [Watch Video Solution](#)

4. Draw a neat diagram of human brain and label it

 [Watch Video Solution](#)

5. Label Medulla and Cerebellum

 [Watch Video Solution](#)

6. Write the functions of the above mentioned parts.

 [Watch Video Solution](#)

7. Both overproduction and underproduction of Growth hormone leads to disorders in the body." Explain.

 [Watch Video Solution](#)

8. Mention three characteristics feature of hormonal secretions in human beings.

 [Watch Video Solution](#)

1. Why is the use of iodised salt advisable

 [Watch Video Solution](#)

2. How do nerve impulses travel in the body ? id Explain.

 [Watch Video Solution](#)

3. How do nerve impulses travel in our body ?

 [Watch Video Solution](#)

4. Define reflex arc. Draw a flowchart showing the sequence of events which occur during sneezing

 [Watch Video Solution](#)

5. List four plant hormones. Write one function of each.

 [Watch Video Solution](#)

6. (a) Define reflex action. State its significance.

(b) How do plants respond to external stimuli ?

 [Watch Video Solution](#)

7. (a) Define reflex action. State its significance.

(b) How do plants respond to external stimuli ?

 [Watch Video Solution](#)

1. Which of the following hormone is responsible for falling of senescent leaves?

- A. Auxin
- B. Gibberellin
- C. Cytokinin
- D. Abscisic acid

Answer:

 [Watch Video Solution](#)

2. Identify the stimulus in the tip of stem growing away from earth's surface?

- A. Chemical
- B. Gravity

C. Water

D. Air

Answer:



Watch Video Solution

3. Which of these is not a plant hormone?

A. Auxin

B. Ethylene

C. Cytokinin

D. Thymus

Answer:



Watch Video Solution

1. Assertion (A): Abscisic acid is a stress hormone.

Reason (R): Stimulation of ABA occurs in adverse conditions.

A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

C. Assertion (A) is true but reason (R) is false.

D. Assertion (A) is false but reason (R) is true.

Answer:

 [Watch Video Solution](#)

2. Assertion Hormones are also called growth adjusters.

Reason Hormones promote or inhibit plant growth.

- A. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- B. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- C. Assertion (A) is true but reason (R) is false.
- D. Assertion (A) is false but reason (R) is true.

Answer:

 [Watch Video Solution](#)

Control And Coordination Self Assessment 2 C Very Short Answer Type Questions

1. The main function of abscisic acid in plants is to

 [Watch Video Solution](#)

2. Give one example each of a plant part:

(a) which is positively hydrotropic as well as positively geotropic

(b) which is positively phototropic but negatively geotropic.

 [Watch Video Solution](#)

3. Florist sprinkled a plant hormone to prevent wilting of leaves.

Name the hormone he must have used.

 [Watch Video Solution](#)

1. The bending of the shoot of a plant in response to light is called:



[Watch Video Solution](#)

2. describe following parts :

(i) positively phototropic and (ii) negatively geotropic.



[Watch Video Solution](#)

3. Give one example each of a plant part:

(a) which is positively hydrotropic as well as positively geotropic

(b) which is positively phototropic but negatively geotropic.



[Watch Video Solution](#)

4. Give example of following plants :

Which synthesises auxin ?

 [Watch Video Solution](#)

Control And Coordination Ncert Corner Intext Questions

1. What is the difference between a reflex action and walking?

 [Watch Video Solution](#)

2. What happens at the synapse between two neurons?

 [Watch Video Solution](#)

3. Which part of the brain maintains posture and equilibrium of the body?

 [Watch Video Solution](#)

4. How do we detect the smell of an agarbatti (incense stick)?

 [Watch Video Solution](#)

5. What is the role of the brain in reflex action?

 [Watch Video Solution](#)

6. What are plant hormones ?

 [Watch Video Solution](#)

7. How is the movement of leaves of the sensitive plant different from the movement of a shoot towards light?

 [Watch Video Solution](#)

8. Give an example of a plant hormone that promotes growth.

 [Watch Video Solution](#)

9. How do auxins promote the growth of a tendril around a support?

 [Watch Video Solution](#)

10. Design an experiment to demonstrate hydrotropism.

 [Watch Video Solution](#)

11. How does chemical coordination take place in animals?

 [Watch Video Solution](#)

12. Why is the use of iodised salt advisable

 [Watch Video Solution](#)

13. How does our body respond when adrenaline is secreted into the blood?

 [Watch Video Solution](#)

14. Why are some patients of diabetes treated by giving injections of insulin?



[Watch Video Solution](#)

Control And Coordination Ncert Corner Exercise Questions

1. Which of the following is a plant hormone?

- A. Insulin
- B. Thyroxin
- C. Oestrogen
- D. Cytokinin

Answer: D



[Watch Video Solution](#)

2. The gap between two neurons is called a

A. Dendrite.

B. Synapse.

C. Axon.

D. Impulse.

Answer: B



Watch Video Solution

3. The brain is responsible for

A. Thinking

B. Regulating the heartbeat

C. Balancing the body.

D. all of the above

Answer: D



[Watch Video Solution](#)

4. What is the function of receptors in our body? Think of situations where receptors do not work properly. What problems are likely to arise?



[Watch Video Solution](#)

5. Draw the structure of a neuron and explain its function.



[Watch Video Solution](#)

6. How does phototropism occur in plants?



[Watch Video Solution](#)

7. Which signals will get disrupted in case of a spinal cord injury?

 [Watch Video Solution](#)

8. How does chemical coordination occur in plants?

 [Watch Video Solution](#)

9. What is the need for a system of control and coordination in an organism?

 [Watch Video Solution](#)

10. How are involuntary actions and reflex actions different from each other?

 [Watch Video Solution](#)

11. Compare and contrast nervous and hormonal mechanisms for control and coordination in animals.



[Watch Video Solution](#)

12. What is the difference between the manner in which movement takes place in a sensitive plant and the movement in our legs?



[Watch Video Solution](#)

Control And Coordination Ncert Exemplar Multiple Choice Questions

1. Which of the following statements is correct about receptors?

- A. Gustatory receptors detect taste while olfactory receptors detect smell
- B. Both gustatory and olfactory receptors detect smell
- C. Auditory receptors detect smell and olfactory receptors detect taste
- D. Olfactory receptors detect taste and gustatory receptors smell

Answer: A

 [Watch Video Solution](#)

2. Electrical impulse travels in a neuron from

- A. Dendrite → axon → axonal end → cell body
- B. Cell body → dendrite → axon → axonal end

C. Dendrite → cell body → axon → axonal end

D. Axonal end → cell body → dendrite

Answer: C

 [Watch Video Solution](#)

3. In a synapse, chemical signal is transmitted from

A. dendritic end of one neuron to axonal end of another neuron

B. axon to the cell body of the same neuron

C. cell body to axonal end of the same neuron

D. axonal end of one neuron to dendritic end of another neuron

Answer: D

 [Watch Video Solution](#)

4. In a neuron, the conversion of electrical signal to a chemical signal occurs at/in:

- A. cell body
- B. axonal end
- C. dendritic end
- D. axon

Answer: B

 [Watch Video Solution](#)

5. Which is the correct sequence of the compounds of a reflex arc

- A. Receptors → Muscles → Sensory neuron → Motor neuron → Spinal cord.

B. Receptors → Motor neuron → Spinal cord → Sensory neuron → Muscle.

C. Receptors → Spinal cord → Sensory neuron → Motor neuron → Muscle.

D. Receptors → Sensory neuron → Spinal cord → Motor neuron → Muscle.

Answer: D



Watch Video Solution

6. Which of the following statements are true?

- (i) Sudden action in response to something in the environment is called reflex action
- (ii) Sensory neurons carry signals from spinal cord to muscles.
- (iii) Motor neurons carry signals from spinal cord to muscles.

(iv) The path through which signals are transmitted from a receptor to a muscle or a gland is called reflex arc.

- A. (i) and (ii)
- B. (i) and (iii)
- C. (i) and (iv)
- D. (i), (ii) and (iii)

Answer: C

 [Watch Video Solution](#)

7. Which of the following statements are true about the brain?

- (i) The main thinking part of brain is hind brain.
- (ii) Centres of hearing, smell, memory, sight, etc., are located in fore brain
- (iii) Involuntary actions like salivation, vomiting, blood pressure are

controlled by the medulla in the hind brain.

(iv) Cerebellum does not control posture and balance of the body.

A. (i) and (ii)

B. (i), (ii) and (iii)

C. (ii) and (iii)

D. (iii) and (iv)

Answer: C



Watch Video Solution

8. Posture and balance of the body is controlled by

A. cerebrum

B. cerebellum

C. medullai

D. pons

Answer: B



Watch Video Solution

9. Spinal cord originates from

A. cerebrum

B. medulla

C. pons

D. cerebellum

Answer: B



Watch Video Solution

10. The movement of shoot towards light is

- A. geotropism
- B. hydrotropism
- C. chemotropism
- D. phototropism

Answer: D



[Watch Video Solution](#)

11. The main function of abscisic acid in plants is to

- A. increase the length of cells
- B. promote cell division
- C. inhibit growth

D. promote the growth of stem

Answer: C



Watch Video Solution

12. Which of the following is not associated with growth of plant?

A. Auxin

B. Gibberellins

C. Cytokinins

D. Abscisic acid

Answer: C



Watch Video Solution

13. Iodine is necessary for the synthesis of which hormone?

A. Adrenaline

B. Thyroxin

C. Auxin

D. Insulin

Answer: B



[Watch Video Solution](#)

14. Choose the incorrect statement about insulin

A. It is produced from pancreas.

B. It regulates the growth and development of the body.

C. It regulates blood sugar level.

D. Insufficient secretion of insulin will cause diabetes.

Answer: B

 [Watch Video Solution](#)

15. Select the mismatched pair

A. Adrenaline : Pituitary gland

B. Testosterone : Testes

C. Estrogen : Ovary

D. Thyroxin : Thyroid gland

Answer: A

 [Watch Video Solution](#)

16. The shape of guard cells changes due to change in the

- A. protein composition of cells
- B. temperature of cells
- C. amount of water in cells
- D. position of the nucleus in the cells

Answer: C



[Watch Video Solution](#)

17. The growth of tendril in pea plants is due to

- A. effect of light
- B. effect of gravity

C. rapid cell divisions in tendrillar cells that are away from the support

D. rapid cell divisions in tendrillar cells in contact with the support

Answer: C



Watch Video Solution

18. The growth of pollen tubes towards ovules is due to

A. hydrotropism

B. chemotropism

C. geotropism

D. phototropism

Answer: B



[Watch Video Solution](#)

19. The movement of sunflower in accordance with the path of the sun is due to :

- A. phototropism
- B. geotropism
- C. chemotropism
- D. hydrotropism

Answer: A



[Watch Video Solution](#)

20. The substance that triggers the fall of mature leaves and fruits from plants is due to

- A. auxin
- B. gibberellin
- C. abscisic acid
- D. cytokinin

Answer: C



Watch Video Solution

21. Which of the following statements about transmission of nerve impulse is incorrect ?

- A. Nerve impulse travels from dendritic end towards axonal end.
- B. At the dendritic end electrical impulses bring about the release of some chemicals which generate an electrical impulse at the axonal end of another neuron.

C. The chemicals released from the axonal end of one neuron cross the synapse and generate a similar electrical impulse in a dendrite of another neuron.

D. A neuron transmits electrical impulses not only to another neuron but also to muscle and gland cells.

Answer: B

 [Watch Video Solution](#)

22. The involuntary actions in the body are controlled by:

A. medulla in fore brain

B. medulla in mid brain

C. medulla in hind brain

D. medulla in spinal cord

Answer: C

 [Watch Video Solution](#)

23. Which of the following is not an involuntary action?

A. Salivation

B. Heartbeat

C. Chewing

D. Chewing

Answer: D

 [Watch Video Solution](#)



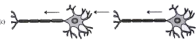
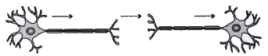
24. When a person is suffering from severe cold, he or she cannot

- A. differentiate the taste of an apple from that of an ice cream
- B. differentiate the smell of a perfume from that of an agarbatti
- C. differentiate red light from green light
- D. differentiate a hot object from a cold object

Answer: B

 [Watch Video Solution](#)

25. Which is the correct direction of flow of electrical impulses?

- A. 
- B. 
- C. 
- D. 

Answer: C



[Watch Video Solution](#)

26. Which statement is not true about thyroxin?

- A. Iron is essential for the synthesis of thyroxin
- B. It regulates carbohydrates, protein and fat metabolism in the body
- C. The thyroid gland requires iodine to synthesise thyroxin
- D. Thyroxin is also called thyroid hormone

Answer: A



[Watch Video Solution](#)

27. Dwarfism results due to

- A. Excess secretion of thyroxin
- B. Less secretion of growth hormone
- C. Less secretion of adrenaline
- D. Excess secretion of growth hormone

Answer: B



Watch Video Solution

28. Dramatic changes of body features associated with puberty are mainly because of secretion of

- A. oestrogen from testes and testosterone from ovary
- B. estrogen from adrenal gland and testosterone from pituitary gland
- C. testosterone from testes and estrogen from ovary

D. testosterone from thyroid gland and estrogen from pituitary gland

Answer: C

 [Watch Video Solution](#)

29. A doctor advised a person to take an injection of insulin because

- A. his blood pressure was low
- B. his heart was beating slowly
- C. he was suffering from goitre.
- D. his sugar level in blood was high.

Answer: D

 [Watch Video Solution](#)

30. The hormone which increase the fertility in males is called

- A. oestrogen
- B. testosterone
- C. insulin
- D. growth hormone

Answer: B



[Watch Video Solution](#)

31. Which of the following endocrine glands is unpaired?

- A. Adrenal
- B. Testes
- C. Pituitary

D. Ovary

Answer: C



Watch Video Solution

32. The junction between two neurons is called

A. cell junction

B. neuromuscular junction

C. neural joint

D. synapse

Answer: D



Watch Video Solution

33. In humans, the life processes are controlled and regulated by

- A. reproductive and endocrine systems
- B. respiratory and nervous systems
- C. endocrine and digestive systems
- D. nervous and endocrine systems

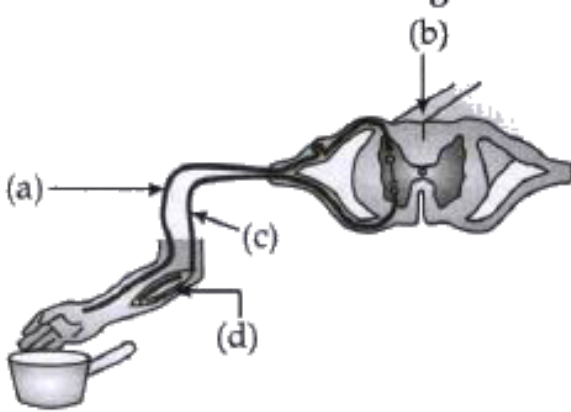
Answer: D



[Watch Video Solution](#)

Control And Coordination Ncert Exemplar Short Answer Questions

1. Label the parts (a), (b), (c) and (d) and show the direction of flow of electrical signals in Figure 7.2.



[Watch Video Solution](#)

2. Name the plant hormones responsible for the following elongation of cells

[Watch Video Solution](#)

3. Name the plant hormones responsible for the following growth of stem

[Watch Video Solution](#)

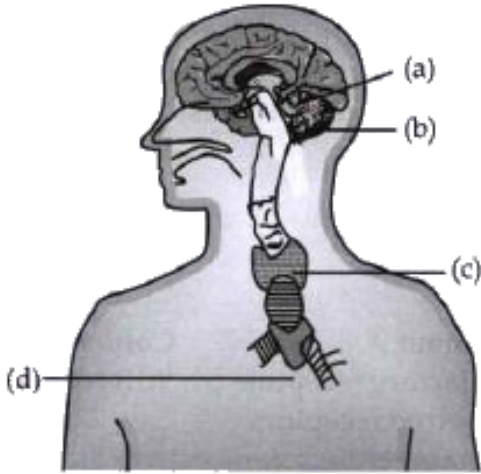
4. Name the plant hormones responsible for the following promotion of cell division

 [Watch Video Solution](#)

5. Name the plant hormones responsible for the following falling of senescent leaves.

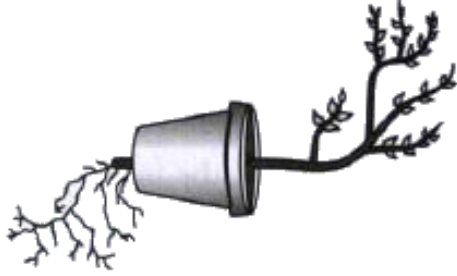
 [Watch Video Solution](#)

6. Label the endocrine glands in Figure.

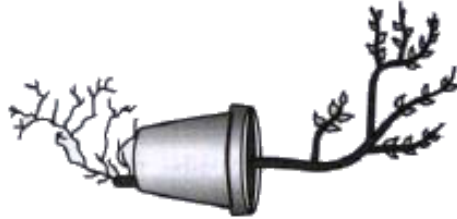


[View Text Solution](#)

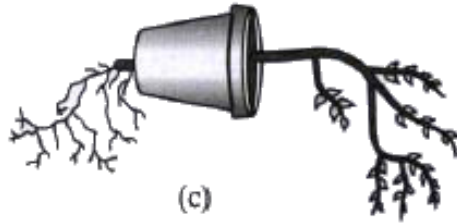
7. In Figure 7.4 (a), (b) and (c), which appears more accurate and why?



(a)



(b)

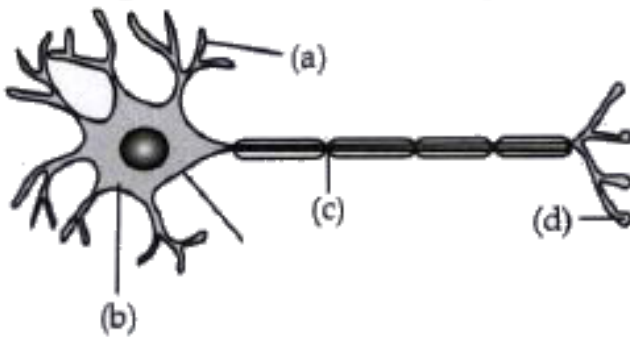


(c)



[View Text Solution](#)

8. Label the parts of a neuron in Figure.



[View Text Solution](#)

9. Match the terms of Column (A) with those of Column (B)

| Column A | Column B |
|--------------------------------|---------------------|
| (a) | Olfactory receptors |
| (i) Tongue | Thermo receptors |
| (b) (temperature receptors) | (ii) Eye |
| (c) | Gustatoreceptors |
| (iii) Nose | Photoreceptors |
| (d) | |
| (iv) Skin | |

[Watch Video Solution](#)

10. What is a tropic movement? Explain with an example.

 [Watch Video Solution](#)

11. What will happen if intake of iodine in our diet is low?

 [Watch Video Solution](#)

12. What happens at the synapse between two neurons?

 [Watch Video Solution](#)

13. Answer the following:

Which hormone is responsible for the changes noticed in females at puberty ?

 [Watch Video Solution](#)

14. Dwarfism results due to



[Watch Video Solution](#)

15. Blood cholesterol may rise due to deficiency of vitamin



[Watch Video Solution](#)

16. Iodine is necessary for the synthesis of the hormone



[Watch Video Solution](#)

17. Answer the following:

Name the endocrine gland associated with brain?



[Watch Video Solution](#)

18. Answer the following:

Which gland secretes digestive enzymes as well as hormones?



Watch Video Solution

19. Answer the following:

Name the endocrine gland associated with kidneys?



Watch Video Solution

20. Answer the following:

Which endocrine gland is present in males but not in females?



Watch Video Solution

1. Draw the structure of a neuron and explain its function.

 [Watch Video Solution](#)

2. What are the major parts of the brain? Mention the functions of different parts.

 [Watch Video Solution](#)

3. What constitutes the central and peripheral nervous systems?
How are the components of central nervous system protected?

 [Watch Video Solution](#)

4. Mention one function for each of these hormones:

Thyroxin

 [Watch Video Solution](#)

5. Mention one function for each of these hormones:

Insulin

 [Watch Video Solution](#)

6. Mention one function for each of these hormones:

Adrenaline

 [Watch Video Solution](#)

7. Mention one function for each of these hormones:

Growth hormone

 [Watch Video Solution](#)

8. Mention one function for each of these hormones:

Testosterone

 [Watch Video Solution](#)

9. Name various plant hormones. Also give their physiological effects on plant growth and development.

 [Watch Video Solution](#)

10. What are reflex actions? Give two examples. Explain a reflex arc



[Watch Video Solution](#)

11. Nervous and hormonal systems together perform the function of control and coordination in human beings.' Justify the statement.



[Watch Video Solution](#)

12. How does chemical coordination take place in animals?



[Watch Video Solution](#)

13. Why is the flow of signals in a synapse from axonal end of one neuron to dendritic end of another neuron but not the reverse?



[Watch Video Solution](#)

Control And Coordination Board Corner Short Answer Type Questions

1

1. (a) Name one gustatory receptor and one olfactory receptor present in human beings.

(b) Write a and b in the given flow chart of neuron through which information travels as an electrical impulse.

Dendrite → a → b → End point of Neuron



[Watch Video Solution](#)

Control And Coordination Board Corner Short Answer Type Questions

1. What are plant hormones? Name the plant hormones responsible for the following:

(i) Growth of stem

(ii) Promotion of cell division

(iii) Inhibition of growth

(iv) Elongation of cells



[Watch Video Solution](#)

2. What is feedback mechanism of hormonal regulation? Take the example of insulin to explain this phenomenon.

 [Watch Video Solution](#)

3. Nervous and hormonal systems together perform the function of control and coordination in human beings.' Justify the statement.

 [Watch Video Solution](#)

4. Name the hormones secreted by the following endocrine glands and specify one function of each :

(a) Thyroid , (b) Pituitary , (c) Pancreas

 [Watch Video Solution](#)

5. What is geotropism ? Draw a labelled diagram of a potted plant showing positive geotropism and negative geotropism .

 [Watch Video Solution](#)

6. Define positive geotropism and negative geotropism. Give one example of each.

 [Watch Video Solution](#)

Control And Coordination Board Corner Long Answer Type Questions

1. Why is the use of iodised salt advisable? Name the disease caused due to deficiency of iodine in our diet and state its one symptom.

 [Watch Video Solution](#)

2. How do nerve impulses travel in the body ? Explain.

 [Watch Video Solution](#)

3. Design an experiment to demonstrate hydrotropism.

 [Watch Video Solution](#)

Control And Coordination Visual Case Based

1. Study these tables related to blood sugar levels and answer the questions from below.

Table A : (Blood glucose chart)

| | Mean Blood Glucose Level (mg/dL) |
|-----------------------|----------------------------------|
| Doctors advice needed | 360 |
| | 350 |
| | 315 |
| | 280 |
| | 250 |
| | 215 |

| | |
|-----------|-----|
| Good | 180 |
| | 150 |
| Excellent | 115 |
| | 80 |
| | 50 |

Table B : (Blood Report of Patient X and Y)

| Time of check | Blood Glucose ranges (mg/dL) | |
|----------------------------|------------------------------|-----------|
| | Patient X | Patient Y |
| Before breakfast (Fasting) | 100 | 70-130 |

| | | |
|------------------------------|-----|--------|
| Before lunch super and snack | 110 | 70-130 |
| Two hours after meals | 140 | 180 |
| Bedtime | 120 | 90-15 |

Refer to Table B showing the blood report of the levels of glucose

of patients X and Y.

Infer the disease which can be diagnosed from the given data.

A. Bronchitis

B. Goitre

C. Diabetes

D. Dwarfism

Answer: C

 [Watch Video Solution](#)

2. Study these tables related to blood sugar levels and answer the questions from below.

Table A : (Blood glucose chart)

| | Mean Blood Glucose Level (mg/dL) |
|-----------------------|----------------------------------|
| Doctors advice needed | 360 |
| | 350 |
| | 315 |
| | 280 |
| | 250 |
| | 215 |

| | |
|-----------|-----|
| Good | 180 |
| | 150 |
| Excellent | 115 |
| | 80 |
| | 50 |

Table B : (Blood Report of Patient X and Y)

| Time of check | Blood Glucose ranges (mg/dL) | |
|----------------------------|------------------------------|-----------|
| | Patient X | Patient Y |
| Before breakfast (Fasting) | 100 | 70-130 |

| | | |
|------------------------------|-----|--------|
| Before lunch super and snack | 110 | 70-130 |
| Two hours after meals | 140 | 180 |
| Bedtime | 120 | 90-15 |

Identify the hormone whose level in the blood is responsible for the above disease.

A. Glucagon

B. Insulin

C. Thyroxine

D. Oestrogen

Answer: B



[Watch Video Solution](#)

3. Study these tables related to blood sugar levels and answer the questions from below.

Table A : (Blood glucose chart)

| | Mean Blood Glucose Level (mg/dL) |
|-----------------------|----------------------------------|
| Doctors advice needed | 360 |
| | 350 |
| | 315 |
| | 280 |
| | 250 |
| | 215 |

| | |
|-----------|-----|
| Good | 180 |
| | 150 |
| Excellent | 115 |
| | 80 |
| | 50 |

Table B : (Blood Report of Patient X and Y)

| Time of check | | Blood Glucose ranges (mg/dL) | |
|---------------------|-----------|------------------------------|-----------|
| | | Patient X | Patient Y |
| Before (Fasting) | breakfast | 100 | 70-130 |

| | | | |
|---------------------------|-------|-----|--------|
| Before lunch and snack | super | 110 | 70-130 |
| Two hours after meals | | 140 | 180 |
| Bedtime | | 120 | 90-15 |

Which one of the following diets would you recommend to the affected patient?

- A. High sugar and low fat diet.
- B. Low sugar and high protein diet.
- C. High fat and low fiber diet.
- D. Low sugar and high fiber diet.

Answer: D

 [Watch Video Solution](#)

4. Study these tables related to blood sugar levels and answer the questions from below.

Table A : (Blood glucose chart)

| | Mean Blood Glucose Level (mg/dL) |
|-----------------------|----------------------------------|
| Doctors advice needed | 360 |
| | 350 |
| | 315 |
| | 280 |
| | 250 |
| | 215 |

| | |
|-----------|-----|
| Good | 180 |
| | 150 |
| Excellent | 115 |
| | 80 |
| | 50 |

Table B : (Blood Report of Patient X and Y)

| Time of check | | Blood Glucose ranges (mg/dL) | |
|---------------------|-----------|------------------------------|-----------|
| | | Patient X | Patient Y |
| Before (Fasting) | breakfast | 100 | 70-130 |

| | | | |
|---------------------------|-------|-----|--------|
| Before lunch and snack | super | 110 | 70-130 |
| Two hours after meals | | 140 | 180 |
| Bedtime | | 120 | 90-15 |

Refer to the Table A and suggest the value of the mean blood glucose level beyond which doctor's advice is necessary :

- A. 180 mg/dL
- B. 115 mg/dL
- C. 50 mg/dL
- D. 80 mg/dL

Answer: A

 [Watch Video Solution](#)

5. Study these tables related to blood sugar levels and answer the questions from below.

Table A : (Blood glucose chart)

| | Mean Blood Glucose Level (mg/dL) |
|-----------------------|----------------------------------|
| Doctors advice needed | 360 |
| | 350 |
| | 315 |
| | 280 |
| | 250 |
| | 215 |

| | |
|-----------|-----|
| Good | 180 |
| | 150 |
| Excellent | 115 |
| | 80 |
| | 50 |

Table B : (Blood Report of Patient X and Y)

| Time of check | | Blood Glucose ranges (mg/dL) | |
|---------------------|-----------|------------------------------|-----------|
| | | Patient X | Patient Y |
| Before (Fasting) | breakfast | 100 | 70-130 |

| | | | |
|---------------------------|-------|-----|--------|
| Before lunch and snack | super | 110 | 70-130 |
| Two hours after meals | | 140 | 180 |
| Bedtime | | 120 | 90-15 |

Which nutrients in diet should be avoided by the patient?

- A. Carbohydrates
- B. Vitamins
- C. Proteins
- D. Minerals

Answer: A

 [Watch Video Solution](#)

6. Sonia went to the market along with her mother to buy fruits. She saw the fruit dealer putting small quantity of some powder wrapped in a paper in each wooden pack containing unripe mangoes. On enquiry, the fruit dealer told him that the powder is specific chemical which will help the mangoes to ripe early. Sonia was not convinced and he discussed the incidence with his class teacher the next day.

Name the chemical that fruit dealer had kept in wrapped paper in each box.

A. Silica

B. Auxin

C. Ethephone

D. Ethylene

Answer: C



[View Text Solution](#)

7. Sonia went to the market along with her mother to buy fruits. She saw the fruit dealer putting small quantity of some powder wrapped in a paper in each wooden pack containing unripe mangoes. On enquiry, the fruit dealer told him that the powder is specific chemical which will help the mangoes to ripe early. Sonia was not convinced and he discussed the incidence with his class teacher the next day.

If it is practiced daily then it may cause

A. Allergy

B. Uneasiness in breathing

C. Drowsiness

D. Diabetes

Answer: A



Watch Video Solution

8. Sonia went to the market along with her mother to buy fruits. She saw the fruit dealer putting small quantity of some powder wrapped in a paper in each wooden pack containing unripe mangoes. On enquiry, the fruit dealer told him that the powder is specific chemical which will help the mangoes to ripe early. Sonia was not convinced and he discussed the incidence with his class teacher the next day.

The plant hormone which promotes the falling of leaves (abscission) is :

A. auxin

B. gibberellin

C. abscisic acid

D. cytokinin

Answer: C



View Text Solution

9. Sonia went to the market along with her mother to buy fruits. She saw the fruit dealer putting small quantity of some powder wrapped in a paper in each wooden pack containing unripe mangoes. On enquiry, the fruit dealer told him that the powder is specific chemical which will help the mangoes to ripe early. Sonia was not convinced and he discussed the incidence with his class teacher the next day.

The substance that triggers the fall of mature leaves and fruits from plants is due to

- A. auxin
- B. gibberellin
- C. abscisic acid
- D. cytokinin

Answer: C



Watch Video Solution

10. Sonia went to the market along with her mother to buy fruits. She saw the fruit dealer putting small quantity of some powder wrapped in a paper in each wooden pack containing unripe mangoes. On enquiry, the fruit dealer told him that the powder is specific chemical which will help the mangoes to ripe early. Sonia was not convinced and he discussed the incidence with his class teacher the next day.

Ethylene is a :

A. Gaseous hormone

B. An enzyme

C. Liquid-gas mixture

D. Protein

Answer: A



View Text Solution