

Before half yearly portion

Life processes

① what is the role of saliva in the digestion of food?

Ans- Saliva contains an enzyme salivary amylase that convert starch into sugar

② where breakdown of pyruvate to give CO_2 , H_2O & energy takes place?

Ans- In mitochondria

③ Give energy transformation that takes place in the process of photosynthesis

Ans- Solar energy is converted into chemical energy.

④ what is peristaltic movement?

Ans- Contraction and expansion movement in the wall of food pipe is called peristaltic movement

⑤ In which kind of respiration more energy is released?

Ans - Aerobic respiration

⑥ what is emulsification of fats?

Ans- Breaking down of bigger fat molecules into smaller fat molecule is called emulsification of fats.

7- what is double circulation

Ans - The flow of blood from heart to Lungs then to heart is called pulmonary circulation.

The flow of blood from heart to tissues then to heart is called systemic circulation.

Both pulmonary and systemic circulation together called as double circulation.

8- what is translocation?

Ans - Transport of soluble products of photosynthesis is called translocation. It occurs through phloem both in upward & downward direction.

9- Name the functional unit of excretory system

Ans Nephron

10- Name the stain used for the preparation of leaf peel slide.

Ans Safranine

11- Name the part of embryo which develops into (i) shoot (ii) root

Plumule develops into shoot

Radicle develops into root

12. Name the intermediate and the end products of glucose breakdown on aerobic respiration

Ans intermediate product $\rightarrow$ Pyruvate
end product $\rightarrow$ $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$

13. Why do the walls of trachea not collapse when there is less air in it?

Ans - Tracheal walls do not collapse when there is less air in it because it is supported by rings of cartilage

14 - What prevents backflow of blood inside the heart during contraction?

Ans - Valves in heart prevent backflow of blood inside the heart during contraction

15 - How is amount of urine produced depends is regulated?

Ans - The amount of urine produced depends on how much excess water is there in the body, and how much of dissolved waste is to be excreted. If the body contains more water, it will be eliminated. If the amount of water in the body is less, more water is reabsorbed and less water is eliminated.

16 - What protects the inner lining of stomach from HCl?

Ans - The inner lining of stomach is protected from HCl by mucus.

17- why do the arteries have thick walled but veins do not have?

Ans - Blood from heart emerges into arteries under high pressure, so they have thick elastic walls. Blood pressure is low in veins hence they do not need thick walls.

18- what is the energy currency of the cell?

Ans - Adenosine Tri Phosphate (ATP)

19- what are the reasons for the reduced activity of kidneys?

Ans - Factors like infection, injury or restricted blood flow to kidneys reduce the activity of kidneys.

20- Write the uses of transpiration in plants.

Ans -

(a) It helps in the absorption of H_2O & minerals.

(b) Transpiration keeps the plant body cool by regulating the temperature.

After Half yearly portion

Management of natural resources

Q1- what is the main pollutant of River Ganga?

Ans - coliform bacteria

Q2- what are the three R's to save the environment

Ans - Recycle, Reduce and Reuse.

Q3- what are biodiversity hot spots?

Answer → Biodiversity hot spots are the regions where diversity is rich.

Q4- "Prejudice against the traditional use of forest areas have no basis". Explain

Ans- The great Himalayan National park contains Alpine meadows within its reserved areas. These meadows were grazed by sheep in summer. But after the formation of National park, this practice was stopped. Due to this green grass first grows very tall and then falls over preventing fresh growth from below.

Q5- What is Narmada Bachao Andolan?

Ans- It is a movement to protest ^{about} the height of Sardar Sarovar Dam on the river Narmada, thereby criticising large dams for addressing problems.

Q6- where did the chipko movement started

Ans - Reni village

Q7- why is replishment of forest necessary?

Ans → (a) It is used to conserve soil.
(b) provides shelter to wild animals.
(c) reduces atmospheric pollution
(d) controls flood and increases frequency of rainfall

Q8- Explain by giving example where active involvement of local people lead to efficient management of forest.

Ans → In west Bengal, the sal forests had been very badly degraded. A forest officer involved villagers in protection of sal forest & gave them employment in silviculture. Villagers are allowed to collect firewood & fodder on a nominal scale. Within a period of 10 years the previously worthless forests became valuable.

Q9- what is Chipko Andolan?

Ans Chipko Andolan was a movement to protect the forest. It is started by women of Reni village in Garwal.

Q10 write 4 stakeholders which may be helpful in the conservation of forests.

Ans - (i) Local people living in villages near the forest

(ii) Industrialists who use the forest

- produce as raw materials
- (iii) wild life and nature enthusiasts.
 - (iv) Forest department

Q11- what is meant "sustainable management"

Ans - A type of management which encourages the utilisation of resources that needs current basic needs while preserving the resources for the needs of future generation.

Q12 - what are the two factors that work against equitable distribution of natural resources

Ans- Money and power

Q13 mention two ways in which water harvesting can be undertaken.

- Ans
- (i) capturing run-off water from roof tops
 - (ii) capturing run-off water from local catchments

Q14- Name 3 problems that are created by building big dams

- Ans.
- (i) Social problems
 - (ii) Economic problems
 - (iii) Environmental problems.

Q15- what would be the advantages of exploiting resources with short term aims?

Ans - It provide immediate advantages that meet the current basic needs.

Q 16- List any two industries based of forest produce.

Ans- Paper, timber industry

Q 17- Name the prominent ecologist who is responsible for chipko movement.

Ans- Shri Sundarlal Bahuguna

Q 18- mention two ways in which water harvesting can be undertaken.

Q 19- Suggest a few useful ways of utilising waste water

Ans- wastewater can be used for the following ways.

- (i) for recharging the ground water
- (ii) can be used for irrigation
- (iii) Treated municipal water can be used for washing cars or watering the gardens
- (iv) Certain pollutants in sewage water can become fertilizer for various crops.

Q 20- On the basis of the issues raised in this chapter, what changes would you incorporate in your life style in a move towards a sustainable use of our resources?

Ans - I would incorporate the maximum of the three R's i.e. reduce, recycle and reuse in my life style in a move towards sustainable use of our resources.

Q21 - In the context of conservation of natural resources, explain the terms reduce, recycle and reuse.

Ans - Reduce → This means that we use less. It emphasises for the proper use of any resources for the sustainable development i.e. electricity, food and water.

Recycle → This means that we collect plastic, glass and metal items. These need to be segregated so that the materials can be recycled, is not dumped along with other waste. eg. Plastic, plates paper etc.

Reuse - This means we simply use things again and again. This is better strategy than recycling because process of recycling uses some energy e.g. Plastic, Carry bag, glass bottle.

Q22 → Why are Arabian forests of Bengal known to be a good example of conserved forest?

Ans → whenever a forest is managed by local people or villager, the forest is conserved ideally and religiously, The villagers

of Arabari forests of west Bengal participate to protect sal tree. For this, they are paid for labour, allowed to collect dry wood and fodder on minimum charge. Due to the above facts, the Arabari forest of Bengal is known to be a good example of conserved forest. This was done by A.K. Banerjee, a forest officer.

Q23 - Can you suggest some charges in your school which would make it environment friendly?

Ans - charges are given below →

- (i) Plantation all around the garden play-ground along with boundary
- (ii) Use of aluminium foil to wrap food should be prohibited
- (iii) water harvesting system can be develop on the roof of the school building.
- (iv) A small zoo can be also develop to create an affection between children and small wildlife.

Q24 - How does a traditional water harvesting system like Khadin system works?

Ans - In largely level terrain, the water harvesting structures are mainly crescent shaped earthen embankments, or low, straight concrete and rubble "check dams" built across seasonal

flooded gullies, monsoon rains fill ponds behind the structures. Their main purpose, however, is not to hold surface water but to recharge the ground water beneath.

Q25- who are the stake holders in relation to forests?

Ans - The stakeholders are →

- (i) The people who live in or around the forests are dependent on forest produce
- (ii) the industrialists - from those who use "tendu" leaves to make bidis and they use various forest produce.
- (iii) Forest department of the government which owns the land and controls the resources from forests.
- (iv) Wildlife and nature enthusiasts who want to conserve nature in its pristine form.