Chapter – 1

LIFE PROCESSES

Q1. Write the sequence of events that take place during the process of photosynthesis?

Q2. Write the Different way in which Glucose is oxidised to produce energy?

Q3. What is the function of bile juice and where is it produced?

Q4. Why oxygenated and deoxygenated blood separate in Birds and mammals?

Q5. Name the water conducting tissue in plants and how to do they transfer water

Q6. Explain the process of nutrition in amoeba?

Q7. How are the lung designed to maximise the area for exchange of gases?

Q8. Describe the internal structure of human heart with the help of diagram?

Q9. What are the raw material for photosynthesis?

Q10. Describe blood circulation in human beings?

Q11. How is food transported in plants?

Q12. How does the small intestine absorb digested food?

Q13. Write difference between arteries and veins?

Q14. Define excretion and draw the diagram of human system?

Q 15. Describe the structure and functioning of nephron.

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Chapter – 2

CONTROL AND COORDINATION

Q1. What are Phyto-hormones? Name them.

Q2. Mention the hormones produced by the following glands

1. Adrenaline gland
2. Ovary
3. Testes

Q3. Represent the schematic pathway of reflex action when bright light is focused on your eyes.

Q4. Write difference between Endocrine Glands and Exocrine Glands.

Q5. What are the parts of hindbrain? What are its functions?

Q6. What is a Synapse? How does message transfer between the Synapse?

Q7. How do we detect smell of an Agarbatti incense stick?

Q8. Which is the largest part of brain? What is its function?

Q 9. It is advised to take Iodised Salt in diet. Justify?

Q10. Pituitary is the Master Endocrine Gland. Justify the statement.

Q 11. Why roots are called Positively Geotropic?

Q 12. What are various types of Tropic movement? Give example.

Q 13. Which part of the brain controls reflexes?

Q 14. What is the difference between Endocrine System and Nervous System?

Q 15. What is the function of the following?

a. Cranium

b. Sensory Neuron

c. Motor Neuron

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Chapter – 3

HOW DO ORGANISMS REPRODUCE

Q1. What is importance of DNA copying in reproduction?

Q2. Name the method by which hydra reproduces. Is this method sexual or asexual?

Q3. State 2 basic events that occur in sexual reproduction.

Q4. What are testes? Write 2 functions performed by testes.

Q5. Give 2 examples of STDs.

Q6. Name the information source for making proteins in a cell.

Q7. Variations that confer an advantage to an individual organism only will survive in a population. Justify.

Q8. How is the process of pollination different from fertilization?

Q9. How does the embryo get nourishment inside the mother's body?

Q 10. How does fertilization takes place in female body in human?

Q 11. What is contraceptive method? List 2 contraceptive methods.

Q 12. Draw a well labelled diagram of Female Reproductive System.

Q 13. What is the function of Ovary?

Q 14. What is Double Fertilization?

Q 15. Draw a diagram of longitudinal section of flower exhibiting germination of pollen on stigma. Label all important parts.

Chapter – 4

HEREDITARY

Q1. Mendal used the term “Factors” for genes. Genes are portion of DNA which are located at specific Loci on chromosome ?

Q2. How did Mendel explained the possibility that a Trait is inherited but not expressed in the Organism?

Q3. Why is the progeny always tall when a tall pea plant is crossed with a short pea plant?

Q4. Why did Mendel carry out an experiment to study inheritance of 2 traits in garden peas?

B what were his findings with respect to inheritance of trait in F1 and F2 generation?

Q5. Do the genetic combination of the mother play a significant role in determining the sex of new-born?

Q6. When plants having Violet flowers were crossed with plants having White flowers in the F1 generation all plants having Violet flowers were obtained. If these plants are self-crossed then 600 Violet flowers were obtained in F2 generation. How many White flowers are obtained in F2?

Q7. If mother have red hair and father have black hair and black colour is dominant, what will be the hair colour of their progeny?

Q 8. If a homozygous short pea plant is crossed with a heterozygous tall plant what is the percentage of tall pea plant in F1 generation?

Q9. Why did Mendel choose Pea plant for his experiments?

Q10. Give reason for appearance of new combination of characters in F2 generation in a dihybrid cross.

Q11. Why maximum variation occurs in sexual reproduction?

Q12. A blue colour flower plant denoted by BB is crossbred with that of white colour flower plant denoted by bb.

a. State the colour of light you would expect in F1 generation.

b. what must be the percentage of white flowers in the F2 generation.

Q13. In humans, if gene BB gives brown eyes and gene bb gives blue eyes, what will be the colour of eyes of person having combination

1. BB
2. Bb

Q14. What is the probability that the male progeny will be a born?

Q15. (a) Who is known as the father of "Genetics" ?

(b) Name the plant on which he performed his experiments.

Chapter – 5

OUR ENVIRONMENT

Q1. Distinguish between biodegradable and non-biodegradable substances.

Q2. What are Tropic levels? Give an example of a food chain and state the different Tropic level in it?

Q3. What will happen if we kill all the organisms in one Trophic level?

Q4. What is Biomagnification? Why are humans affected most by the Concentration of Pesticides?

Q5. Write the causes of depletion of the Ozone layer. How can we prevent it?

Q6. What are the two ways in which biodegradable substances would affect the environment?

Q7. What is the role of Consumers in a food chain?

Q8. Why are green plants called Producers?

Q9. What are Food Chain and Food Web? Which is better between both of them?

Q10. What are the problems caused by non-biodegradable waste that we generate?

Q11. Why is the Ozone layer getting depleted at higher levels in the atmosphere?

Q12 What are Decomposers? Write their importance with respect to our environment?

Q13. Energy flow in a food chain is unidirectional. Explain.

Q14. Give any three methods to reduce the problem of Waste Disposal.

Q15. Differentiate between Artificial and Natural Ecosystem.

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