TEST – NO. 8
CH – 8
BIOLOGY **CLASS 9TH – 019** **Paper: (Objective Type)**
Time Allowed: 15 Minutes **Maximum Marks: 12**

Note : Write answers to the questions on the objective answer sheet provided. Four possible answers A, B, C and D to each question are given. Which answer you consider correct, fill the circle in front of A, B, C or D with pen ink to each question on the answer sheet provided.

Q.1	QUESTIONS	(A)	(B)	(C)	(D)
1.	Deficiency of which element cause yellowing of leaves?	Zinc	Magnesium	Copper	Chlorine
2.	Every animal takes food, whose 2/3 part consists of	Proteins	Carbohydrates	Minerals	Vitamins
3.	It helps in blood clotting.	Calcium	Phosphorus	Nitrogen	Sodium
4.	Fat soluble vitamins are.	A,B,C,D	A,D,I,K	A,C,E,K	B,C,E,D
5.	How much % of lipid is present in Milk?	10%	12%	0.9%	04%
6.	Proteins are composed of	Fatty acids	Acetic Acid	Amino acids	Minerals
7.	Elimination of undigested food from the body is called.	Ingestion	Absorption	Digestion	None of these
8.	One gram of carbohydrates has kilo calorie energy.	2	4	6	8
9.	Which one of the following organs is part of digestive system?	Lungs	Oral cavity	Kidneys	Heart
10.	The largest gland of human body is.	Pancreas	Thyroid	Liver	Parathyroid
11.	Rickets develops due to deficiency of ___ vitamin.	B	A	D	C
12.	Bread contains amount of carbohydrates	40%	30%	52%	70%

	A B C D		A B C D		A B C D		A B C D		A B C D
1	Ⓐ ● Ⓒ Ⓓ	4	Ⓐ Ⓑ ● Ⓓ	7	Ⓐ ● Ⓒ Ⓓ	10	Ⓐ Ⓑ ● Ⓓ	13	Ⓐ Ⓑ Ⓒ Ⓓ
2	Ⓐ ● Ⓒ Ⓓ	5	Ⓐ Ⓑ Ⓒ ●	8	Ⓐ ● Ⓒ Ⓓ	11	Ⓐ Ⓑ ● Ⓓ	14	Ⓐ Ⓑ Ⓒ Ⓓ
3	● Ⓑ Ⓒ Ⓓ	6	Ⓐ Ⓑ ● Ⓓ	9	Ⓐ ● Ⓒ Ⓓ	12	Ⓐ Ⓑ ● Ⓓ	15	Ⓐ Ⓑ Ⓒ Ⓓ

نوٹ: معروضی سوال نامے کو توجہ سے پڑھیں اور ہر MCQ کی درست آپشن A,B,C,D کو پین کی سیاہی یا مار کر سے اس طرح پُر کریں کہ سیاہی دائرے سے باہر نہ نکلے۔ ایک سے زیادہ دائروں کو پُر کرنے یا کاٹ کر پُر کرنے کی صورت میں مذکورہ جواب غلط تصور ہوگا۔

TEST- 8
CH – 8

BIOLOGY **CLASS 9TH – 019** **Paper: (Essay Type)**
Time Allowed: 1:45 hours **Maximum Marks: 48**

(PART – I)

2. **Write short answers to any FIVE (5) questions:** **10**
   (i) What are macronutrients? Give example.
   (ii) What is difference between Organic and inorganic fertilization.
   (iii) What is a balance diet.
   (iv) What are dietary fibres?
   (v) Define epiglottis and glottis?
   (vi) What is marasmus?
   (vii) What is Protein-energy malnutrition?
   (viii) Why meat is not a good source of vitamin C?
3. **Write short answers to any FIVE (5) questions:** **10**
   (i) What is difference between Autotrophs and Hetetrophs?
   (ii) What are lipids? Also describe types of fatty acids.
   (iii) What is function of Calcium and Iron in Human body.
   (iv) What are water soluble vitamins? Give two examples.
   (v) Write any four symptoms od deficiency of vitamin C.
   (vi) Name two diseases cause by the deficiency of Minerals.
   (vii) How will you differentiate between bolus and chyme?
   (viii) Write any two functions of large intestine.
4. **Write short answers to any FIVE (5) questions:** **10**
   (i) Write three parts of large intestine.
   (ii) What is Diarrhoea? What are its causes?
   (iii) What three parts of large intestine.
   (iv) What are vitamins?
   (v) What is difference between nutrition and nutrients?
   (vi) Define Fat-soluble vitamins.
   (vii) What is meant by digestion?
   (viii) Define Nutrition.

(PART – I I)

Note: - Attempt any TWO questions.

5. (a) Define macronutrients and micronutrients. Explain mineral requirements of plants in detail. **5**
   (b) What is the role fo nitrogen and magnesium of plant growth? **4**

6. (a) Describe the role of Calcium and iron in our diet. **5**

   (b) Write a note on digestion of Food in Stomach. **4**

7. (a) What are water and dietary fibres considered important of our diet. **5**

   (b) What is Ulcer? Describe causes and symptoms. **4**

TEST-8
CH- 8 (Class 9th)
Biology

(Part 1)

2. Write Short Answers to any five (5) Questions:

1: What are macronutrients? Give Example.

A The nutrients which are required in large quantites are called macrounutients.

(ii) What is diffrence between organic and inorganic fertilization.

(A) The distinction between the organic and inorganic fertilized fertilizers is not always clear-cut urea, for example, is an organic compound, but chemically synthesized urea is generally grouped with inorganic fertilizers.

iii What is ballance diet?

(A) A ballance diet may be defined as the one which contains all the essential nutrients in correct proportion for the normal growth and development of body.

iv What are dietary fibers?

Dietary fibre (also known as "roughage") is the part of human food that is indigestible. It is found only in plant foods and it moves undigested through stomach and small intestine and into colon.

(v) Difine epiglotties and Glotties?

(A) EPiglotties

small flap at the back of the tongue; it closes the glottis when we swallow to that food does not go down into trachea.

Glotties

The glotties is the opening between the local folds.

vi What is marasmus?

(A) Usually develops between the ages of six months and one year, patients lose all their body fat and muscle strength, and acquire a skeletal appearance.

vii) What is protein—energy malnutirition?

(A) Protien energy malnutrition mean inaduate availability or absorption of enery and proteins in the body. It is the leading

Cause of death in Children in developing Countries. It may lead to diseases Such as Kwashiorker and marasom.

viii) Why meat is not a good source of vitamin C?

(A) Minute quantites of vitamin C are present in muscles. Since meat consists of muscles so it is not a good source of vitamin C

(3) Write short answers to any five (5) Questions?

(i) What is difference between Autotraphs and Heterotophs?

Autotrophic organisms obtain water, Carbon dioxide and minerals from their environment and prepare their food which is then used for growth and energy.

Heterotophs:

Heterotrophic organisms obtain their food from other organisms and use it for growth and energy.

(ii) What are lipids? also discribe types of fatty acids?

(A) The lipids present in food are composed

of fatty acids bonded to glycerol. The fatty acids of lipids may be saturated or unsaturated

Saturated.

Fatty acids have all the of their carbon atoms bonded to hydrogen atoms.

Unsaturated

Fatty acids have some of their carbon atoms double-bonded in place of a hydrogen atoms.

(iii) What is function of calcium and iron in human body.

(A) Calcium is essential for the development and maintenance of bones and teeth it is also needed for maintaining cell membranes and connective tissues and for the activation of several enzymes. Calcium also aids in blood clotting. Iron plays a major role in oxygen transport and storag. Iron also supports immune function.

(iv) What are water Soluble Vitamins? Give Two exampels.

(A) A Vitamin is an organic molecule that is an essential micronutrient that an organism needs in small quantities for the Proper functioning of its metabolism. (Vitamin B1) (Vitamin B2) are examples.

(v) write any for Symptoms od dificiency of vitamin C?

(A) Symptoms of scurvy include muscle and joint pain, Swollen and bleeding gums, slow wounds healing, and dry skin.

(vi) Write Two diseases Cause by the dificiency of minerals.

An increased need for the mineral, lack of the mineral in the diet, or difficaulty absorbing the mineral from food are some of the more commen reasons. Mineral dificiencies can lead to a varity of health problem. weak bones, Fatigu

(vii) How will you differentiate between bolus and Chyme?

(A) Bolus

During the processes of chewing, lubrication and semi- digestion, the pieces of food are rolled up by the tongue into small slippery, spherical mass called bolus

Chyme

The Starch in our bite of bread and protein in mutton have been partially digested and the food has been converted to soup-like mixture called chyme.

(viii) write any Two functions of larg intestine.

(A) when the digested food inters into the

large intestine, the water is absorbed from it and enters into the blood.

(ii) Faeces is stored in the rectum, a part of large intestine.

(4) Write short Answers to any Five (5) Question.

(i) Write Three part of larg intestine

(A) It has Three parts; Caecum (or pounch that forms the T- junction with small intestine), colon and rectum. From colon, water is absorbed into blood.

(ii) What is diarrhoea? What are its Causes?

(A) Diarrhoea is a condition in which the sufferer has frequent watery, loose bowl movements. This condition may be accompanied by abdominal pain, nausea and vomiting. it occurs when requised water is not absorbed in blood from colon. The main cause of diarrhoea includes lack of adequate safe water. viral or bacterial infections of larg intestine.

(iv) What three part of larg intestine?

(Ans) The large intestine consists of the

Caecum and colon and also rectum.

(iv) What are Vitamins?

(A) Vitamins are the chemical compounds that are required in low amounts but are essential for normal growth and metabolism.

(v) What is difference between nutritions and nutrition?

(A) Nutrition

The process in which food is obtained or prepared, absorbed and converted into body substances, for growth and energy is called nutrition.

Nutrients

Nutrients are the elements and compounds that an organism obtains and uses for energy or for the synthesis of new materials.

(vi) Define fat soluble vitamins?

(A) Fat soluble vitamins are much less excreted from the body as compared to water Soluble vitamin.

(vii) What is meant by digestion?

(A) The process of breaking up complex substances into simples substances.

(viii) Define nutrition.

The process in which food is obtained

or prepared absorbed and converted into body substance for growth and energy is called nutrition.

Note:- Attemp any Two Questions.

5. (a) Define macronutrients and micronutients. Explain mineral requirments of plants in detail.

(A)

Macronutrients	Rode in plant life
Phosphorus	component of ATP, nucleic acids, and Coenzymes, necessary for seed germination, photosynthesis, Protein formation etc
Potassium	Regulates the opening and closing of the stoma, reduces water loss from the leaves
Sulphur	Component of proteins, vitamins and enzymes
Calcium	Activates enzymes, is a structral component of cell wall, influences water movement in cells.

Micronutients	Rode in plants life
Iron	Necessary for photosynthesis, activates many enzymes
Molybdenum	Component of the enzymes that

	reduces nitrates to ammonia, important in building amino acids
Boron	important in sugar transport, cell, division and synthesizing certain enzymes
Copper	component of several enzymes
Manganese	involved in enzymes activity for Photosynthesis, respiration, and nitrogen metabolism
Zinc	Required in a larg number of enzymes
Chlorine	involved in osmosis of water
Nickel	Required in a nitrogen metabolism

(B) What is the role for nitrogen and magnesium of plant growth?

A Plants get nitrogen in the form of nitrates. Nitrogen is a major component of protiens, hormones, chdorophyll, vitamins and enzymes essentiel for plant life. nitrogen metabolism is a major factor in stem and leaf growth. Too much nitrogen can delay flowering and fruiting. Dificiencies of nitrogen can reduce yields, cause yellowing of the leaves and stunt growth.

Magnesium is a structural component of chlorophyll. it is also necessary for the functioning of plant enzymes to produce carbohydrates, sugars and fats. it is use for fruit and nut

formation and essential for germination of seeds. Deficiency of magnessium causes yellowing and witting of leaves.

6(a) Describe the role of calcium and in our diet?

A Calcium is essential for the development and maintenance of bones and teeth. it is also needed for maintaining cell membranes and connective tissues and for the activation of several enzymes, Calcium also aids in blood clotting. Humans get Calcium from milk, Cheese, egg yolk, beans, nuts, cabbage atc. Deficiency of Calcium causes spontaneous discharg of nerve impulses which may result in tetany, bones also become soft blood clots slowly and wounds heal slowly.

iron plays a major role in oxygen transport and storage. it is a component of haemoglobin in red blood cells and myoglobin in muscle cells. Cellular energy production also requisration. iron also supports immune function. Humans get iron from red meat, egg yolk, whole wheat, fish, spinach, mustard etc. its dificiency is the most common nutrient dificiency worldwide. iron dificienoy causes anaemia.

(b) Write a note on digestive of food in stomach.

A. Stomach is a dilated of alimentary canal. it is J- shapesed, located in left of abdomen, just beneath diaphragm. stomach has two main Portions, Cardiac Portion of stomach is present immediatly after oesophagus and pyloric portion is located beneath Cardiac portion. Stomac has two Sphincters (oponings which are guarded by muscles) Cardiac sphincter is between Stomac and oesophagus while Pyloric sphinctee is between Stomac and small intestine. Bolus enters Stomac from oesphagus through cardiac Sphincter. when food enters stomac, the gastric glands found in the Stomac wall are stimulated to secrete gastric Juice. Gastric Juice is composed chiefly of mouceus, hydrochloric acid, and a Protein-digesting enzymes pepsinogen. Hydrochloric acid converts the inactive enzymes pepsinogen into its activ form i.e pepsin. HCl also kills microoganisms present in food, pepsin Partially digests the protein portion of food (bulk of motton into polypeptides

and shorter peptide chains. in Stomach, food is further broken apart through a process of churning. The walls of stomac contract and relax and these movements help in thorough mixing of gastic juice and food. The churning action also produces heat which helps to melt the lipid content of food.

The starch in our bite of bread and the protien in mutton have been partially digested and the food has been converted to a soup-like mixture called chyme. after it the pyloric sphincter allows a little mass of chyme to enter duodenum.

7(g) what are water and dietary fibres considered important of our diet.

(A) Strictly speaking, water and dietary fiber are not considered as nutrients, but they do play important role of life.

WATER

Approximately 60% of the adult human body is composed of water. Nearly all life sustaining chemical reactions required an aqueous (watery) enviroment. water also functions as the enviroment in which water- soluble food stuff is absorbed

in the intestines and the waste Products are eliminated in urine. Another essential role of water is to maintain body temperature through evaporation, as in sweeting. severe dehydration may result in cardiovasclur problems. The estimated water requirment of and everge adult is two liters per day. imported Sources of daily water intake are natural water, milk, Juicy fruits and vegitables.

DIETARY FIBRE

Dietary fibre (also Known as roughage) is the part of human food that is indigestible. It is found only in plant foods and moves undigested through Stomac and small intestine and into colon. The insoluble dietary fibre travel quickly Through small intestines. its Sources are wheat bran, Cereals and skins of many fruits and vegitables. The soluble dietary fibre breaks down as it passes though alimentary canal. Its Sources are oats, beans, barley, and many fruits and vegetables.

Fibre Prevents and relives constipation

by Stimulating the Contraction of intestinal muscles Avoiding Constipation reduces the risk of many other diseases. Soluble fibers help in lowing blood cholesteral and sugar levels. insoluble fibre Speed up the movement of carcinogens (cance causing agent) from intestine.

(b) What is ulcer? Decribe Causes and Symptoms?

Ulcer:

Ulcer (peptic ulcer) is a sore in the inner wall of gut (in oesophagus, duodenum or Stomac. in ulcer, the acidic gestric juice gradually break down the tissue of the inner wall. Ulcer of Stomach is called gastric. ulcer. the causes of ulcer include excess acid, infection long term use of anti-inflammatory medicines (including aspirin), smoking drinking coffee, colas and eating spicy food.

The Signs and Symptoms of ulcer include abdominal burning after meals or at midnight Severe ulcer many may cause abdominal pain, rush of saliva after an episode of regurgitation, nausea, loss of appitite and weight

loss. Ulcer is treated with medicines, which neutralize the acidic affects of gastric juice, spicy, acidic foods and Smooking should be avoided as preventive measures.