QUICK QUIZES

"1"

1. What are carbohydrates? Give its general formula.

"Those organic compounds that contain Carbon, hydrogen & oxygen are called carbohydrates."

They have general formula $C_n(H_2O)_n$.

2. Quote one example of each type of carbohydrates.

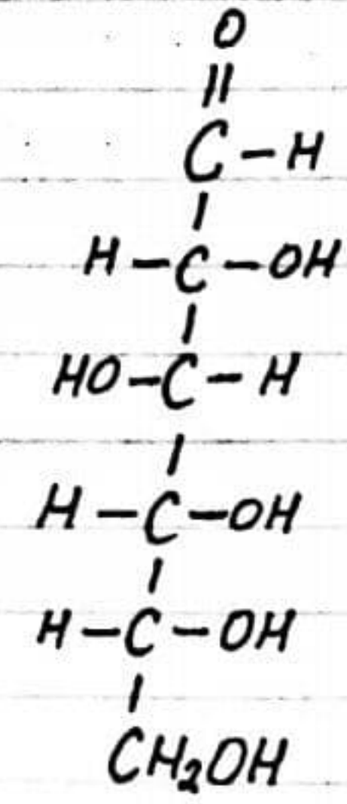
(a) Monosaccharide:-
Glucose, Galactose & fructose.

(b) Disaccharide:-
Lactose, Maltose & Sucrose.

(c) Polysaccharide:-
Starch & cellulose.

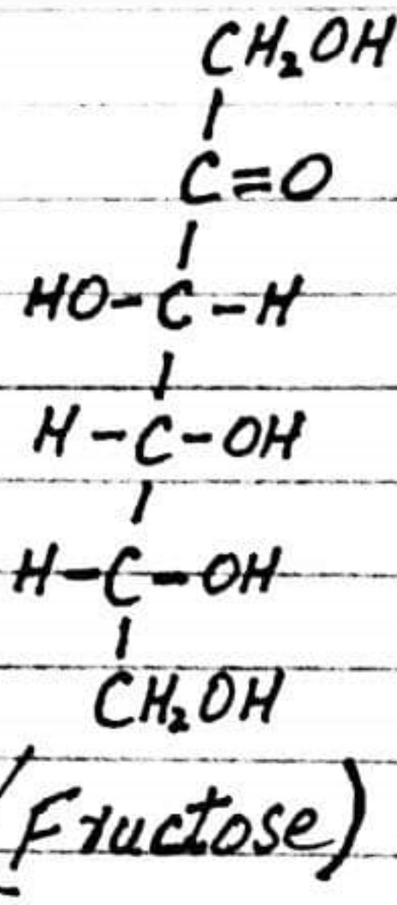
3. Write structural formulae of glucose & Fructose.

→ Glucose contains aldehydic group.



(Glucose)

→ Fructose contains ketonic group.



(Fructose)

4. What do you understand by glycemic index?

The new system for classifying carbohydrates is **glycemic index.**

→ Glycemic index ranks food how they can affect blood sugar level by measuring that how much blood sugar level increase after eating.

5. How much calories do 1gm of carbohydrate have?

1 gram of carbohydrate have about 4Kcal.

6. On what factors tooth decay depend?

Tooth decay depends upon following factors:

→ Degree of oral hygiene.
→ Some genetic factors.
→ type of food being eaten.
→ Availability of floride.

"2"

What are proteins? Give its simple classification?

"Thoes molecules which yield amino acids on complete hydrolysis are called proteins."

→ Classification of proteins are:

ⓐ Simple proteins. (Albumin, Histone)
ⓑ Conjugated proteins. (Glycoprotein, phospho protein)
ⓒ Derived proteins. (proteans, peptides)

2. Differentiate primary, Secondary & Tertiary structures of proteins.

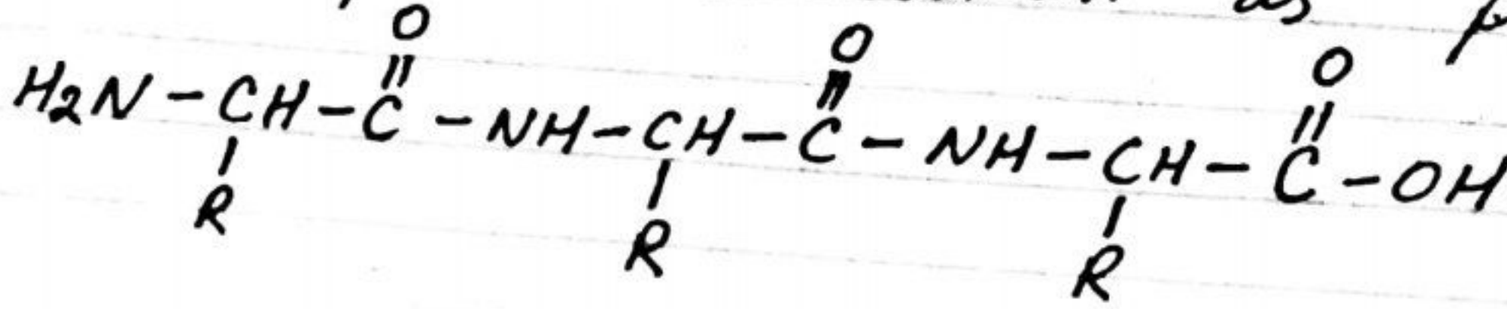
→ That structure which contain sequence of amino acid in a peptide chain is called **primary structure of protein.**

→ That structure in which poly peptide chain is present in spiral fashion is called **Secondary structure.**

→ That structure in which polypeptide chain is present in the form of folding or in twisting manner is called **Tertiary structure of protein.**

3. What are poly peptides?

"When amino acids are joined togeathes in a long chain by peptide bond. then the compound is known as poly peptide."



(Poly peptide)

'4'

1. What are lipids? Shortly explain the property that all the lipid have in common.

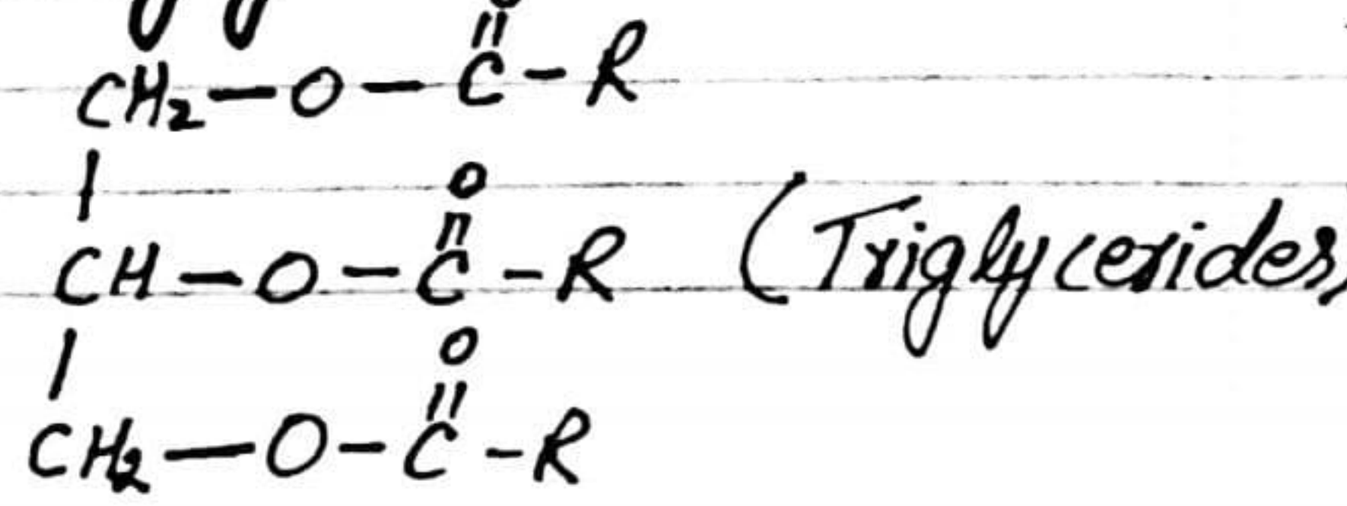
"Naturally occuring organic compound found in animals & plants and is insoluble in organic solvents is called lipid."

properties:

→ Insoluble in water.
→ Lighter than water.
→ Poor conductor of heat & electricity.

2. What are Triglycerides? Draw its structure.

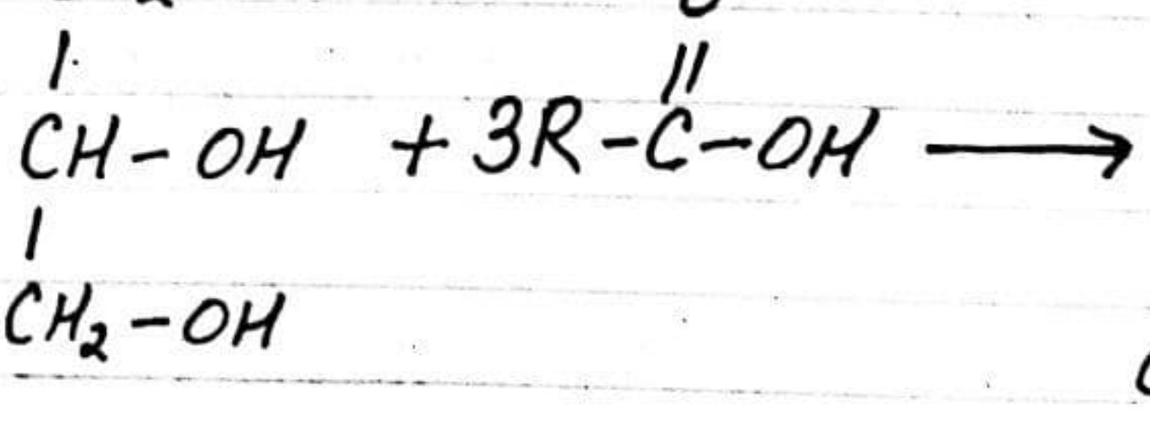
"One molecule of glycerol & 3-molecules of Fatty acids are combine togeather to form **Triglyceride.**"



3. Explain briefly the structure of lipids?

→ Fats & oils are generally known as lipid.

→ Lipid contains one molecule of glycerol & three molecules of fatty acids.



"5"

1. Write the names of structural components of DNA & RNA?

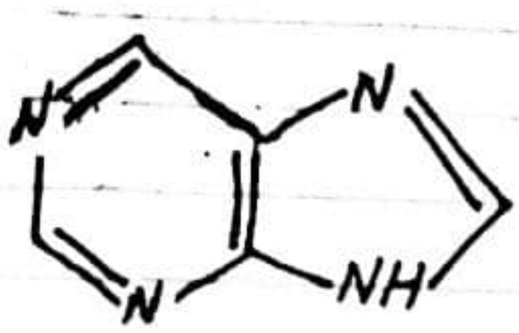
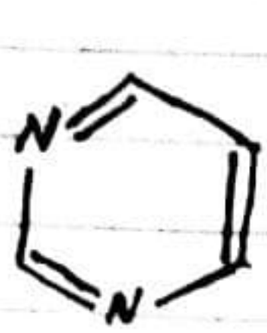
Structural components of DNA & RNA are:

→ 5-Carbon Sugar or pentose sugar.

→ Nitrogenous bases.

→ Phosphate group.

2. Differentiate purines & pyramidines.

Purines	Pyrimidines
→ It contains Adenine and Guanine.	→ It contains Thymine, Cytosine & uracil.
→ 	→ 

Which purines are present in both DNA & RNA.

Adenine & Guanine are present in both DNA & RNA.

"6"

What is biological significance of mineral?

Biological significance of minerals are:

→ Minerals are necessary for body as like oxygen.

→ They maintain all physiological processes.

→ Helps in transmission of message.

→ Found in organic & inorganic food.

→ Vitamins cannot be properly assimilated without the correct balance of minerals.

2. Define mineral. Give its percentage present in human body.

"The term mineral refers to the chemical that present in the ash of calcined tissue."

→ 5% of minerals are present in human body.

3. Minerals of which metals are required for assimilation of vitamins B, C & E.

→ Magnesium is required for the assimilation of vitamin B.

→ Calcium is required for vitamin C.

→ Selenium is essential for vitamin E.

4. What problems are caused by the deficiency of calcium & phosphorus?

Calcium:-

Deficiency of calcium may result in softening of bones, rickets, poor growth, osteoprosis & mental depression.

phosphorus:-

It's deficiency may cause irregular breathing, anxiety, fatigue and skin sensitivity.

5. **Give importance of Zinc mineral.**

Importance of zinc are:

→ Involves in human's metabolism.
→ It is a need of enzyme for catalytic activity.
→ Vital to immune resistance.
→ Maintain normal vitamin 'A' level.

6. **Give Importance/Significance of**

(i) keratin:-

→ It is a fibrous protein play structural & supporting role in **nails & hair.**

(ii) Myosin & Fibrin Fibrous protein:-

Myosin:-

It plays important role in **muscle cells.**

Fibrin:-

Support in blood clotting.

7. **How much intake of manganese should be per day.**

Minute amount of manganese should be taken per day.

How hibernating animals obtain energy during hibernation.

These animals store large amount of fats in their body. During winter, metabolic activities decreased then these animals use stored fat for ATP production during oxidation process.

9. Give few macro & micro minerals.

Some **macro** minerals are:

→ Calcium
→ Chloride
→ Sodium
→ potassium &
→ Sulphur etc.

Some **micro** minerals are:

→ Iron
→ Iodine
→ Silicon
→ copper &
→ Cobalt etc.

10. How much Sodium & potassium should be taken per day.

0.3 to 2.0 grams of Na & K should be taken per day.

11. What is Insulin?

→ Insulin is the first antibiotic found in the world.
→ It is produced by pancreatic beta cells.
→ It contain 51 amino acids peptide. It is used to treat some forms of diabetes.

THE END