

Lesson -1
NUTRITION

NUTRITION:

I. One Mark Questions:

1. What is life process?
2. What are autotrophs?
3. Why are green plants called 'producers'?
4. What fulfills the carbon and energy requirements of the autotrophic organism?
5. Which nutrient serves as the internal energy reserve of the plant?
6. What are the green dots present in a leaf?
7. When do desert plants take up carbon dioxide?
8. Name the organelle in which photosynthesis occurs.
9. Name the pigment present in plants which can absorb solar energy.
10. What are stomata?
11. When do guard cells swell?
12. How do autotrophs obtain CO₂ and N₂ to make their food?
13. Why is nutrition necessary for an organism?
14. Name the two stages in photosynthesis.
15. Name the mode of nutrition in amoeba.
16. Write the mode of nutrition in fungi.
17. Name some parasitic plants and animals.
18. What are the enzymes secreted by stomach?
19. What are villi?
20. Where does digestion of fat take place in our body?
21. What is the mode of nutrition in human beings?
22. Which pancreatic enzyme is effective in digesting proteins?
23. Which enzyme present in saliva breaks down starch?

KEY

1. The process that helps in survival and perpetuation of race Ex: Nutrition ,Respiration
2. These organisms which can prepare their own food Ex: Green plants
3. Because they can provide food by photosynthesis and supply food to all living organisms.
4. CO₂, light
5. Starch
6. Chloroplast
7. Nighttime
8. Chloroplast
9. Chlorophyll
10. Pores present in that for exchange of gases
11. During photosynthesis to open stomata
12. From air through stomata
13. For growth repair and energy production
14. Light reaction , Dark Reaction.
15. Holozoic
16. Saprophytic
17. Cuscuta, leech, Tapeworm, lice
18. Pepsin, Renin, Lipase
19. Finger like projection in small intestine for absorption & Assimilation.
20. Duodenum by Bile Juice & pancreas
21. Holozoic

22. Trypsinogen
23. Salivary Amylase

Dr.K.K.R's GOWTHAM EDUCATIONAL INSTITUTIONS-A.P
X Class State Biology (2019-20)
Chapter Wise Assignment- One Mark Questions

Lesson -2

RESPIRATION:

1. What is respiration?
2. What are the two end products of anaerobic respiration?
3. Why is nasal cavity warm and coated with mucous inside?
4. What is the rate of breathing in human beings under normal conditions?
5. Where can you see anaerobic respiration?
6. Which organelle in a cell is associated with the production of energy by aerobic respiration?
7. How long can the muscles of vertebrates work in absence of oxygen?
8. What are the products of anaerobic fermentation?
9. Name the two ways in which glucose is oxidised to provide energy in various organisms.
10. Name the respiratory organs of: (i) Mosquito, (ii) Earthworm, (iii) Fish.
11. What is breathing?
12. Name the respiratory organs of animals like fish that live in water.
13. How does diaphragm help in inspiration?
14. In eukaryotes cellular respiration take place in ?
15. In prokaryotes cellular respiration take place in ?
16. One ATP molecule on oxidation gives energy?

KEY

1. Break down of food in living cells in presence of O_2 to produce energy ATP
2. CO_2 , $2C_2H_5OH$ (Ethyl Alcohol)
3. For humidification of air to body temperature
4. 18 times for minute.
5. Bacteria
6. Mitochondria
7. By Anaerobic respiration.
8. CO_2 , $2C_2H_5OH$
9. Glycolysis
10. (i) Trachea (ii) Skin (iii) Gills
11. Taken in O_2 and give out CO_2
12. Gill
13. Volume of chest cavity increases, reduces air pressure in lungs. Outside air rush in
14. Cytoplasm & mitochondria.
15. Cytoplasm.
16. 7200.

Chapter Wise Assignment- One Mark Questions

Lesson -3

CIRCULATORY SYSTEM

1. Why is blood called a 'liquid connective tissue'?
2. Name the two major chambers of the human heart.
3. What is the other term for extracellular fluid?
4. What is the main function of lymph nodes?
5. Name the largest artery in the human body.
6. What makes the red blood corpuscles (cells) red?
7. Name the type of blood vessels which carry blood from organs to the heart.
8. Give one reason why multicellular organisms require special organs for exchange of gases between their body and their environment?
9. What is 'translocation' in plants? _
10. What will happen to a plant if its xylem is removed?
11. What process in plants is called transpiration?
12. Name the tissue which transports soluble products of photosynthesis in a plant.
13. Name the tissue which transports water and mineral in a plant.
14. State the term for transport of food from leaves to other parts of the plant.
15. What is the normal B.P of Human being.

KEY

1. Blood cells are flowing in liquid plasma
2. Right auricle and left auricle
3. Lymph
4. To produce WBC
5. Aorta
6. Hemoglobin present
7. Veins
8. As cell are deep seated from External environment.
9. Transport of food through phloem to all cells
10. Water & mineral supply cutoff
11. Loss of water from leaves into atmosphere by stomata.
12. Phloem
13. Xylem
14. Translocation
15. 120/80.

Chapter Wise Assignment- One Mark Questions

Lesson-4
EXCRETION

1. Name the excretory unit of a kidney.
2. Name any two excretory organs in human.
3. Where is urine carried through the ureters?
4. The Ureter in man is also called as
5. Micturition
6. Urochrome
7. Uremia
8. Cadaver Transplantation.
9. PCT, DCT
10. Excretion, secretion
11. Primary metabolites & secondary metabolites
12. What are substances presents in urine.
13. Dialysis
14. Secondary metabolites in plants.
15. Glomerulus

KEY

1. Nephron
2. Skin, Kidney
3. Urinary Bladder
4. Urino genital duct
5. The discharge of urine from the bladder by reflex contraction of the muscle after voluntary relaxation of the sphincter muscle. At urethra.
6. Chemical responsible for yellow colour urine.
7. Dangerous condition then the kidneys no longer filter blood properly.
8. Kidney donor to a victim in need.
9. a) Proximal Convoluted Tubule in absorbs salts and water up to 75%
b) Distal convoluted Tubule observes calcium ,sodium and chloride and regulate PH of urine.
10. Excretion is passive, Secretion is active process,
Removal of waste. Movement of material from One part to another.
11. Carbohydrates ,Proteins Fats — Alkaloids, tannis, resins.latex
12. 95% water, Urea, chloride, sodium, potassium, creatinine.
13. Treatment that filters and purifies blood by machine.
14. Compound that do not help in growth and development
15. Network of capillaries that filter primary urine from blood.

Chapter Wise Assignment- One Mark Questions

Lesson-5

Control and Coordination

I. One Mark Questions:

1. What is a ganglion?
2. Define nerve impulse.
3. Define synapse.
4. Name the coverings in brain and the fluid present in between.
5. What is the function of medulla oblongata?
6. What is the function of cyton in a neuron?
7. Name the neuron which carry impulses from the spinal cord to the effector.
8. Which part of the brain is the seat of consciousness, thinking and stimulates interpretation?
9. What are the environmental triggers that can change the direction of growth in plants?
10. What is the main characteristic of "touch me not" plant?
11. How are the plant responses reflected?
12. What is tropic movement?
13. What are the two main kinds of coordination present in living organisms?
14. What is nastic movement?
15. Name one chemical substance of plant which promotes ripening of fruit
16. Write the full form of ABA.
17. Which gland is known as master gland?
18. What is known as "fight or flight" hormone?
19. Deficiency of which hormone causes goitre?
20. What causes gigantism?
21. Write down two functions of testis.
22. Name two ovarian hormones.
23. Name the hormone that regulates protein metabolism and body growth.
24. Mention one example of chemotropism.
25. Mention the function of hind brain in humans.
26. Name and explain the function of the hormone secreted by the pituitary gland in humans.
27. State the main function of abscisic acid in plants.
28. Name the plant hormone responsible for the promotion of cell division.
29. Which hormone is injected to a diabetic patient and why?
30. Name the hormone secreted by an endocrine gland during emergency? Name the gland which secretes this hormone.
31. What will happen if intake of iodine in our diet is low?
32. What do we call the movement of shoot towards light?
33. Name the plant hormone responsible for elongation of cells.
34. Which part of the brain controls posture and balance of the body?
35. Define chemotropism.
36. Which of the following actions on touch is an example of chemical control? Movement on touch a sensitive plant. Movement in human leg.
37. Name two tissues that provide control and coordination in multicellular animals.
38. In our bodies what is the function of thyroxine hormone?
39. Name the endocrine gland that secretes insulin in our bodies.
40. Name the main hormone secreted by thyroid gland and state its one function.
41. Name the plant hormone that retards growth of the plant.
42. What is the function of hormone secreted by the endocrine gland, pituitary?
43. Name the hormone the secretion of which is responsible for dramatic change in appearance in girls when they approach 10-12 years of age.
44. Which endocrine gland secretes the growth hormone?

45. What is neuron?
46. What is phytohormone?
47. List two functions performed by ovaries in a human female.
48. Name the structural and functional unit of human nervous system.
49. Name the part of the hindbrain which takes part in the
50. Which hormone helps in lowering the level of blood glucose in human beings?
51. Which hormone is responsible for the development of moustache and beard in men?
52. Which type of glands in human body secrete hormones? State any one location for them.

KEY

1. Number of nerve cell bodies connected by synapses
2. When a stimulus is applied to neuron an electric potential of 0.05 Volts is generated
3. Junction between two nerve cells with minute Gap.
4. Minute gap
5. Dura mater, Arachnoid, membrane, pia mater, cerebrospinal fluid.
6. Breathing, Heart, Digestion, Swallowing
7. Growth and maintenance of cells
8. Motor neuron
9. Cerebrum
10. Phototropism, geotropism
11. Thigmotropism, (Negative response to touch)
12. Moving away from stimulus
13. Movement of plant towards stimuli
14. Nervous & Hormonal
15. Directional responses to stimuli
16. Ethylene
17. Abscisic Acid
18. Pituitary gland
19. Adrenaline
20. Thyroxine
21. Excess growth hormone
22. Production of sperms and Hormone Testosterone.
23. Oestrogen, follicle Stimulating Hormone, Leutinising Hormone, Progesterone
24. Thyroxine
25. Movement of pollen grain towards stigma
26. Respiration, motor activity, sleep
27. Growth hormone
28. Growth inhibitor, promote dormancy.
29. Cytokinin
30. Insulin
31. Adrenaline
32. Hypothyroidism (Goitre)
33. Phototropism
34. Auxin
35. Cerebellum
36. Movement of plant part in response to chemical stimulus
37. Thigmotropism, Reflexion
38. Nervous & Glandular
39. Metabolism, growth
40. Pancreas
41. Thyroxine
42. ABSCISSIC ACID
43. Growth and coordinate of other Glands
44. Oestrogen
45. Pituitary

- 46 It is Structural and functional unit of Nervous system
- 47 Plant hormone that coordinator growth & Movements.
- 48 Oestrogen for Secondary sexual characters in females and ovulation
- 49 Nervecell
- 50 Medulla Oblongata.
- 51 Insulin
- 52 Testosterone
- 53 Endocrineglands

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Chapter Wise Assignment- One Mark Questions

(D6)

Reproduction

I. VERY SHORT ANSWER QUESTIONS

1. What is a spore?
2. Name two plants which reproduce through spores.
3. Why is regeneration considered a method of reproduction?
4. Which vegetative part is used in the propagation of bryophyllum and mint?
5. Name two types of layering.
6. Which technique would you use for propagating improved varieties of mango and rose?
7. Mention one physiological advantage of grafting quality roses on wild rose stock. [HOTS]
8. Give two examples of organisms, which can regenerate from small part of their body.
9. What is the main difference between stem cutting and layering?
10. Which process results in zygote?
11. Which parts of the flower transform into the seed and fruit?
12. Which group of plants shows double fertilisation? [HOTS]
13. What is the function of pollen grains in flowers?
14. Where is the zygote located in the flower after fertilisation? [HOTS]
15. What are gonads?
16. What is external fertilisation?
17. What is internal fertilisation?
18. What is semen?
19. Where are the ova produced in woman?
20. What are oral contraceptives?
21. What is epididymis? What is the function of epididymis?
22. What are the functions of urethra?
23. What are the secondary sexual characters in human male?
24. When does puberty occur in human male and female?
25. Name the type of fission carried out by Amoeba.
26. Why is DNA copying an essential part of the process of reproduction?
27. What is the effect of DNA copying which is not perfectly accurate on the reproduction process?
28. Write the expanded form of AIDS.
29. Write the full form of IUCD.
30. Write the full expansion of HIV.
31. Name any two sexually transmitted diseases.

KEY

1. Reproductive unit of fungi.
2. Yeast, fern

3. gaining lost part & developing whole body
4. leaf
5. Ground layering, air layering
6. grafeting
7. new verities without error in stock
8. Hydra, planria
9. a) Detachment of branch from parent plant and develop into new plant is cutting.
b) Bending of healthy branch from parent plant on to ground, layered part develop roots and become new plant called layering.
10. Sexual reproduction
11. Ovary & ovule
12. Angiosperms
13. Cross pollination
14. Ovary
15. Reproductive organs Testes and ovary.
16. Fertilization outside the body of animals. Ex: Fish, frog.
17. Fertilization inside the body of female animal. Ex: Mammals
18. Medium for movement of sperms produced by seminal vesicles.
19. Graffian follicle of ovary.
20. Pills
21. Highly coiled tube where sperms are temporarily stored
22. Opening for sending out urine in women.
23. Beard, Muscles, sperm production.
24. 11 to 14 years
25. Binary fission
26. To maintain chromosome number constant for a particular Species.
27. Abnormalities called mutation
28. Acquired Immuno deficiency Syndrome.
29. Intra Uterine contraceptive device.
30. Human Immuno deficiency virus.
31. Syphylis, Gonorrhoea , AIDS

Heredity and Evolution

I. VERY SHORT ANSWER QUESTIONS

1. (a) Write full form of DNA. (b) Why are variations essential for the species?
2. (a) State the importance of DNA copying in reproduction. (b) Protozoans reproduce by binary fission as well as by multiple fission. In your opinion, which process is better and why?
3. (a) DNA copying is an essential part of the process of fertilization. Why? (b) How is the process of pollination different from fertilization?
4. Define variation in relation to a species. Why is variation beneficial to the species?
5. A man with blood group A marries a woman with blood group O and their daughter has blood group O. Is this information enough to tell you which of the traits — blood group A or O is dominant? Why?
6. The sex of the children is determined by what they inherit from their father and not the mother.” Justify.
7. What are fossils? What do they tell about the process of evolution?
8. In terms of evolution, what is the significance of homology between a human hand and a wing of a bird?
9. What is meant by analogous organs? Taking a suitable example, explain how they support the theory of Organic Evolution.

KEY

1. a) Deoxy Ribo Nucleic acid.
b) For evolution and natural selection.

2. a) To maintain chromosome number constant for particular species.
b) Binary fission
3. To maintain chromosome number constant
4. For better characters and survival.
5. O group if dominant
6. Y Chromosome of father.
7. Remnants of organisms that lived during past.
8. Divergent evolution.
9. Convergent evolution.

Our Environment

I. VERY SHORT ANSWER QUESTIONS

1. Write two examples of natural ecosystem.
2. Which of the following belonging to a food chain is likely to have maximum concentration of harmful chemicals in its body? (a) Kingfisher, zooplankton, fish, phytoplankton (b) Peacock, frog, snake, grasshopper (c) Frog, hawk, grasshopper, snake (d) Small fish, zooplankton, birds, phytoplankton
3. Which two of the following belong to the same trophic level? (a) Grasshopper, frog, grass, lizard. (b) goat, grass, crow, squirrel.
4. Rearrange the following according to their ascending trophic levels in a food chain : Hawk, grass, snake, rabbit.
5. In the following food chain 20 J of energy was available to the hawks. How much would have been present in the plants? Plants → Rats → Snakes → Hawks
6. If a harmful chemical enters a food chain comprising fishes, phytoplanktons and birds, which of the organisms is likely to have minimum concentration of the harmful chemicals in its body?
7. What is ten percent law?

KEY

1. Interdependence of organisms from producers to top carnivores of different trophic levels in a food chain.
2. a) Phytoplankton b) Grasshopper c) Grasshopper d) Zooplankton
3. a) Frog, lizard b) Goat, Squirrel
4. 1) Grass 2) Rabbit 3) Snake 4) Hawk
5. 100 Joules
6. Phytoplankton.
7. Lind man discovered 10% of organic matter is stored in each trophic level as we move from producers to top carnivores called as 10% law.