(Tue) 12/5/20 CL-X, EVS

CH-6 Topic (Harvesting Wildlife)

Home Assignment.....

1) Why hunters kill animals?
2) Can you kill an animal humanely?
3) What is the importance of wildlife?
4) How many animals are killed each year?
5) Why is it bad to hunt animals?

.....(To be continued next class.....)

Mathematics

Measures of Central Tendency

Class-X Date:-12.05.20

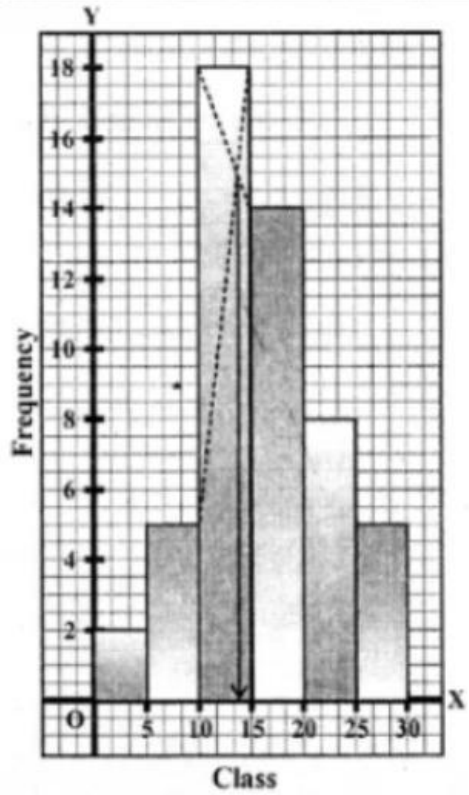
Question 1.

Draw a histogram for the following frequency distribution and find the mode from the graph :

Class	0-5	5-10	10-15	15-20	20-25	25-30
Frequency	2	5	18	14	8	5

Answer 1

Class	0-5	5-10	10-15	15-20	20-25	25-30
Frequency	2	5	18	14	8	5



Mode = 14

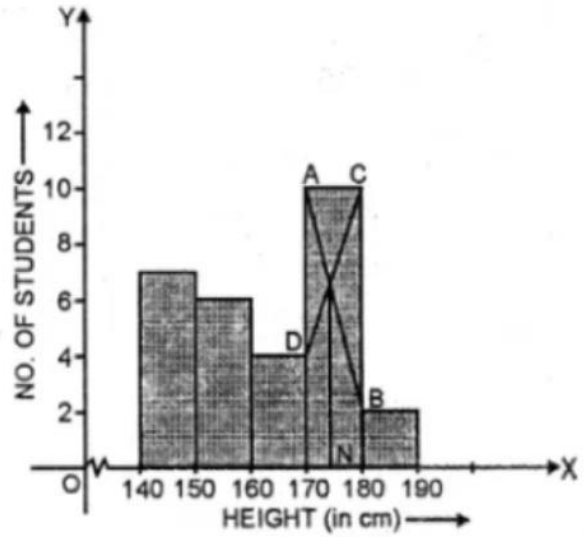
Question 2.

Find the modal height of the following distribution by drawing a histogram :

Height (in cm)	140–150	150–160	160–170	170–180	180–190
No. of students	7	6	4	10	2

Answer 2

Height (in cm)	No. of students
140–150	7
150–160	6
160–170	4
170–180	10
180–190	2



Now present the Height on x-axis and No. of students (frequency) on the y-axis

and draw a histogram as shown. In the histogram join AB and CD intersecting at M.

From M, draw MN to the x-axis. N shows the mode.

Hence mode = 174 cm

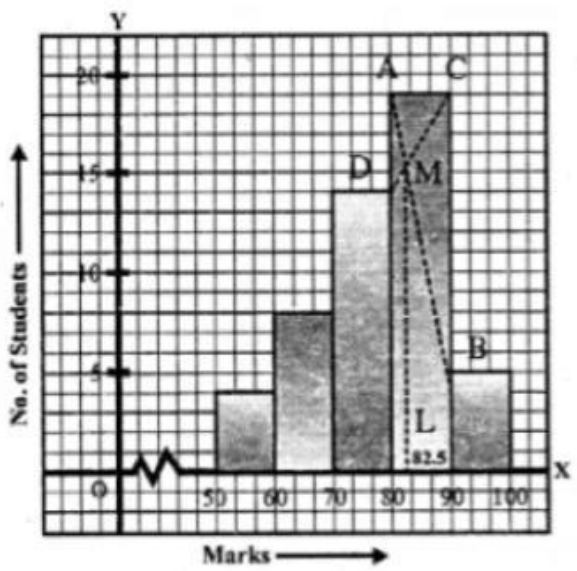
Question 3.

A Mathematics aptitude test of 50 students was recorded as follows :

Marks	50-60	60-70	70-80	80-90	90-100
No. of Students	4	8	14	19	5

Draw a histogram for the above data using a graph paper and locate the mode. (2011)

Answer 3



Hence, the required mode is 82.5.

Question 4.

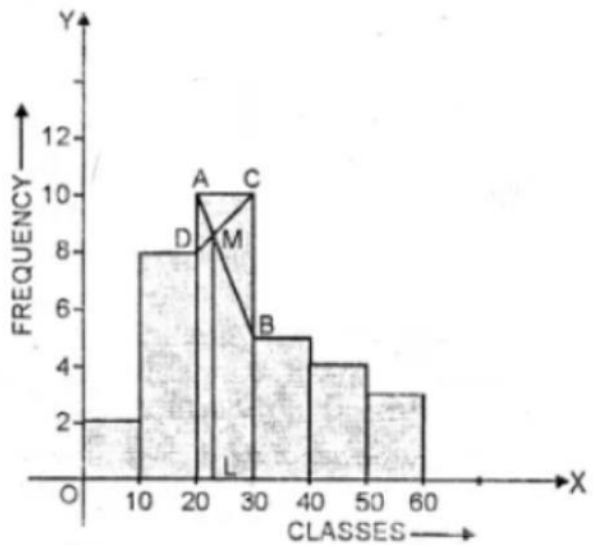
Draw a histogram and estimate the mode for the following frequency distribution :

Classes	0–10	10–20	20–30	30–40	40–50	50–60
Frequency	2	8	10	5	4	3

(2003)

Answer 4

Classes	Frequency
0–10	2
10–20	8
20–30	10
30–40	5
40–50	4
50–60	3



Representing classes on x-axis and frequency on the y-axis, we draw a histogram as shown.

In the histogram, join AB and CD intersecting at M.

From M, draw ML perpendicular to the x-axis. L shows the mode

Hence Mode = 23

Home Work-

Q1.

IQ of 50 students was recorded as follows

IQ score	80–90	90–100	100–110	110–120	120–130	130–140
No. of students	6	9	16	13	4	2

Draw a histogram for the above data and estimate the mode.

Q2.

Use a graph paper for this question. The daily pocket expenses of 200 students in a school are given below:

Pocket expenses (in ₹)	Number of students (frequency)
0-5	10
5-10	14
10-15	28
15-20	42
20-25	50
25-30	30
30-35	14
35-40	12

Draw a histogram representing the above distribution and estimate the mode from the graph.

Q3.

Draw a histogram for the following distribution :

Wt. in kg	40–44	45–49	50–54	55–59	60–64	65–69
No. of students	2	8	12	10	6	4

Hence estimate the modal weight.

Q4.

Find the mode of the following distribution by drawing a histogram

Mid value	12	18	24	30	36	42	48
Frequency	20	12	8	24	16	8	12

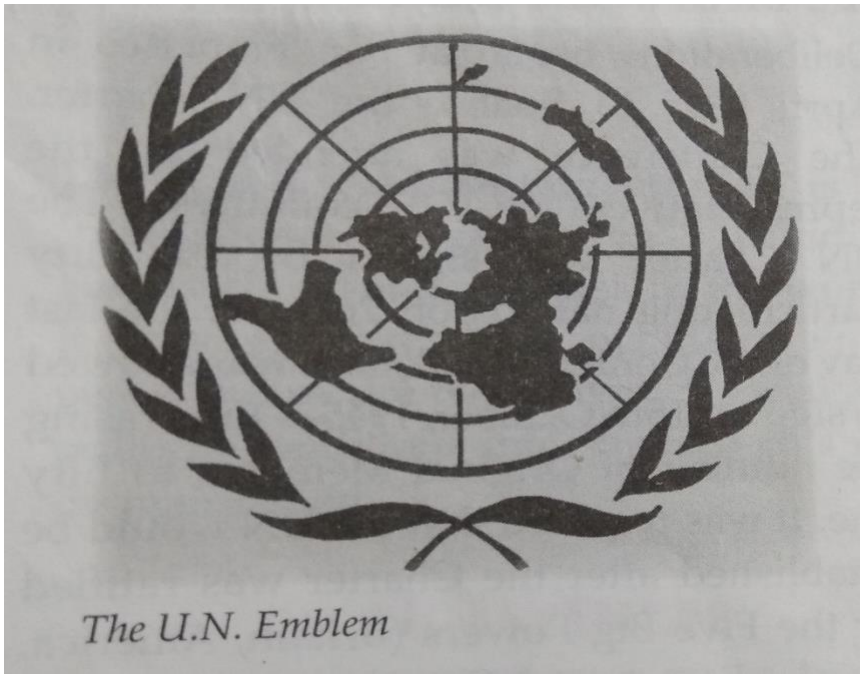
Also state the modal class.

Class X

12.05.2020

History & Civics

United Nations Organisation (UNO)



The U.N. Emblem

Destructive and horrifying experiences of the two World Wars made the world realise the necessity of a peace maintaining organisation more powerful than the previous ones e.g., the League of Nations. The efforts finally took shape at San Francisco on 24th October, 1945 with the emergence of the **United Nations Organisation (UNO)**.

Establishment of the UNO

- The two World Wars left a legacy of misery and depression in nearly every country. Millions of people lost their lives and many others became disabled, homeless and unemployed, apart from the millions of dollars that were spent during the war.

- The League of Nations was established with a promise of peace, but it had failed to prevent another war. All the countries feared, that another World War might lead to the end of the world as destructive weapons, like atom bombs, were now invented and already used.
- The world was divided in two Power Blocs, both having opposite ideologies. All the above mentioned events gave the world leaders a purpose to form a more powerful, transparent and impartial organisation, which would be able to resolve the differences between the countries/blocs amicably and save the mankind from any further destruction.

Purposes/Objectives of the United Nations

Objectives of the United Nations are as follows:

1. To maintain International Peace and Security.
2. To develop friendly relations among nations, based on the respect for the principle of equal rights and self-determination of people.
3. To achieve International Co-operation in solving various International, Economic, Social, Cultural or Humanitarian problems.
4. To be centre for harmonising the actions of nations in the attainment of goals.

Principles of the United Nations

Principles of the United Nations are as follows:

1. To respect the sovereign equality of all its members.
2. All members should fulfill, in good faith, the obligations assumed by them.
3. They should settle their International disputes by peaceful means.
4. They would refrain from threat or use of force against any state.
5. They should give the United Nations every assistance in any action it takes.
6. The Organisation should ensure, that States, which are not members of the United Nations, act in accordance with these principles.

Headquarters

- All the organs of the United Nations are based in New York, USA, except the International Court of Justice, which is located at the Hague in Netherlands.

Membership

All Peace-loving Nations can be admitted to the UN. These countries are admitted by the General Assembly upon the recommendation of the Security Council by a 2/3rd majority of votes. It should be noted that India was one of those 50 members who took part in the Conference and has been an active participant in all the peace-keeping endeavours of the UN.

Organs of the United Nations

The General Assembly

The work of the UN is determined by the will of the majority of the members as expressed in Resolutions adopted by the Assembly. The General Assembly is the main deliberative organ of the UN. All the members of the UN are members of the General Assembly. Each state has 5 representatives in the General Assembly, but each State has only one vote. The regular session of the General Assembly begins each year on the 3rd Tuesday in September and continues usually until the 3rd week of December. At the beginning of each regular session, the Assembly elects a new President, 21 Vice-Presidents and the Chairmen of the Assembly's six main committees.

Powers and Functions of the General Assembly

The powers and functions of the General Assembly are as follows:

1. To consider and make recommendations on the principles of co-operation, in the maintenance of international peace and security.
2. To discuss any question relating to international peace and security and to make recommendations on it.
3. To make recommendations for the peaceful settlements of disputes.
4. To receive and consider reports from the Security Council and other organs of the UN.
5. To consider and approve the budget of the UN and to apportion the contributions among members.
6. To elect the non-permanent members of the Security Council , the Economic and Social Council and Trusteeship Council and to elect the judges of the International Court of Justice.
7. To appoint the Secretary-General on the recommendation of the Security Council.

8. To discuss and make recommendations on any issue affecting the powers and functions of any organ of the UN.
9. To make recommendations to promote International, Political, Social and Economic co-operation.

The Security Council

It is the executive body of the United Nations. It has the primary responsibility for the maintenance of International peace and security.

Composition of Security Council

The Council consists of 15 members out of which 5 members China, France, Russia, Britain and the USA are permanent. The non-permanent members are elected from Afro-Asian countries (5 members), Latin America (2 members), West European and other countries (2 members) and East European countries (1 member).

Each member of the Security Council has one vote. The permanent members have the Veto power i.e., a negative vote. However, abstinence for voting does not amount to a negative vote or a veto.

Powers and Functions of the Security Council

The powers and functions of the Security Council are as follows:

1. To maintain International peace and security in accordance with the principles and purposes of the UN.
2. To investigate any dispute or situation and to take military action against an aggressor, and to recommend terms of settling disputes and any methods of adjusting against them.
3. Formulating plans to regulate armaments.
4. To call on members to apply economic sanctions and other measures other than force, to prevent or stop aggression.
5. To recommend to the General Assembly for the appointment of the Secretary-General and to elect the Judges of the International Court of Justice together with the General Assembly.
6. To determine existence of any threats and to recommend actions for the same.
7. To recommend the admission of new members.
8. To exercise the trusteeship functions of the United Nations in strategic areas. One of the peace keeping forces of the UN is working in Afghanistan

as UN Assistance Mission in Afghanistan (UNAMA), which is deeply concerned about the rising number of civilian deaths and injuries.

The International Court of Justice

It is the principal judicial organ of the UN. Its headquarter is at the Hague (Netherlands). The Court has a dual role to settle in accordance with International law, to settle the legal disputes submitted to it by the States, to give advisory opinions on legal questions referred to it, to modify International laws etc.

Composition and Qualification

- The Court composes of 15 judges for a term of 9 years by the UN General Assembly and Security Council sitting independently. Elections are held every 3 years for 1/3rd of the seats.
- A retiring Judge may be re-elected.
- The Judges must possess the qualifications required in their respective countries for appointment to the highest judicial offices.

Or,

Should be a Jurist of recognised competence in International Law.

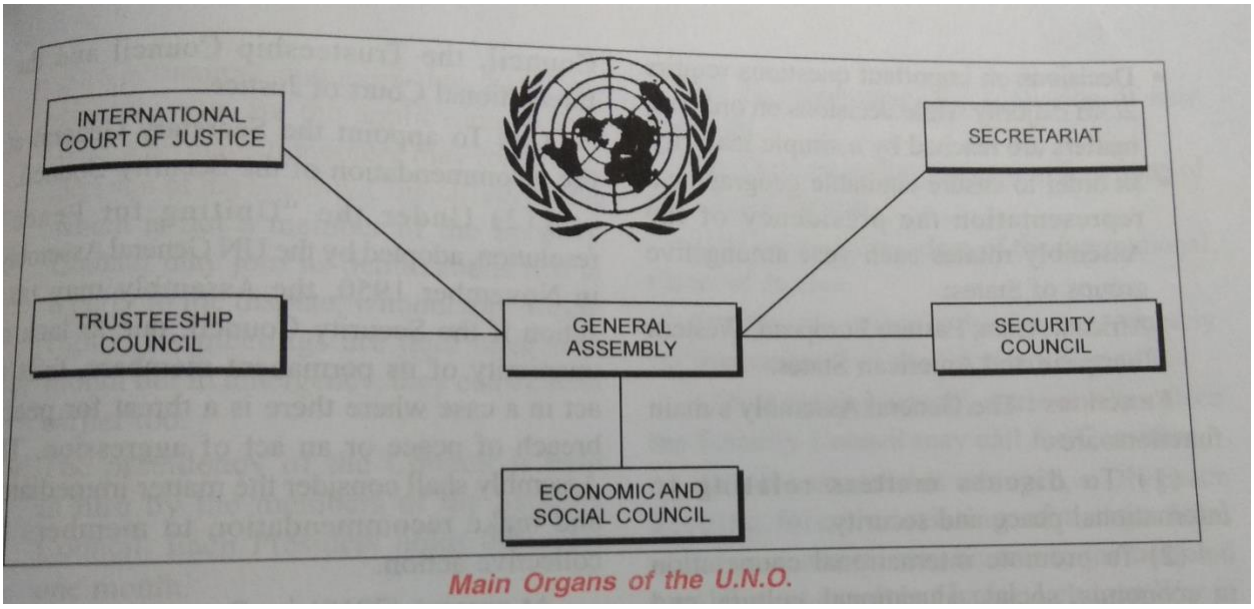
Powers and Functions of the International Court of Justice

- Only the Member States may apply to appear before the Court. The Court decides cases in accordance with International treaties and conventions in force, and is competent to entertain a dispute if the parties so involved agree for it.
- The advisory procedure of the Court is open only to its 5 organs and 16 other authorised agencies of the UN family . The Court plays a significant role in the codification of International laws. The Court may recommend appropriate procedures/methods of settlement during or at the end of the case.

Home Work –

1. Why UNO was formed?
2. Mention the objectives of the UNO.
3. Explain the composition and functions of the General Assembly.
4. Explain the composition and function of the Security Council.
5. Where the headquarter of the UNO located?

6. What do you understand by the abbreviation UNO? When it was formed and where?
7. Which organisation was the predecessor of the UNO?
8. What is “Veto”?



Main Organs of the U.N.O.

DREAMLAND SCHOOL

BIOLOGY - CLASS 10 (2020 – 2021)

ASSIGNMENT

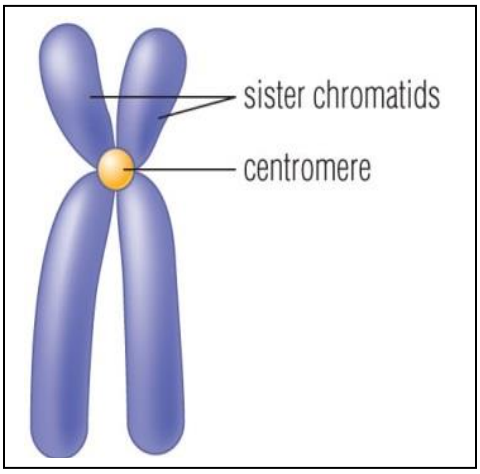
DATE - 12/05/2020

CHAPTER – CELL CYCLE. CELL DIVISION & STRUCTURE OF CHROMOSOME

DETAILED EXPLANATION

STRUCTURE OF CHROMOSOMES

- Chromosomes are highly condensed coiled chromatin fibres.
- Chromosomes were first discovered by a German scientist Walther Fleming.
- Each chromosome consist of two **chromatids** joined at some point along the length. This point of attachment is called **centromere**.
- The centromere is a small constricted region which serves to attach to the spindle fibre during cell division.



A SINGLE CHROMOSOME

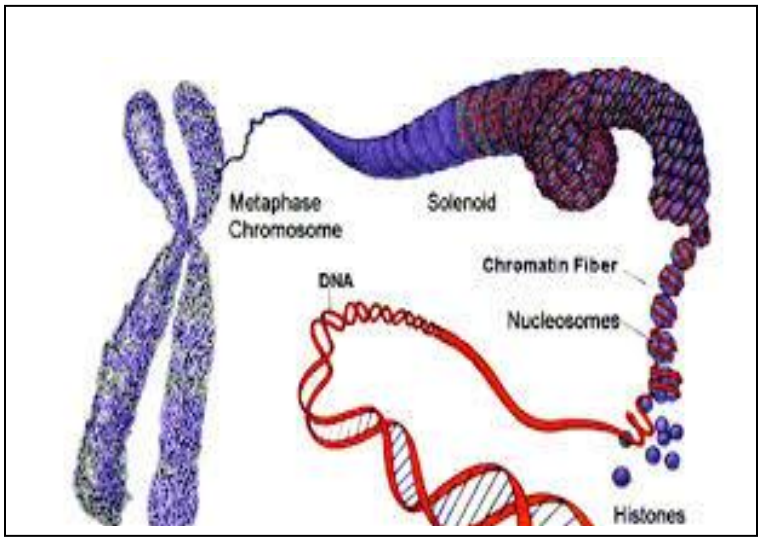
CHROMATIN :

The chromatin material that constitute the fibre is formed of two substances.

1) DNA (deoxyribonucleic acid) -40%

+

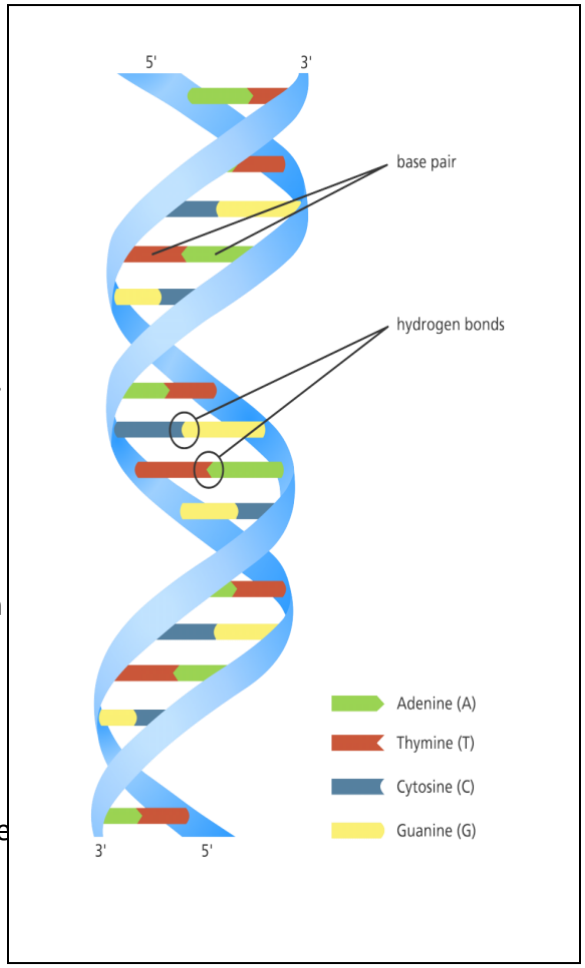
2) Histones (proteins) – 60%



- The DNA strand winds around a core of eight histone molecules.
- Each such complex is called nucleosome.
- These nucleosomes becomes coiled & supercoiled to become chromatin fibres.
- These chromatin fibres further condenses to become chromosome.

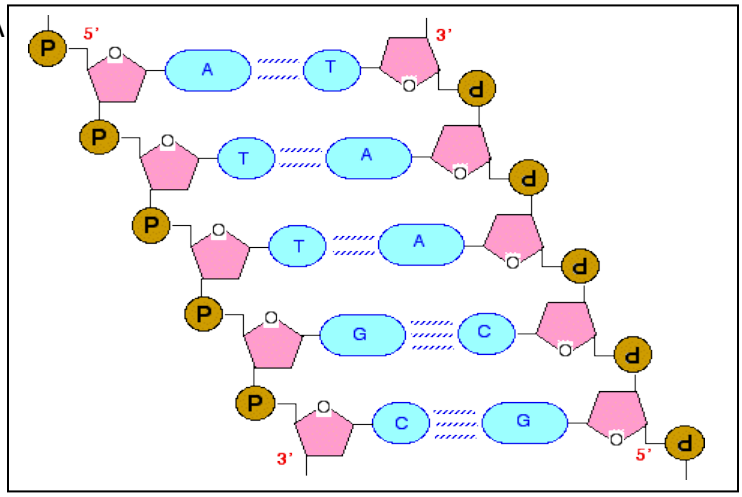
STRUCTURE OF DNA

- The shape of the DNA molecule was studied by Rosalind Franklin & the structure was finally worked out by Watson & Crick .
- The DNA is a very large single molecule & hence called Macromolecule.
- It is composed of two complementary strands wound Around each other in a double helix.
- Each single DNA strand is composed of repeating nucleotides.
- Nucleotides are made of three components-
  a) Phosphate
  b) Pentose sugar
  c) Nitrogenous base
- On a single strand the phosphate & sugar are arranged length Wise & the nitrogenous base is attached to the sugar inner Side.
- The nitrogenous base extends to join the nitrogenous base of The complementary strand.
- Thus the two strands together makes a ladder like appearance
- There are four nitrogenous bases-
  a) Adenine(A)
  b) Guanine (G)
  c) Thymine(T)
  d) Cytosine (C)
- The adenine pairs with thymine only and are joined by two hydrogen bond
- The guanine pairs with cytosine & are joined by three hydrogen bonds.

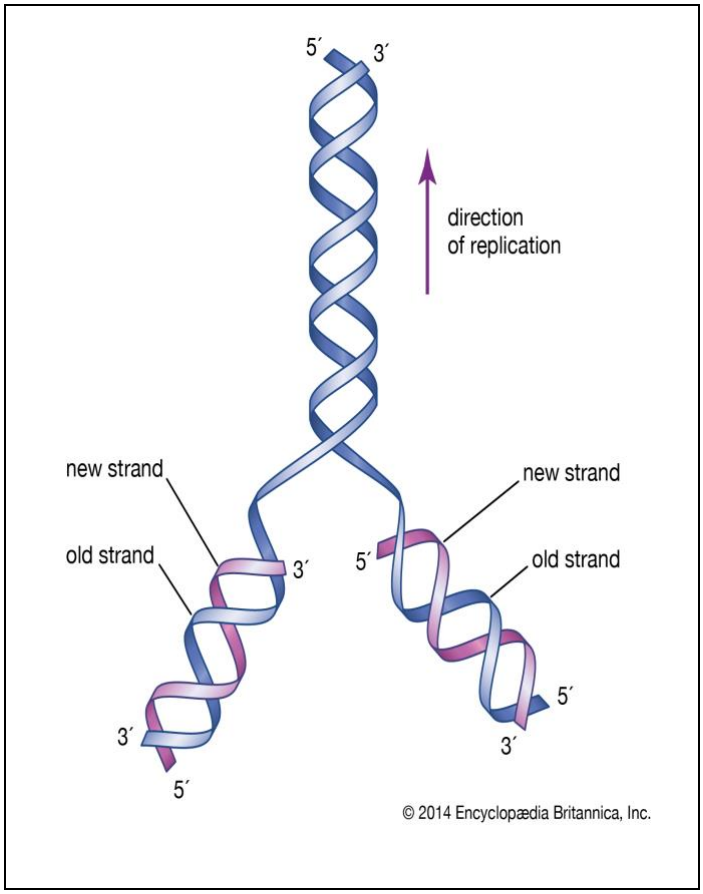


Structure of DNA (fig 1)

linear structure of DNA (fig2)



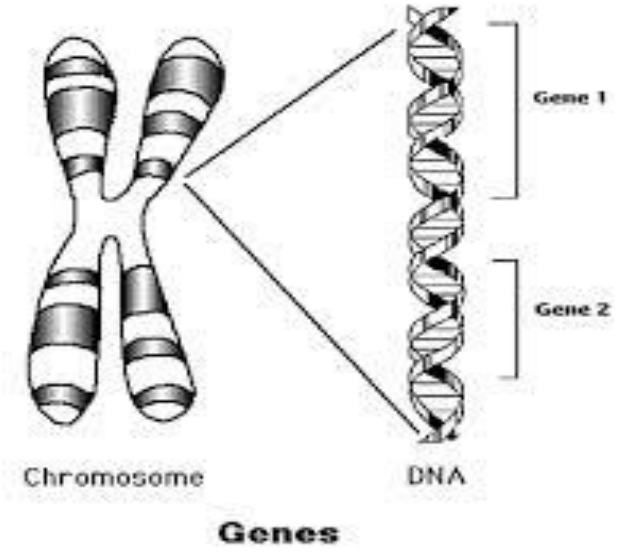
FORMATION OF NEW DNA



For replication the DNA double helix opens at one end , making the two strands free to which the new strand starts forming. The process continues in a sequence for the whole length of DN A.

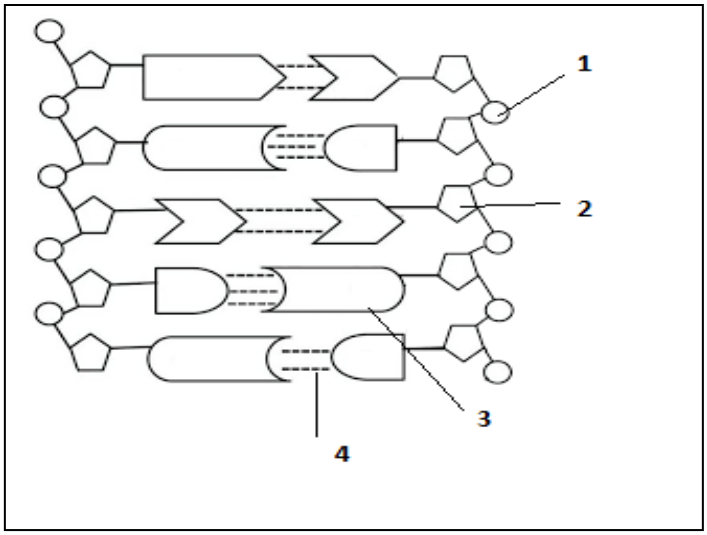
GENES

Genes are specific sequences of nuleotides on a chromosome , that encode particular proteins which express in the form of some particular features in the body.



ASSIGNMENT 6 (CONTINUATION) DRAW THE DIAGRAMS FOR DIAGRAM BASED QUESTION

5)



1) How many strands is it showing?
2) How many nucleotides is shown in each strand?
3) Name the parts 1-4
4) How many hydrogen bonds are there between guanine & cytosine?

6) How are the chromosomes formed?

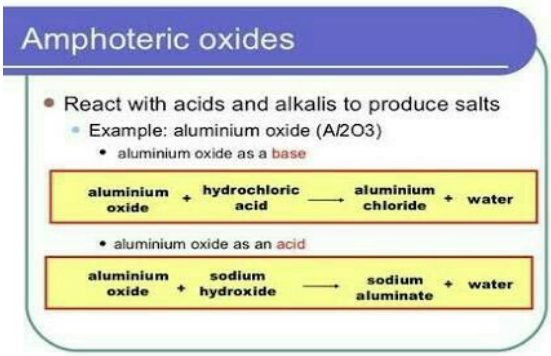
7) What are genes?

MOUMITA GANGULY

Chemistry Class 10

Chapter 4:Analytical chemistry

- When ammonium hydroxide solution is added to metallic salts precipitate of the hydroxide are formed which react in excess of reagent.
- Calcium salts are insoluble in ammonium hydroxide because the concentration of hydroxyl ion from ionisation of NH4OH is low that it cannot precipitate hydroxide of calcium
- Ferrous salt form dirty green por and ferric ion forms reddish brown ppt. and both precipitates are insoluble.In case of copper salts pale blue precipitate is formed which is soluble in excess reagent
- Zinc salts form white gelatinous precipitate with NH4OH and precipitate is soluble in excess reagent.
- Lead salt form chalky white insoluble precipitate.
- Certain metals like Zn,Al,Pb react with both acid and base. Their oxides are known as amphoteric oxides.E g:zinc oxide gives sodium skincare with NaOH.zinc oxide gives zinc chloride with HCl.



- Oxides of most metals ate basic in nature.They dissolve in water forming hydroxide.A few metallic oxide show dual nature.

ASSIGNMENT

1. Name the metal hydroxide insoluble in caustic soda solution and ammonium hydroxide solution.
2. How will you distinguish between NaOH and NH4OH
3. Name the chloride of the metal that is soluble in excess NH4OH.Give the equation
4. How will you distinguish between lead carbonate and zinc carbonate in solution
5. How will you distinguish between NaOH and NH4OH using copper salt.Give the equations
6. You are provides with 2 test tube containing reagent:NaOH and ammonia solution.You are to use Calcium salt to identify them.How will you do so.write relevant equation
7. What happens when hot and concentrated caustic soda solution is added to a)Zinc. b)Aluminium.Write equation