

**UNIT : 1**

**SHORT QUESTIONS:**

1. What is a life process?
2. Define photosynthesis?
3. What are the end products of photosynthesis? write an equation for photosynthesis showing all the requirements and the products formed ?
4. What is a reaction center?
5. What is a pigment?
6. What is the difference between oxidation and reduction?
7. What is an electron acceptor? Give some examples ?
8. What is photolysis and mention its importance in photosynthesis?
9. What are the end products of light reactions?
10. Who discovered dark reactions?
11. What is the difference between palisade and spongy parenchyma ?
12. What are respiratory substrates ? give some examples?
13. What is cellular respiration ?
14. How is citric acid is formed ?
15. What is oxidative phosphorylation ?
16. What are the factors that control respiration ?
17. What is external and internal respiration ?
18. What is exoskeleton ?
19. What are alveoli ?
20. What is epiglottis ?
21. What is glottis ?
22. What is palate ?
23. Write a short notes on (a) pulmonary respiration (b)tracheal respiration ?
24. What is the difference between photophosphorylation and oxidative phosphorylation ?
25. What is a branchial heart ?
26. What is a pulmonary heart ?
27. How sinus venosus formed in amphibian ?
28. Write a short notes on auricles and ventricles ?
29. Write about pericardium ?
30. Write about stages of heart beat ?
31. Write a short notes notes on (a) pulmonary circuit (b) systemic circuit ?
32. Write a systole and diastole ?
33. What is haemotology ?
34. What is plasma ?
35. What is serum ?
36. What is saline ?
37. What is heparin ?
38. Write a short notes on erythrocytes (R.B.C) ? leucocytes (W.B.C.) ?
39. What is blood transfusion ?
40. What is agglutination of blood ?
41. Who are universal donors ? and universal recipients ?
42. What is the function of blood banks ?

**UNIT II : (CONTROL AND CO ORDINATION):**

1. What is irritability ?
2. What is apical dominance ?

3. What is a hormone ?
4. What is a target tissue ?
5. What is the function of parathormone ?
6. What is a mixed gland ? give example ?
7. What is the role of oestrogen ?
8. What is simple goitre ?
9. What is the function of glial cells ?
10. What are the differences between a dendrite and an axon ?
11. What is a synapse ?
12. What is action potential ?
13. What are nissl granules ? where do you find them ?
14. What is the difference between efferent and afferent nerves ?
15. What is cranium ? what is its function ?
16. Where do you find the cerebrospinal fluid ? what are its function ?
17. What is cerebral cortex ?
18. What are gyri and sulci ? what is the advantage of these structures ?
19. What are the functions of diencephalon ?
20. What are the functions of hypothalamus ?
21. Give the functions of cerebellum ?
22. What is a nerve ? what is its function ?
23. What is a mixed nerve ?
24. What are the functions of sensory and motor nerves ?
25. What are the functions of cerebellum ?
26. What are reflex actions ?
27. What is a reflex arc ?
28. What is the function of a receptor in a reflex arc ?

### UNIT III : (REPRODUCTION) :

1. Differences between sexual reproduction and asexual reproduction ?
2. Advantages of vegetative reproduction ?
3. Write about tissue culture ?
4. Applications of plant cell and tissue culture ?
5. What is reproduction ?
6. What is fragmentation ? how does it help fungi ?
7. What is a bud ? what are suckers ?
8. What is layering ?
9. What is totipotency ?
10. Describe an explants ?
11. What is callus ?
12. What is embryo rescue ? when is this method followed ?
13. Describe the terms scion and stock ?
14. Describe about fertilization ?
15. Describe the structure of a flower ?
16. Describe about (a) embryo sac ,(b) nucellus ?
17. How is zygote produced ?
18. What is a fertilization ? describe about external and internal fertilization ?
19. What is hermaphrodites ? and explain about hermaphroditism ?
20. What are conjugants ?
21. What is synkaryon ?
22. What is the function of acrosome of a spermatozoan ?
23. What is a milt ?
24. What is a spawn ?
25. What are the amphibian pads ? how do they help the frogs ?
26. What are sperms ?
27. What is menstrual cycle ?

28. What is corpus luteum and what is its function ?

**UNIT IV : (HIV.....AIDS)**

1. What is the full form of HIV and AIDS ?
2. Name the tests to detect HIV antibodies ?
3. What are the enzymes present in the HIV?

**UNIT V : (NUTRITION)**

1. What are micro and macro nutrients ?
2. What is iodised salt ? why it is advisable to take iodised salt ?
3. What is a balanced diet ?
4. Give three essential fatty acids ?
5. Name some essential and non essential amino acids ?
6. What is malnutrition ?
7. Which is the main cause of obesity ?
8. Why vitamins are called as essential nutrients ?
9. What happens if antibiotics are indiscriminately taken?
10. What is health ?
11. What is infection ?
12. What is a incubation period ?
13. What is a symptom ?
14. What is a recovery period ?
15. What are the symptoms of mumps ?
16. What are the symptoms of malaria ?
17. What is first aid ? mention its purpose ?
18. What are the rules to be followed while giving first aid ?
19. What are the different types of fractures seen in limbs of a person ?
20. Mention the symptoms of a fracture ?
21. What first aid you will render for fractures ?
22. What are the functions of health care system ?
23. Describe the duties of village health guide ?

**IMPORTANT DIAGRAMS :**

1. structure of chloroplast ?
2. transverse section of a leaf ?
3. structure of mitochondria ?
4. respiration in amoeba by diffusion ?
5. structure of lungs in man ?
6. internal structure of human heart ?
7. external structure of human heart ?
8. human heart showing position of different valves ?
9. structure of nerve cell ?
10. structure of brain ?
11. T.S spinal chord ?
12. Structure of reflex arc ?
13. Structure of datura flower ?
14. Embryo sac , structure of ovule ?
15. Fertilization ?
16. Male and female reproductive system of frog ?
17. Male and female reproductive system of human beings ?
18. Structure of ovum and sperm?
19. Structure of HIV virus ?

**4M IMPORTANT QUESTIONS :**

**UNIT I (LIFE PROCESS):**

1. What is the importance of photosynthesis ?
2. How do you prove that carbondioxide is essesntial for photosynthesis ?
3. Discuss the mechanism by which the light energy is converted to chemical energy ?
4. How is carbondioxide converted to glucose during photosynthesis ?
5. Write a brief account of (a) glycolysis (b) krebs cycle (c)structure of mitochondria with diagram (d) respiratory substrates
6. How can we show that heat is liberated during respiration ?
7. Write the differences between combustion and respiration ?
8. Respiration in amoeba by diffusion ?
9. Tracheal system in cockroach ?
10. Differences between internal and external respiration ?
11. Pulmonary respiration with diagram ?
12. Differences between photosynthesis and respiration ?
13. What is the difference between photophosphorylation ? and oxidative phosphorylation?
14. Need for a transport system in an animal body ?
15. Blood sinuses in cockroach ?
16. Evolution of heart in higher animals ?
17. Open and closed type of circulatory system ?
18. Circulation in earthworm (megasclex) ?
19. Bring out the differences between right auricle and left auricles ?
20. What are the differences between right ventricle and left ventricle ?
21. Give an account of valves in the human heart ?
22. What is hypertension ?how is it caused ?mention the preventive steps to be taken?
23. What are the differences between R.B.C AND W.B.C. ?
24. Inorganic and organic constituents of blood plasma ?
25. Describe the different blood groups in man ?
26. How is blood transfusion done and who can donate the blood ?

#### UNIT II : (CONTROL AND CO ORDINATION)

1. What are plant growth regulating substances ? give examples ?
2. What are auxins ? how do they affect plant growth ?
3. What is the role of gibberellins in plant growth and development ?
4. What is the importance of pituitary gland in the body ?mention the hormones and their functions and their gland ?
5. Write a brief account of adrenal glands ?
6. Give a brief account of (a)simple goiter (b)tetany(c)diabetes mellitus(d)dwarfism(e)gigantism
7. What is nerve impulse ?
8. Why the damage in certain disease like polio is permanent ?
9. Write about structure of nerve cell or (neuron) with a neat diagram ?
10. Describe the structure of cerebrum ?
11. What are the functions of spinal cord ?
12. Write about reflex arc ? (b) reflex action ?
13. What is (a) conditioned reflexes (b) unconditioned reflexes ?

#### UNIT III :(REPRODUCTION)

1. What is binary fission ? where do you see this method of reproduction ?
2. What is the major differences between sexual and asexual reproduction ?
3. What is fragmentation ?how does it help fungi ?
4. What is layering ? ground layering ? give examples ?
5. What is totipotency ?
6. Describe an explants ?
7. What is callus ?
8. What is embryo rescue ?when is this method followed ?
9. What are the differences between a spermatozoan and ovum ?
10. Describe briefly how the conjugation is formed in paramecium ?

11. Describe the male and female reproductive system of earthworm ?
12. Describe how cocoon is formed in earthworm ?
13. Describe male and female reproductive system of frog ?
14. Sexual dimorphism in animals ?
15. Hermaphroditism in animals ?
16. Describe the structure of human ovum ?
17. Give an account of the menstrual cycle in human beings ?
18. What is implantation ?how does it occur in human beings ?
19. How is placenta formed ? what is its function ?
20. Give an account of the various contraceptive methods ?

**UNIT IV :(HIV.....AIDS)**

21. How do you differentiate between HIV and AIDS ?
22. What are the modes of HIV transmission ?
23. Why life skills are necessary for everyone to face the challenges of life especially in the context of HIV.....AIDS ? which life skills would you practice ?

**UNIT V (NUTRITION)**

24. How are proteins useful to the body ?
25. What are the effects of kwashiorkor on children ?
26. What is flurosis ?how does it affect the body ?
27. How does marasmus affect a child ?
28. How is obesity a health hazard ?
29. Give an account of different sources of infection ?
30. Give different causes for the occurrence of jaundice ?
31. Why encephalitis is a fatal disease ? how it is caused ?
32. Briefly give a historical account of malarial disease ? sexual and asexual cycle ?
33. What are the rules to be followed while giving first aid ?
34. What are the different types of fractures seen in limbs of a person ?
35. Mention the symptoms and first aid rendering for fracture ?
36. What are the functions of health care system ?
37. Explain the duties of a village health guide (VHG)
38. What are the main functions of a primary health centre ?

\*\*\*\*\* *ALL THE BEST*\*\*\*\*\*  
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