BRAIN INTERNATIONAL SCHOOL

TERM II **CLASS:-X** **2018-19**

SUB:-BIOLOGY REVISION SHEET

CHAPTER : LIFE PROCESSES

A. NUTRITION

1, Mention any one point of difference between Pepsin and Trypsin .

2. What are enzymes ?Name any one enzyme of our digestive system and write its function.

3. Why multicellular organisms require special organs foe exchange of gases between their body and their environment ?

4. Explain the process of nutrition in Amoeba.

5. State the role of following in human digestive system –liver ,Hydrochloric acid ,villi, pancreas ,salivary gland ,teeth ,tongue

6, Which digestive secretion does not contain any enzyme but is important ?Discuss.

7, In each of the following situations what happens to the rate of photosynthesis -cloudy days , No rainfall in the area ,Good manuring in the area, stomata gets blocked due to dust.

8. What are the three steps taking place in photosynthesis ?

9. Name the glands associated with digestion of starch in human digestive tract and mention their role. How is required Ph maintained in the stomach and small intestine?

10. Describe an activity proving that –

(i) Chlorophyll is required for photosynthesis (ii) CO_2 is required for photosynthesis (iii) Light is required for photosynthesis (iv) CO_2 is released during respiration (v) plant showing Phototropism ,geotropism,chemotropism ,Hydrotropism and thigmotropism

11. What are Dental Caries ?How we can avoid them?

Differentiate between Autotrophic and Heterotrophic nutrition

12. Name the hormone which is released into the blood when its blood sugar level increases .Name the organ which provides this hormone and its effect on blood sugar level.

13. Draw a diagram to show open stomatal pore and state two functions of Stomata

14. What is the effect of life style or nature of food on gastric juices ?

15. What are the final products of digestion of -Proteins ,Carbohydrates,fats?

B. RESPIRATION

1.Why do aquatic organisms breathe at faster rate then terrestrial animals ?

2. What will happen if Diaphragm present in lungs get ruptured during an accident ?

3. What is the role of cartilaginous rings on trachea ? OR

When we breathe out why does air passage not collapse ?

4. After vigorous exercise you may experience cramps in your leg muscle .Why ?
5.How are alveoli designed to maximise the exchange of gases?
6. Differentiate between –Aerobic and anaerobic respiration ,respiration and breathing , Inhalation and exhalation
7. What is common between following pairs –
(i) starch and glycogen (ii) chlorophyll and haemoglobin (iii) gills and lungs (iv) Arteries and veins (v) nephron and alveoli
8. Draw a diagram of human respiratory system and label the following parts on it – Larynx,Trachea ,Diaphragm, Bronchi ,Alveoli
9. How do desert plants perform photosynthesis though their stomata remains closed during the day time ?
10. How is Oxygen and Carbon di oxide transported in human beings ?

C: TRANSPORTATION

1.What would be the consequences of deficiency of haemoglobin in our body?
2. What will happen if platelets were absent in the blood ?
3. Why are arteries thick walled and elastic ?
4. Why is transportation important for plants ?
5. Differentiate between – Arteries and veins ,Blood and lymph , Auricles and Ventricles , Xylem and phloem
6. Write the composition of blood and mention function of each component of it
7. Describe the process of double circulation in heart and why it is necessary ?
8.Explain how human body respond when adrenaline is secreted into blood?
9. Draw a diagram of human heart .
10. How do guard cells regulate the opening and closing of stomatal pore?
11. What is blood pressure ?Name the instrument used to measure blood pressure .

D: EXCRETION

1. Define excretion and osmoregulation .Name the organ involved in these processes in human beings .
2. Name any two substances which are selectively reabsorbed from the tubules of a nephron .
3. How is amount of urine produced regulated ?
4. What are the strategies of plants to get rid of their wastes ?
5. Compare the functioning of alveoli in lungs and nephrons in the kidney with respect to their structure and functioning.
6. Describe the mechanism of urine formation .
7. Draw a neat diagram of human excretory system and label the following –
(i) part in which urine is produced (ii) part which stores urine
(iii) part which connects (i) and (ii) (iv) part from which urine is passed out
8. Describe the structure and functioning of Nephron.

9. The volume of glomerular filterate produced is 18Lbut the volume of urine excreted is just 1-2L.Give a suitable reason for this statement .
10. What is Hemodialysis ?

CHAPTER : CONTROL AND COORDINATION

1.Name and state the function of – Gustatory receptor , olfactory receptor , photoreceptor ,Thigmoreceptor, phonoreceptor
2. Name the part of neuron where information is acquired and through which information travels as an electrical impulse .
3. List two body functions that will be affected when cerebellum is damaged.
4. What is synapse? How do nerve impulse gets transmitted through neuro muscular junctions ?
5. We suddenly withdraw our hand when a pin pricks .Name the type of response involved in this action . Draw the flow chart .
6. What is cerebrospinal fluid ?Mention its functions .
7. Mention the part of brain that enables us to =(i) to ride a bicycle (ii) changes the size of pupil of eye (iii) Maintains blood pressure of the body (iv) maintains posture and equilibrium (v) Regulates respiration (vi) detects smell of burning incense stick .
8.State the function of any three subunits of the structural and functional unit of nervous system ,Draw its diagram also .
9.What is the need of a system of control and coordination in an organism?
10 Draw a diagram of human brain and label on it the following parts – Cerebrum, Meninges, Medulla oblongata , cerebellum .Mention the function of each part .
11. Draw and label a Neuron . Explain how it carries messages.
12. What are phytohormones ?
13. Design an experiment to show –Geotropism ,phototropism, Hydrotropism ,Chemotropism,
14. How do Auxin promote the growth of a tendril around the support?
15. What are Nastic and Curvature movements ? Give example of each.
16. Give the functions of the following hormones –Auxins, Gibberellins, Cytokinins, Abscissic acid , Ethylene.
17. How does chemical coordination taking place in plants ?
18. Why endocrine glands release their secretions into the blood?
19. At the time of puberty ,both boys and girls show lot of changes in appearance .Name the hormone responsible for these changes.
20. Which mechanism controls timing and amount of hormone released?
21. Answer the following pertaining to endocrine system-
(a) Name the endocrine gland associated with brain (b) Which gland secretes digestive enzymes as well as hormones ?(c) Name the endocrine gland associated with kidneys (d) Which endocrine gland present in males but not in females (e) Which hormone is responsible for the changes noticed in females at puberty (f) Dwarfism results due to deficiency of which hormone ?(g)Blood

sugar leve rises due to deficiency of which hormone ?(h) Iodine is necessary for synthesis of which hormone?
22. List the characteristics of hormones .
23 List in tabular form three differences between nervous and chemical coordination.
24. Name the endocrine glands present in human body .Briefly describe the hormone secreted by them with their functions and what would happen if these hormones are produced in more or less concentration.
25. Why (i) pituitary is known as master of endocrine glands (ii) Adrenals are known as gland of emergency.
26. The two glands A and B which occur in pairs are present in endocrine system. The pair of gland A is found only in females whereas the pair of glands B occur only in males .The gland A make and secrete hormone C whereas gland B make and secrete hormone E. In addition to hormone ,gland A makes gamete F whereas Gland B makes gamete G.
(i) What are glands A and B (ii) Name the hormone Cand E (iii) Name the gamete Fand G.
27. What will happen if intake of iodine is low in our diet?
28. Name and explain the functions of hormones produced by pituitary gland.
29. List the effect of adrenaline on the following-gastric secretion, Heart,Bronchi
30 Give one example of plant growth promoter and plant growth inhibitor.

CHAPTER: HOW DO ORGANISMS REPRODUCE
1.Name the information source of making proteins in the cell .state two basic events in reproduction.
2.What is the effect of DNA copying which is not perfectly accurate in the reproduction.
3. Variation are seen in organisms .State two main causes of variations.
4. Differentiate between Asexual and sexual reproduction.
5. Explain the various types of Asexual reproduction with example of each.
6. Can you think of reasons why more complex organisms cannot give rise to new individuals through regeneration?
7. List advantages and disadvantages of Spore formation ,vegetative propagation, sexual reproduction
8. What happens when-(i) planeria gets cut into many pieces (ii0 bryophyllum leaves falls on the vet soil (iii) Sporangium of rhizobium bursts
9. Differentiate between binary fission and multiple fission.
10. What is the role of scrotum ?
11. Differentiate between pollen grain and ovule , unisexual and Bisexual flowers, male gamete and female gamete.
12. What happens when egg is not fertilised?
13. How is the process of pollination different from fertilisation?
14. List specific characteristics of Asexual reproduction.

15. Draw a neat and labelled diagram of male and female reproductive system and describe the function of ovary ,Fallopion tube ,uterus , testis, seminal vesicles.
16. What is placenta ?Give the significance .
17. Describe post fertilisation changes in flower and draw L.S of carpel showing it .
18 Describe the structure of seed .
19. Describe all the methods of family planning
20. What are STDs ? name two bacterial ,viral and protozoal diseases .How you can prevent spread of STDs
21 List any four point of significance of reproductive health of the society .

CHAPTER ; HEREDITY AND EVOLUTION
1. Why DNA copying is important event in reproduction?What happens when there is error in DNA copying?
2. Define Heredity and Speciation .
3. Give the scientific name of the plant chosen by Mendel for his experiments .Why he has chosen this plant
4. Describe Monohybrid cross and its conclusion,with ex.
5. Describe Dihybrid cross and its conclusion ,with ex.
6. How do traits are expressed ,explain giving example.
7. Describe gender determination in human beings.
8.Describe the reasons responsible for speciation.
9. Describe all the types of evidences used for establishing evolutionary relationships.
10 Describe artificial selection taking various varieties derived from wild cabbage .
11. Why evolution is not equated with progress ?
12 Describe various methods used for tracing evolutionary relations of human beings
13. There is a subpopulation A and subpopulation B .Both are separated by a natural barrier ,what will happen in this case .
14. A group of grasshoppers ,some green and some brown lies in green bushes-
(i) Which would be eaten by crows and other birds and why ?
(ii) Population of which grasshoppers will increase and why ?
(iii) Name the phenomenon involved ?
15. Differentiate between Acquired traits and Inherited traits .
16. In a mendelian cross,tall pea plants with purple flowers were crossed with dwarf plants with white flowers .How would you denote –
(i) The genotype of two parents
(ii) The genotype and phenotype of F1 progeny
(iii) The results obtained by selfing F1 progeny to get F2 progeny .Give the ratio obtained in F2 progeny .
17. Define Genes and Alleles .

18. A pregnant women has an equal chance of her baby being blood group A or blood group AB .What is the possible genotype of woman and the father of the child?
19. What is the name given to set of unpaired chromosomes of an organisms ?
20. DNA is the carrier of the genetic information .Justify.

CHAPTER : OUR ENVIRONMENT

1. The first Trophic level in food chain are always green plants .Why?
2. Why should biodegradable and non biodegradable wastes discarded into separate dust bins?
3. State 10% law of energy flow with example and why it is unidirectional ?
4. Why food chain consisting of more than 5 members do not survive in nature for long ?
5.What do you mean by Biological magnification and Eutrophication?
6. How is Ozone produced in atmosphere ? Why it is important ? Name the chemicals causing harm to ozone layer .
7. Why conservation of ozone layer is cause of concern globally ?How it is achieved?
8. Describe various R's for conserving our environment .
9. Excessive use of nonbiodegradable substances are harmful .Justify the statement giving example.
10.What is an ecosystem? List its two components.
11. We do not clean ponds or lakes but an aquarium needs to be cleaned regularly. Explain.
12.Explain how pesticides enter a food chain and subsequently get into our body.
13. Distinguish between biodegradable and nonbiodegradable substances with examples.
14. Why decomposers are known as cleaners ?
15. Why are crop fields are known as artificial ecosystem
16. Write the harmful effects of using plastic bags on environment. Suggest alternative to plastic bags.
17. What are trophic levels? Give an example of food chain and state the different trophic levels in a food chain.
18. How do green plants obtain carbon di oxide and nitrogen to make their food?
19. A food chain consists of grass, deer and tiger , what will happen if deer is missing in the food chain?
20. What is scum and how it is formed?

CHAPTER : MANAGEMENT OF NATURAL RESOURCES

1. 'Burning of fossil fuels results in global warming'. Give reason .
2. Suggest a few measures for controlling CO2 levels in atmosphere.

3. Suggest a few useful ways of utilizing waste water .
4. List the human activities causing harm to our forests
5.What are biodiversity Hotspots ?Why they need to be conserved .
6. What do you mean by acid rain ? Mention its harmful effects .
7.What is GAP?
8.What are the harmful effects of construction of Dams?
9.Write advantages of underground water .
10.Name the water storing devices of Tamil Nadu ,Madhya Pradesh and Rajasthan.