

Class 10 Commercial Application

Ch-3 GAAP

Q1: What is book keeping?

Q2: What is accounting?

Q3: What is the difference between book keeping and accounting?

Q4: What is an accounting cycle? What is GAAP?

Q5: What are the needs of GAAP?

Class 10 Economics

Ch-11 Public Expenditure

Q1: What is public expenditure?

Q2: What are the reasons due to which public expenditure has increased?

Q3: What is developmental expenditure?

Q4: What is non developmental expenditure?

Q5: What is revenue expenditure?

DREAMLAND SCHOOL

Class: X

Subject: ART Paper - 1

Objects required:

A ladies
purse and a pair of
sunglasses.

Arrangement:

The sunglasses
must be arranged in
front of the purse
in such a way as to
make a good composition.

Suitable coloured drapery
must be used for the
foreground and background
to contrast with the
colour effect of the
whole arrangement.

Date: / /

DREAMLAND SCHOOL

Class : X

Subject : ART Paper - 4

Design an illustrated poster in not more than four colours for Rabindra Jayanti Celebration which is being organised in your school.

The words "TAGORE FESTIVAL" must be written in bold.

Special attention should be given to a simple & creative design with a good colour scheme.

DREAMLAND SCHOOL
PHYSICAL EDUCATION - CLASS 10 (2020-2021)
ASSIGNMENT

Date – 07/05/2020

CHAPTER 2 – PHYSICAL EDUCATION

BRIEF EXPLANATION –

- Physical education aims to develop students physical competence and knowledge of movement and safety and their ability to use these to perform in a wide range of activities associated with the development of an active and healthy lifestyle.
- Earlier students were trained, that is they knew the techniques only , but now they are educated, that is part from knowing the technique they also knows the different fields of developments associated with it.
- The objectives of physical education are –
physical development, psychological development , social development, moral development, improvement in knowledge, emotional development.
- **Physical development** – proper growth and development and proper functioning of various systems of the body. Including regular **physical** activities every day helps students improve cardiovascular health, **develop** muscular strength and maintain **fitness**. A regular **physical activity** improves the body's absorption of nutrients, increases physiological processes and improves digestive processes.
- **Psychological development** – development of healthy interests and attitudes, channelizing of emotions.
- **Social development** – developing qualities of sympathy and cooperation with others. When individuals are involved in organized sports or exposed to an organized physical education class in school, the basic values they learned in the sandbox all those years ago are further emphasized: sharing, working together, and celebrating together are all essential components of team sports and organized play. Working together and seeing such work pay off helps strengthen a individuals relationships with his or her peers, and gives him or her something to bond over with other children. Therefore, the social aspect of certain physical activities help to develop a individual's sense of camaraderie, and teaches them positive values. These values are then carried with the individual throughout life.
- **Moral development** – development of self-control, leadership qualities, personality. Physical activity can impact a individual's mood, as well as his or her motivation and focus. Not only is exercise an important aspect of your child's physical development, it is a crucial element to his or her mental development. As a result of consistent physical activity, individuals are likely to perform better in school, learn social lessons and gain friendships, and be more mentally healthy, all of which are important to setting them up for successful futures.

- **Improvement in knowledge** – acquiring the knowledge, understanding health problems & their prevention.
- **Emotional development** - Social and emotional learning enhances students' capacity to integrate skills, attitudes, and behaviors to deal effectively and ethically with daily tasks and challenges. A physical active environment is the ideal place to enhance these skills. it also improves mood and mental health. Exercise promotes chemicals in the brain that improve your mood and make you more relaxed. Specifically, the brain releases feel-good chemicals throughout the body. Physical activity reduces anxiety and depressed mood, and enhances self-esteem.

ASSIGNMENT 2 (PREVIOUS)

Answer the following :-

- 1) Define physical education.
- 2) List two objectives of physical education.
- 3) Explain why moral development is necessary for physical development.
- 4) Enumerate the role of psychological development in physical education.
- 5) Explain how physical education improved from the past days.

ASSIGNMENT 2 (CONTINUATION) – 07/05/2020

- 6) What do you mean by emotional development through physical development?
- 7) Explain 2 ways in which physical development enhances social development.

MOUMITA GANGULY

CLASS – 10
COMPUTER APPLICATION
STRING IN JAVA

Continuation.....

Example Program 1: that shows how to declare String

```
import java.io.*;
import java.lang.*;

class Example1
{
    public static void main(String[] args)
    {
        // Declare String without using new operator
        String str = "HelloStudents";

        // Prints the String.
        System.out.println("String str = " + str);

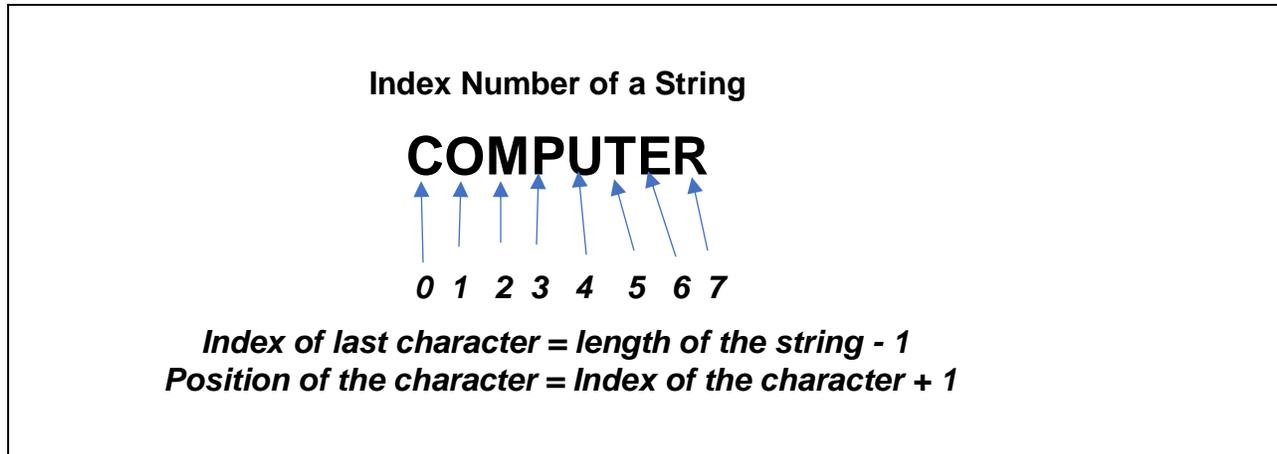
        // Declare String using new operator
        String str1 = new String("HelloStudents ");

        // Prints the String.
        System.out.println("String str1 = " + str1);
    }
}
```

Output:

```
String str = HelloStudents
String str1 = HelloStudents
```

Note: Single-line comments start with two forward slashes (//). Comments can be used to explain Java code, and to make it more readable. **The compiler will not run the comment (//) line/statements.**



Example Program 2: Program to illustrate various string methods

```
import java.io.*;
import java.util.*;
class Example2
{
    public static void main (String[] args)
    {
        String s= " Computerclass ";
        // or String s= new String ("Computerclass");

        // Returns the number of characters in the String.
        System.out.println("String length = " + s.length());

        // Returns the character at ith index.
        //String index number begins from 0
        System.out.println("Character at 3rd position = "+ s.charAt(3));

        // Return the substring from the ith index character
        // to end of string
        System.out.println("Substring " + s.substring(3));

        // Returns the substring from i to j-1 index.
        System.out.println("Substring = " + s.substring(2,5));

        // Concatenates or joins string2 to the end of string1.
        String s1 = "computer";
```

```

String s2 = "class";
System.out.println("Concatenated string = " + s1.concat(s2));

// Returns the index within the string
// of the first occurrence of the specified string.
String s4 = "How are you";
System.out.println("Index of are " + s4.indexOf("are"));

// Returns the index within the string of the
// first occurrence of the specified string,
// starting at the specified index.
System.out.println("Index of o = " + s4.indexOf('o',2));

// Checking equality of Strings
boolean out = "Class".equals("class");
System.out.println("Checking Equality " + out);
out = "Class".equals("Class");
System.out.println("Checking Equality " + out);

out = "Class".equalsIgnoreCase("clAsS");
System.out.println("Checking Equality " + out);

// Converting cases
String word1 = "BeGood";
System.out.println("Changing to lower Case " + word1.toLowerCase());

// Converting cases
String word2 = "BeGood";
System.out.println("Changing to UPPER Case " + word1.toUpperCase());

// Trimming the word
// It returns a copy of this string with leading and trailing white space removed, or
this string if it has no leading or trailing white space.
String word4 = " Stay healthy ";
System.out.println("Trim the word: " + word4.trim());

// Replacing characters
String str1 = "computerclass";

```

```

        System.out.println("Original String " + str1);
        String str2 = "computerclass".replace('s','p') ;
        System.out.println("Replaced s with p -> " + str2);
    }
}

```

Output :

String length = 13

Character at 3rd position = p

Substring puterclass

Substring = mpu

Concatenated string = computerclass

Index of are 4

Index of o = 9

Checking Equality false

Checking Equality true

Checking Equality true

Changing to lower Case begood

Changing to UPPER Case BEGOOD

Trim the word: Stay healthy

Original String computerclass

Replaced s with p -> computerclapp

Example Program 3: Write a program to accept a alphabet in upper case or in lower case. Display the next alphabet accordingly.

i.e. 'c' comes after 'b' & 'a' comes after 'z'

```

import java.util.*;
class Example3
{
    public static void main(String args[])
    {
        Scanner obj=new Scanner(System.in);
        System.out.println("Enter a character:");
        char ch=obj.next().charAt(0);
    }
}

```

```

        if(ch=='z')
        System.out.println("a");
        else if(ch=='Z')
        System.out.println("A");
        else
        System.out.println(++ch);
    }
}

```

Output:

Enter a character: d

e

Example Program 4: Write a program in java to accept a string/word and display the new string after removing all

the vowels present in it.

Sample i/p: COMPUTER APPLICATIONS

Sample o/p: CMPTR PPLCTNS

```

import java.util.*;
public class Q4
{
    public static void main(String args[])
    {
        String w=" ";
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a String:");
        String st=sc.nextLine();
        for(int i=0;i<st.length();i++)
        {
            char x=st.charAt(i);
            if(x!='A' && x!='E' && x!='I' && x!='O' && x!='U' && x!='a' && x!='e' &&
            x!='i' &&x!='o' && x!='u')
                w=w+x;
        }
        System.out.println(w);
    }
}

```

Output:

Enter a String: How are you all

Hw r y ll

ASSIGNMENT IV (PART – 2)

6. Write a program to accept a sentence and print only the first letter of each word of the sentence in capital letters separated by a full stop.

i.e. Input sentence – “We are Students”

output- W.A.S.

7. Write a program to accept a alphabet in upper case or in lower case. Display the next alphabet accordingly.

8. Answer by an example(program) on how to convert a string totally into uppercase?

Mathematics

Class-X

Measures of Central tendency

Date:-07.05.20 Assignment:-

Q1.

Find the mean of the following distribution

Class Interval	0-10	10-20	20-30	30-40	40-50
Frequency	10	6	8	12	5

Solution:

Class interval	Class mark x_i	Frequency f_i	$f_i x_i$
0-10	5	10	50
10-20	15	6	90
20-30	25	8	200
30-40	35	12	420
40-50	45	5	225
Total	$\Sigma f_i = 41$		$\Sigma f_i x_i = 985$

$$\text{Mean} = \frac{\Sigma f_i x_i}{\Sigma f_i} = \frac{985}{41} = 24.02 \text{ (approx.)}$$

Q2.

Calculate the mean of the following distribution:

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	8	5	12	35	24	16

Solution:

Consider the following distribution :

Class interval	Frequency f_i	Class mark x_i	$f_i x_i$
0-10	8	5	40
10-20	5	15	75
20-30	12	25	300
30-40	35	35	1225
40-50	24	45	1080
50-60	16	55	880
Total	$f_i = 100$		$f_i x_i = 3600$

$$\text{Mean} = \frac{\sum f_i x_i}{\sum f_i} = \frac{3600}{100} = 36$$

Q3.

Find the mean of the following frequency distribution:

Class-intervals	0-50	50-100	100-150	150-200	200-250	250-300
Frequency	4	8	16	13	6	3

Solution:

Class intervals	Frequency	Class Mark	$f \cdot x$
0-50	4	25	100
50-100	8	75	600
100-150	16	125	2000
150-200	13	175	2275
200-250	6	225	1350
250-300	3	275	825
Total	50		7150

Arithmetic mean (\bar{x})

$$= \frac{\sum f \cdot x}{\sum f} = \frac{7150}{50} = 143 \text{ Ans.}$$

Home Work-

Q1.

The following table gives the daily wages of workers in a factory:

Wages in ₹	45-50	50-55	55-60	60-65	65-70	70-75	75-80
No. of Workers	5	8	30	25	14	12	6

Calculate their mean by short cut method.

Q2.

Calculate the mean of the distribution given below using the short cut method.

Marks	11-20	21-30	31-40	41-50	51-60	61-70	71-80
No. of students	2	6	10	12	9	7	4

Q3.

The following distribution shows the daily pocket allowance fo children of a locality. The mean pocket allowance is Rs. 18. Find the value of f

Daily pocket allowance (in Rs)	11-13	13-15	15-17	17-19	19-21	21-23	23-25
No. of children	3	6	9	13	f	5	4

Q4.

The mean of the following distribution is 50 and the sum of all the frequencies is 120. Find the values of p and q .

Class intervals	0-20	20-40	40-60	60-80	80-100
Frequency	17	p	32	q	19

Class X

07.05.2020

History & Civics

President and Vice president of India

The President of India

The President of the executive head of the Union of India. He/She is the Head of the State but according to our Constitution, he/she is bound to follow the advice given by the Prime Minister and the Council of Ministers. The Constitution makes it necessary on the part of the President to exercise his/her functions in accordance with the advice of the Council of Ministers.

Qualifications –

A person shall be eligible for election as a President, if he/she

1. is a citizen of India.
2. has completed an an age of 35 years.
3. should be qualified for elections as member of the Lok Sabha.
4. should not hold any office of profit under the Government of India or Government of any State or any other public authority.

- The election of the President is held in accordance with the system of proportional representation by means of 'Single Transferable Vote'. The voting is done by a secret ballot. All the disputes regarding the election of the President shall be decided by the Supreme Court of India.

Composition of the Electoral College

The President is elected indirectly by the members of an Electoral College consisting of :

1. the elected members of the both Houses of the Parliament.
2. the elected members of the Legislative Assemblies of the States including National Capital Territory of Delhi and the Union Territory of Puducherry.

Procedure of Election

The President is indirectly elected by the elected members of the Vidhan Sabha, the elected members of the Lok Sabha and the Rajya Sabha, according to proportional representation by means of a 'Single Transferable Vote'.

Reasons for Indirect Election

The President is indirectly elected because;

1. if elected directly, he could become a rival centre of power to the Council of Ministers.
2. an indirect election protects the President to become a nominee of the Ruling Party at the Centre.
3. the inclusion of members of State Legislative Assembly in the Electoral College makes the President the elected representative of the whole nation. A clear voice would be given to the States as well, by this process.

Oath of Office

Before entering upon his office, the President takes on oath in the presence of the Chief Justice of India (or in his absence the senior-most Judge of the Supreme Court)

Term of Office

- The President holds the office for a term of 5 years from the date on which he enters the office. The Chief Justice of India administers the oath of office to the President.
- The President may resign before the completion of his/her term. In that case, he can submit his resignation to the Vice-President of India. The vacant seat of the President must be filled within 6 months.

Procedure for Impeachment

The President can be expelled from the office in case of the violation of the Constitution by the process of impeachment. Either House can initiate the procedure by mentioning the charge for violation of the Constitution. A 14 days notice should be given to the President in writing signed by at least 1/4th of the total members of the House that framed the charges.

After the lapse of 14 days, a resolution is moved which is to be passed by a majority of not less than 2/3rd of the total strength of the House.

The resolution then moves to the other House, which should investigate the charges. During the process, the President has the right to appear and to represent himself in such investigation. If the resolution, after investigation is passed the second House by a majority of not less than 2/3 rd of the total Membership of the House (investigating), the President will stand impeached.

Home Work –

1. Who is the chief executive authority of the Indian Union?
2. When and how can the President Of India be removed from office?

3. Who administers the oath of office to the President?
4. State one reason for why the President is elected indirectly?
5. What is an Electoral College?
6. Mention the qualifications to become a President of India.
7. What is the term of office of the President of India?
8. Who is at present the President of India?

DREAMLAND SCHOOL
BIOLOGY - CLASS 10 (2020 – 2021)
ASSIGNMENT

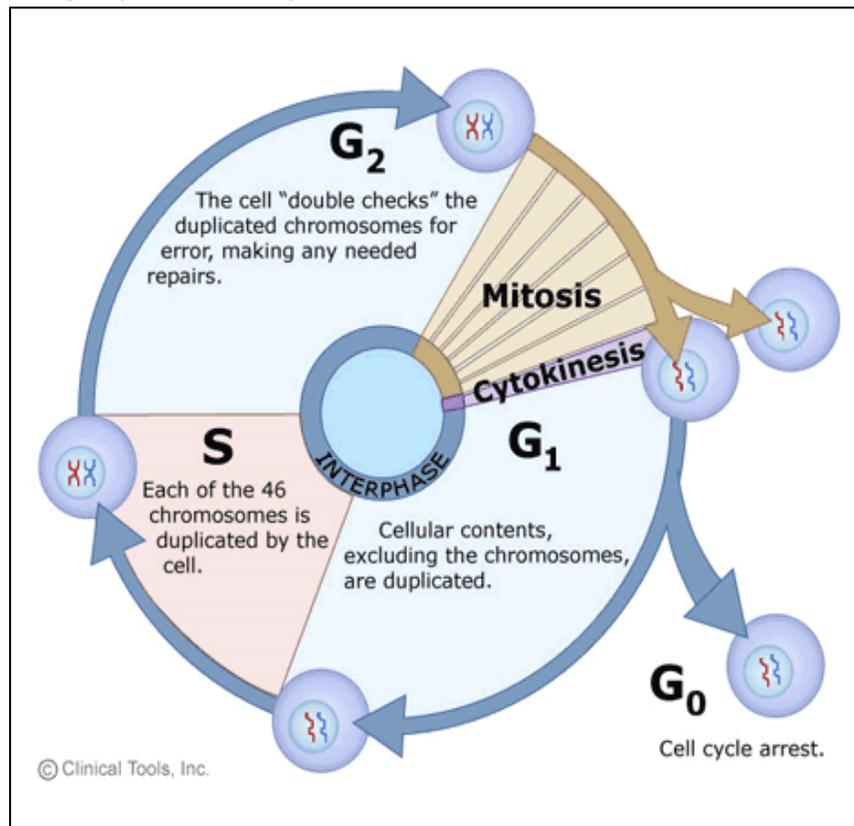
DATE - 07/05/2020

CHAPTER – CELL CYCLE. CELL DIVISION & STRUCTURE OF CHROMOSOME

DETAILED EXPLANATION

CELL CYCLE

- Cell cycle is the process of divide , grow & redivide.
- Cells undergo mitosis and divide into two daughter cells.
- The new cells at the end of mitosis are relatively small, with a full sized nucleus but relatively little cytoplasm.
- Now, they enter **Interphase** during which they prepare for the next cell division & grow to the same size as their mother cell.
- Interphase is the longest phase of cell cycle.



CELL CYCLE STAGES

- The interphase itself has 3 phases –
 1. First growth phase – (G_1)
 2. Synthesis phase - (S)
 3. Second growth phase – (G_2)
- **FIRST GROWTH PHASE (G_1)**
 1. RNA & proteins are synthesized.

2. The volume of cytoplasm increases.
3. **Mitochondria** (in all cells) & **chloroplast** (in plant cell) have their own DNA (containing their genes). They also contain their own **ribosomes** which help in producing the particular proteins for this two organelles. Both these organelles divide by their own by simple fission, & are partitioned between the two daughter cells produced by mitosis.
4. At the end of G_1 phase there is a checkpoint, which checks whether the cell is big enough & has made the proper proteins for the synthesis phase.
5. If its ready then the cell will pass to the next phase. Or else it will enter into a **resting phase (G_0)**, until its ready to divide.

➤ **SYNTHESIS PHASE (S)**

1. DNA is synthesized .
2. Histone proteins synthesized.
3. Centrioles duplicated.
4. Chromosomes are duplicated.
5. Again there is a checkpoint to check whether the DNA has replicated correctly. Then it passes onto the next phase.

➤ **SECOND GROWTH PHASE (G_2)**

1. A shorter growth phase, where cell growth continues.
2. Enzymes & other proteins are synthesized.
3. Final preparation of cell for division.

➤ Now the cell is ready for next cell division (Mitotic phase) & thus cell cycle continues.

○ **HOW LONG CAN A CELL CYCLE GO ON –**

Cell cycle cannot go on endlessly. At some places it stops **permanently**, some places **temporarily** & at some **till it's needed**.

For example,

- Brain & other nerve cells ,once formed in the embryo they do not divide further. Once dead , they are not replaced. So cell cycle stops permanently.
- Liver cells may divide only once in every one to two years to replace damaged cells. So cell cycle stops temporarily for a certain time gap.
- Surface skin cells are continuously lost & repaired . so cell cycle continues whenever needed.

“MEIOSIS IS CALLED REDUCTION DIVISION “

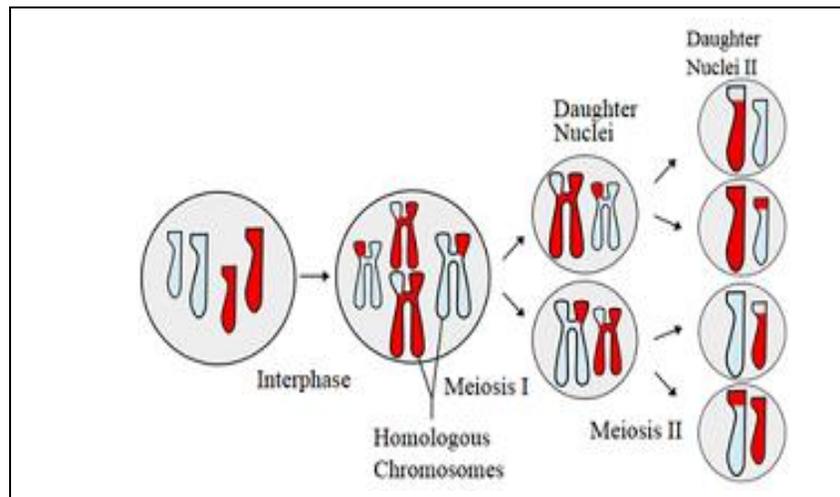
→ Meiosis is the kind of cell division that produces the sex cells or the gametes.

→ Meiosis consists of two stages – meiosis I & meiosis II.

→ In the beginning the cell has 46 chromosomes.

→ In the Anaphase I stage of meiosis I, unlike anaphase of mitosis, there is separation of chromosomes towards the two poles. So the 23 pairs divide. Out of that 23 chromosomes towards the upper pole & 23 towards the lower pole.

→ In this way after telophase I when two daughter cells are formed then each cell has 23 chromosomes.so chromosome numbers are halved in daughter cells compared to parent cell.



- After this the two cells will individually enter into meiotic II phase. Here at anaphase II stage the 23 chromosomes will separate from centromere just like mitosis & move towards the two poles.
- So each pole has 23 chromatids. In this way it will enter into telophase. After which it will break into two daughter cells each having 23 chromatids which will become independent chromosomes.
- There were two daughter cells at the end of meiosis I stage. So each will undergo meiosis II division to form 2 daughter cells each. Thus at the end 4 daughter cells are produced having 23 chromosomes each.
- As the chromosome number is halved , so it is called reduction division.

- This reduction is required because when the sperm & egg each having 23 chromosomes produced by meiosis process fuses to produce zygote then the diploid number (46) is maintained. This zygote with 46 chromosomes then matures into an individual.

SIGNIFICANCE OF MITOSIS

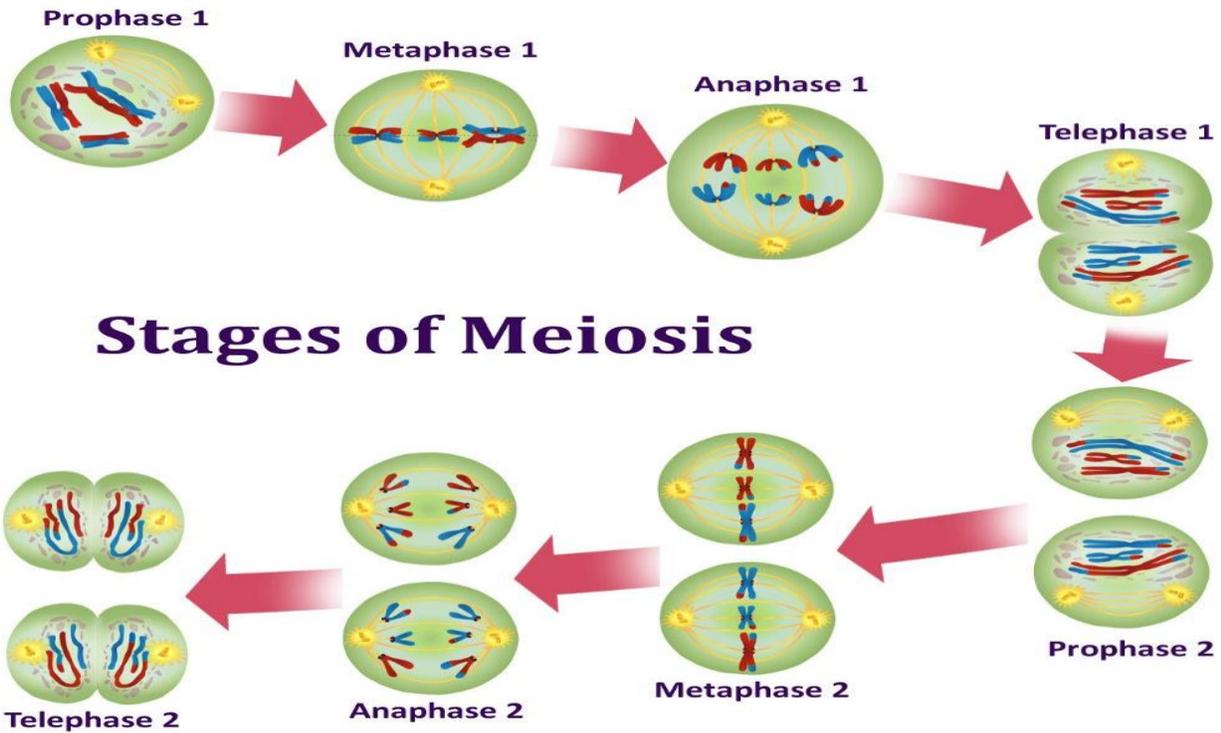
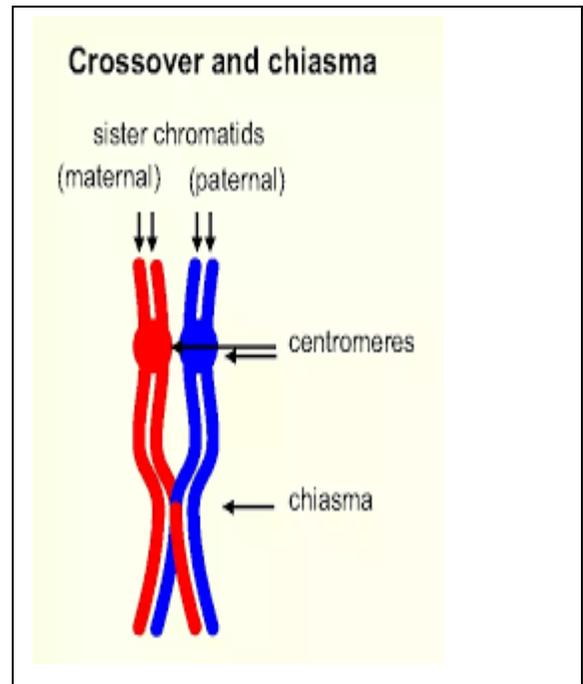
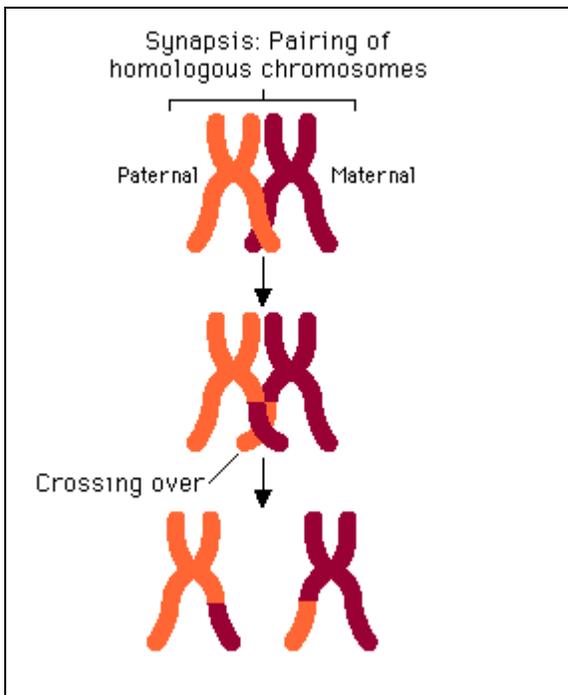
1. Helps in growth by cell division.
2. Helps in cell repairment.
3. Helps in cell replacement by division.
4. Maintains same chromosome number in daughter cell.

SIGNIFICANCE OF MEIOSIS

1. Chromosome number is halved in gametes (n) so that on fertilization the normal number (2n) is restored.
2. It helps in mixing up of gene. Thus brings about variation.

CROSSING OVER - The phenomenon of exchange of genetic material between two nonsister chromatids of homologous chromosomes during meiosis is called crossing over.

CHIASMATA - a point at which paired chromosomes remain in contact during the phenomenon of crossing over is called chiasmata.



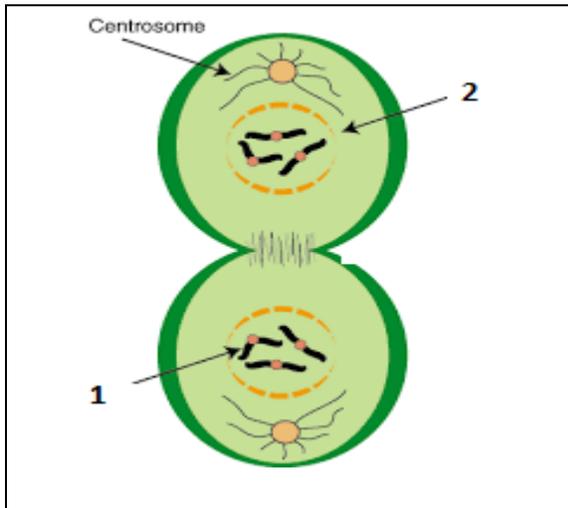
(JUST FOR UNDERSTANDING OF THE REDUCTION IN NUMBER. STAGES NOT THERE IN SYLLABUS)

ASSIGNMENT 6 (DRAW THE DIAGRAMS FOR DIAGRAM BASED QUESTIONS)

1. What is chiasmata?
2. Explain the G_1 phase of cell cycle.

3. Why is meiosis called reductional division?

4.



a. Identify the stage giving suitable reasons.

b. Name the parts numbered 1 & 2.

c. Which is the cell division that results in half the number of chromosomes in daughter cells?

MOUMITA GANGULY