

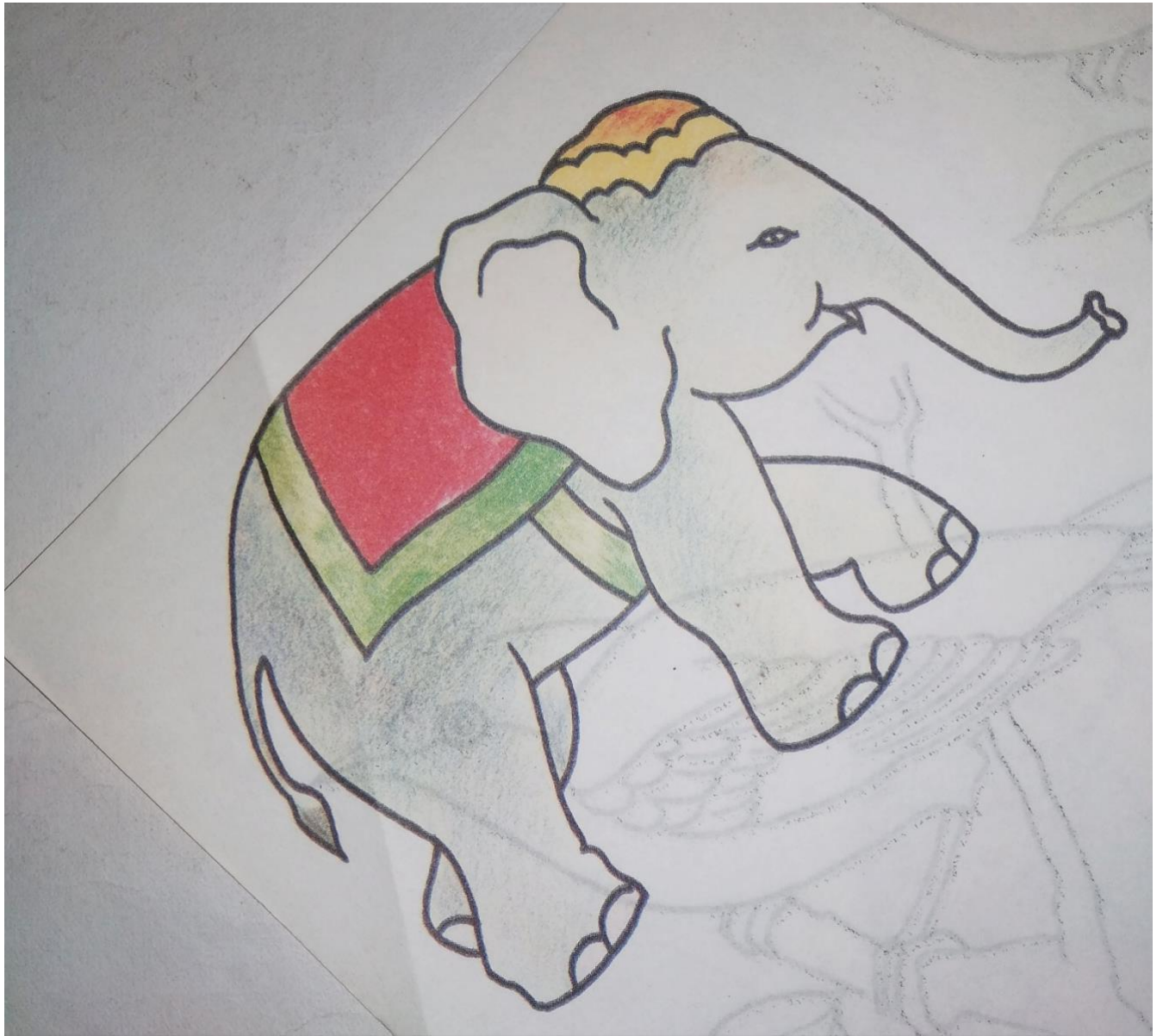
CLASS – VII

SUBJECT – ART EDUCATION

DATE – 24.04.2020

DRAW AND COLOUR THIS TWO PICTURES :





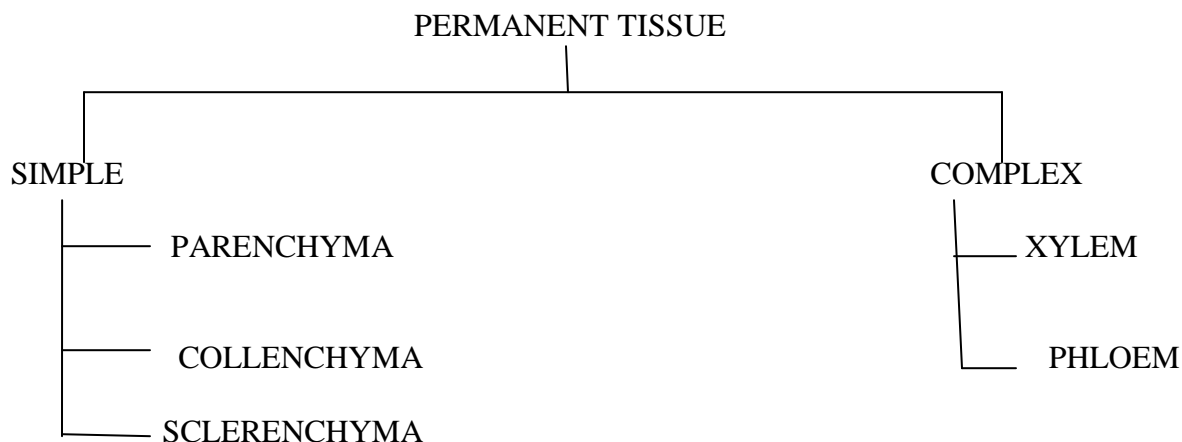
I hope you have gone through the PDF uploaded earlier and you have practised the questions given there. Now we are going to discuss the solution of the previous assignment [I] (chapter 1 & chapter 2) and the rest part of the chapter 1.

➤ **ANSWERS OF PREVIOUS HW QUESTIONS : CHAPTER 1**

- i. Write down the definition of plant tissue.
Plant tissue is a collection of similar plant cells performing a specific function for plants.
- ii. Write one difference between permanent tissue and meristematic tissue.

PERMANENT TISSUE	MERISTEMATIC TISSUE.
The permanent tissues in a plant are those tissues that contain nondividing cells and are derived from the meristematic tissue	A meristematic is a tissue in plants that consists of undifferentiated living cells capable of cell division

- iii. Write down the function of the following :
 - a) Permanent tissue - The **permanent tissue** mainly helps in providing support, protection as well as in photosynthesis and conduction of water, minerals, and nutrients.
 - b) Lateral meristem – These **meristems** help in increasing the girth of the plants.
- iv. Give the location of the following ;
 - a) Intercalary meristem - The **intercalary meristems** are **located** at the internodes or the base of the leaves
 - b) Apical meristem – A **meristem** at the tip of a plant shoot or root that causes the shoot or root to increase in length.
- v. Give a schematic diagram mentioning the types of permanent tissue.



- vi. Meristematic tissue is living while permanent tissue may be living or dead.
- vii. A tissue performs a specific function.

➤ **ANSWERS OF PREVIOUS HW QUESTIONS : CHAPTER 2**

- i. Write down one difference between striated and smooth muscle.

Striated Muscle	Smooth Muscle.
They are striated in appearance and are under voluntary control.	It appears spindle-shaped, without striations and are also under involuntary control.

- ii. Why striated muscle is named so?

Striated muscle is named so because when we observed this **muscles** under the microscope they have a striped like appearance & they also show alternate dark and light **striations** or bands.

- iii. Write down the function of the following :

a) Muscular tissue - **Muscle tissue** is a soft **tissue** that composes **muscles** in animal bodies, and gives rise to **muscles'** ability to contract.

b) Epithelial tissue – They perform a variety of functions that include **protection** secretion, absorption, excretion, filtration, diffusion, and sensory reception.

- iv. Name one fluid connective tissue.

Blood

- v. Columnar epithelium is further divided into __ciliated__ and __glandular__.

- vi. Give the location of the following.

a) Cardiac muscle – Cardiac muscle cells are located in the walls of the heart.

b) Squamous epithelium – **Squamous epithelium** is **found** lining surfaces such as the skin, and alveoli in the lung,

- vii. What are the main types of animal tissue?




Four main types of animal tissues are there, named epithelial tissue, muscular tissue, connective tissue, nervous tissue.

EXPLANATION OF THE REST PART OF CHAPTER 1

- **FUNCTION OF PERMANENT TISSUE** - Two types of permanent tissue are there named simple permanent tissue and complex permanent tissue.

Simple Permanent Tissue : These **tissues** are made up of one type of cells .They perform a variety of **functions** like protection storage mechanical support etc . Examples : Parenchyma , collenchyma and sclerenchyma.

- **COMPARATIVE STUDY OF PARENCHYMA COLLENCHYMA AND SCLERENCHYMA**

Features	Parenchyma	Collenchyma	Sclerenchyma
	 <p>thin primary cell wall</p>	 <p>Irregularly Thickened Primary Cell Wall Collenchyma</p>	 <p>thick secondary cell wall primary cell wall</p>
1. Cell shape	Isodiametric cells which are oval, spherical or polygonal in shape	Circular, oval or polyhedral	Variable in shape. Fibres and sclereids
2. Cell wall	Thin cellulosic cell wall	Uneven thickening on their cell wall.	Lignified secondary cell wall present
3. Cytoplasm	Abundant	Present	Absent
4. Nucleus	Present, (Living tissue)	Present, (Living tissue)	Absent (Dead tissue)
5. Vacuoles	Large vacuole	Vacuolated	Absent
6. Intercellular spaces	Present	Absent	Absent
7. Occurrence	Basically packing tissue, All soft part of plant, Pith, cortex, medullary rays	Dicot stems, petiole and beneath the epidermis. Absent in monocot and roots	Dicot hypodermis, bundle sheath, pericycle, Seed, pulp of fruits.
8. Functions	Food storage, Photosynthesis	Provide tensile strength, Mechanical support, Photosynthesis	Protection from stress and strain, Mechanical strength

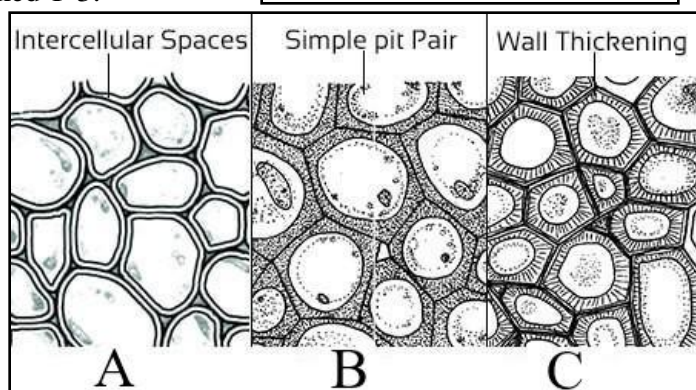
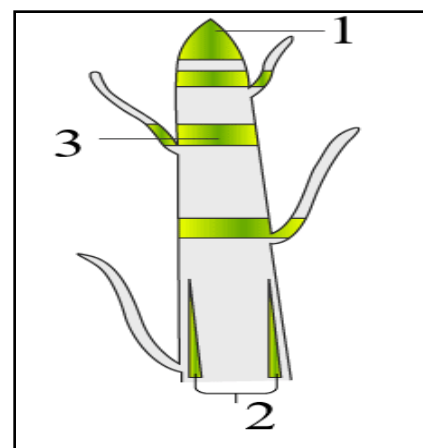
Complex permanent tissue - It contains different types of cells . It is classified into two types which are **xylem** and **phloem**. Thus, the two complex permanent tissue **xylem** and **phloem** together makes up vascular bundle.

➤ COMPARATIVE STUDY OF XYLEM AND PHLOEM –

Xylem	Phloem
1) It transports water and minerals from roots to the apical parts of the plant.	1) It transports food material from the leaves to growing parts of the plant.
2) Xylem consists of tracheids, vessels, xylem fibres and xylem parenchyma.	2) Phloem consists of sieve tubes, sieve cells, companion cells, phloem fibres and phloem parenchyma.
3) Only xylem parenchyma is living.	3) Sieve tubes, sieve cells, companion cells and phloem parenchyma are living.
4) Tracheids, vessels, xylem fibres are dead tissues.	4) Phloem fibres are dead tissues.
5) Xylem gives mechanical strength to the plant.	5) Phloem does not give mechanical strength to the plant.
6) Conduction of water by xylem is unidirectional i.e., from roots to apical parts of the plant.	6) Food material conduction is bidirectional i.e., from leaves to storage organs or growing parts or from storage organs to growing parts of plants.
7) Xylem is star shaped.	7) Phloem is not in star shaped.
8) Xylem occupies the center of the vascular bundle.	8) Phloem occurs on outer side of the vascular bundle.
9) Tubular with hard walled cells.	9) Tubular with soft walled cells.

HOMEWORK QUESTIONS :

- Give one word for the following.
 - Substance present in the cell wall of sclerenchyma.
 - One living component of xylem tissue.
 - Direction of conduction of food by phloem.
- Differentiate between the following according to their function.
 - Xylem & Phloem
 - Parenchyma & Sclerenchyma
- A diagram is given alongside. Identify it.
 - Mention the parts 1-3.
 - Write down the function of the part marked 1-3.
- Mention the components of xylem and phloem.
- A diagram is given alongside.
 - Identify A,B,C.
 - Compare the location and shape of the three cells.
- Why sclerenchyma is dead cell?



N.B : For further information and better understanding , click on the following links.

<https://www.youtube.com/watch?v=jH96p-7YPzA>

<https://www.khanacademy.org/science/in-in-class-10-biology/in-in-life-processes/in-in-transportation-in-plants/v/intro-to-vascular-tissues-xylem-phloem-life-processes-biology-khan-academy>

Date: 23.4.20

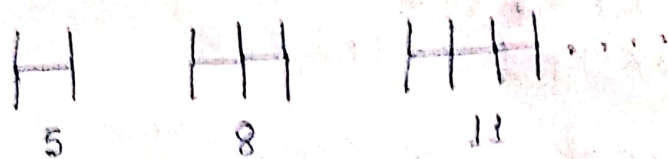
Mathematics
Class - 7

Ex - 8.4

8.1. Observe the patterns of shapes of letters formed from line segments of equal lengths.

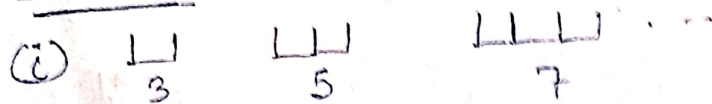


(i)



If n shapes of letters are formed, then write the algebraic expressions for the number of line segments required for making these n shapes in each case.

Solution:



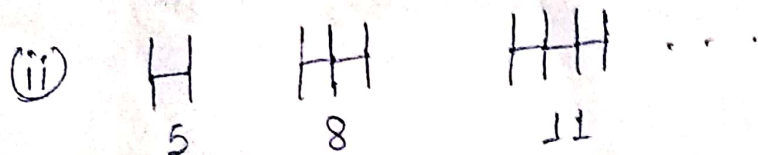
$$2 \times 1 + 1 = 2 + 1 = 3$$

$$2 \times 2 + 1 = 4 + 1 = 5$$

$$2 \times 3 + 1 = 6 + 1 = 7$$

∴ In general, we can write,

$$2n + 1 = 2n + 1; \quad n = 1, 2, 3, \dots$$



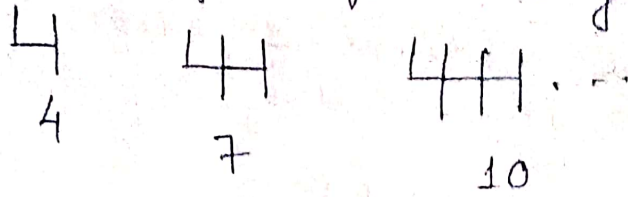
$$3 \times 1 + 2 = 3 + 2 = 5$$

$$3 \times 2 + 2 = 6 + 2 = 8$$

$$3 \times 3 + 2 = 9 + 2 = 11$$

∴ In general, $3n + 2$, where $n = 1, 2, 3, \dots$

Q. 2 - observe the pattern of shapes of digits formed from line segments of equal lengths.



Solution:-

$$3 \times 1 + 1 = 3 + 1 = 4$$

$$3 \times 2 + 1 = 6 + 1 = 7$$

$$3 \times 3 + 1 = 9 + 1 = 10$$

\therefore In general, $3n + 1$; where $n = 1, 2, 3, \dots$

Q. 3 - If a pattern consists of n shapes formed by line segments of equal lengths and the number of line segments required to make n shapes is given by the algebraic expression,

(i) $2n + 1$, (ii) $3n + 1$, then find the number of line segments required to form 5, 10 and 100 shapes in each case.

Solution:-

(i) $2n + 1$

Taking $n = 5, 10$ and 100 , we get;

$$2 \times 5 + 1 = 11$$

$$2 \times 10 + 1 = 21$$

$$2 \times 100 + 1 = 201$$

(ii) $3n + 1$

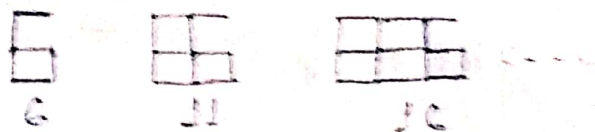
Taking $n = 5, 10, 100$,

$$3 \times 5 + 1 = 16$$

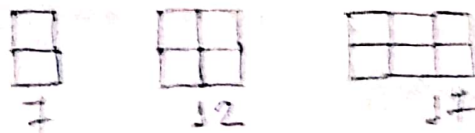
$$3 \times 10 + 1 = 31$$

$$3 \times 100 + 1 = 301$$

8.1. Observe the pattern of shapes of digits formed from line segments of equal lengths.



(i)



If n shapes of digits are formed, then write the algebraic expression for the number of line segments required for making these n shapes in each case.

8.2. If a pattern consists of n shapes formed by line segments of equal lengths and the number of line segments required to make n shapes is given by the algebraic expression.

(i) $3n+2$, (ii) $5n+1$, (iii) $5n+2$,

(iv) $4n+3$

check your progress:-

8.1. consider the ~~term~~ expression $\frac{5}{2}xy^2 - \frac{1}{2}xy^2 + 6xy^2$.

(i) How many terms are there? what do you call such an expression?

(ii) List out the terms.

(iii) In the term $-\frac{1}{2}xy^2$, write down the numerical and the literal coefficient.

(iv) In the term $-\frac{1}{2}xy^2$, what is the coefficient of x ?

Q.2. Write down the degree of the following polynomials.

$$(i) \frac{2}{5}x^3 - 7x^2 - \frac{1}{2}x + 3$$

$$(ii) \frac{2}{3}xy^2 - 5xy + \frac{3}{5}y^2x^2 + 2x$$

Q.3. The sides ~~to~~ of a triangle are $5a - 3b$, $3a + 2b$ and $5b - 2a$, find its perimeter.

Q.4. Subtract the sum of $3x^2 + 2xy - 2y^2$ and $5y^2 - 7xy$ from $5x^2 + 2y^2 - 3xy$.

Q.5. When $a = 3$, $b = 0$, $c = -2$, find the values of

$$(i) ab + 2bc + 3ca + 4abc$$

$$(ii) a^3 + b^3 + c^3 - 3abc$$

4TH HOME ASSIGNMENT – 2020-2021

CLASS –VII SUBJECT – ENGLISH LANGUAGE

DATE :- 24.04.20

(SOLUTIONS TO THE EXERCISES OF CHAPTER-11 PREPOSITIONS DATE- 22.04.20)

EXERCISE 1. Insert suitable prepositions to complete the following sentences :-

1. Does this book belong **to** you ?
2. The boys are confident **of** a huge victory .
3. Rishi congratulated us **on** our success .
4. I have been waiting for you **since** 8 o'clock .
5. Would you like to go **to** the cinema tonight ?
6. He was stabbed **by** a robber **with** a knife .
7. He insists **upon** going there .
8. I prefer riding **to** walking .
9. One must live **within** one's means .
10. He is jealous **of** your success .

EXERCISE 2. Correct the errors and rewrite the sentences correctly :-

1. Open page 57 .

Ans:- Open at page 57 .

2. He was charged for murder .

Ans:- He was charged with murder .

3. She is fond to talk .

Ans:- She is fond of talking .

4. It is half-past ten in my watch .

Ans:- It is half-past ten by my watch .

5. Do not be angry upon me .

Ans:- Do not be angry with me .

6. Guard from that vice .

Ans:- Guard against that vice .

7. The chair is to sit .

Ans:- The chair is to sit on .

8. We sat on the dining table to have dinner .

Ans:- We sat at the dining table to have dinner .

9. We shall meet him in the party

Ans:- We shall meet him at the party today .

10. The soldiers marched in the hall .

Ans:- The soldiers marched into the hall.

11. He bit the dog with a stick .

Ans:- No error .

12. He was bent in coming first in the examination .

Ans:- He was bent on coming first in the examination .

13. Do you take his word as mine ?

Ans:- Do you take his word for mine .

14. He may turn in when we least expect him .

Ans:- He may turn up when we least expect him .

15. He deals with silk .

Ans:- He deals in silk .

CHAPTER - 11 PREPOSITIONS (CONTINUED)

THE USE OF PREPOSITIONS

6. Between, Among **Between** is used for two persons or things and **Among** for more than two . **e.g.** Distribute these biscuits **among** the poor .

The two sisters quarreled **between** themselves .

7. In ,Into **In** is used when speaking of things at rest; **Into** is used with reference to things in motion .**e.g.** We were waiting **in** the hall .

The guest went down **into** the dining room for dinner .

8. On , Upon **On** is used in speaking of things at rest; and **Upon** is used in speaking of things in motion . **e.g.** We stood and watched the boats **on** the river .

The monkey jumped **upon** the back of the camel .

9. Beside, Besides **Beside** means by the side of or outside; while **Besides** means in addition to . **e.g.** My dog came and sat **beside** me .

Besides lending him money, I found him a job .

10. Before, For **Before** is used in affirmative and negative sentences to denote a point of future time . **For** is used in negative sentences to denote a period of future time .

e.g. The moon will not come up **before** seven o'clock .

The moon will not come up **for** another hour .

11. Till, By, To **Till** means up to; **By** means not later than; **To** expresses place .

e.g. I waited for you **till** four o'clock .

Make sure you return **by** eight o'clock .

The man walked **to** the end of the road .

12. Over, Above, Under, Below **Over** implies the highest position or space . **Above** implies that something is in a higher position than another thing . **e.g.** I jumped **over** the bench and sat down at my desk.

Keep your head **above** water .

Below means in a lower place or position . **Under** is used to express the concept of being beneath,below something or covered by something . e.g. Put these books in the drawer **below** .

The child hid **under** the table .

HOME ASSIGNMENT

Fill in the blanks with suitable prepositions :-

1. She prays _____ God daily .
2. He is always in need _____ money .
3. He died _____ heart attack .
4. The two cars collided _____ each other .
5. Don't clap _____ I finish talking .
6. The wheel was wedged _____ two boulders .
7. You are suspended _____ today .
8. He warned me _____ the danger .
9. Innocent civilians were _____ the casualties .
10. She was carrying her handbag _____ her arms .
11. We enjoy driving _____ the highway .
12. The public protested _____ the nuisance .
13. He had to push his way _____ the crowd to get in .
14. Books were scattered _____ the room .
15. Do you believe in life _____ death .
16. The new factory is expected to come online _____ May .
17. The mob stoned her _____ death .
18. The field will be ploughed _____ the end of the month .
19. Our path was strewn _____ difficulties .
20. The innocent girl burst _____ tears .

Date: 24.04.2020

**COMPUTER (HOME ASSIGNMENT – 2)
CLASS – 7**

**CHAPTER: 1 (COMPUTER HARDWARE COMPONENTS)
STUDY MATERIAL NO. – 1.2**

Computer works with an interaction of hardware and software. Computer hardware can classify into two parts – **Internal and External**.

Internal Hardware Components:-

The hardware parts that are installed within the CPU cabinet are called **Internal Hardware**.

1) THE MOTHERBOARD

The motherboard is the body or mainframe of the computer, through which all other components interface. It is the central circuit board making up a complex electronic system. A motherboard provides the electrical connections by which the other components of the system communicate. The mother board includes many components such as: central processing unit (CPU), random access memory (RAM), firmware, and internal and external buses.

2) THE PROCESSOR

The processor is a computer chip that carries out instructions given by computer programs and handles all the day to day tasks that a PC has to do. They used to use up an entire circuit board, but nowadays, microprocessors like this one handle everything from just one chip.

3) RAM

RAM is a type of temporary computer data storage. It deals with temporary data requests such as keeping windows open on a desktop or just viewing a file. RAM can often be overloaded which is what happens if a window freezes during shutdown or stops working. The more RAM you have more windows and processes can be open than if you only have little Ram.

4) HARD DISK DRIVE (HDD)

The Hard Disk drive is a type of permanent computer data storage. Data is retrieved by using a series of rapidly spinning magnetic disks that store the data. The spindle physically writes the data to the magnetic disk and is a very delicate piece of hardware that must be handled carefully.

Unlike RAM, hard drives retain data even if the machine is powered off or cut off unexpectedly because of a power cut. Data can be lost if the hard drive breaks or becomes corrupt.

5) REMOVABLE MEDIA DEVICES

If you're putting something in your computer and taking it out is most likely a form of removable media. There are many different removable media devices. The most popular are probably CD and DVD drives which almost every computer these days has at least one of. There are some new disc drives such as Blu-ray which can hold a much larger amount of information than normal CDs or DVDs. One type of removable media which is becoming less popular is floppy disk.

6) POWER SUPPLY

The Power Supply unit is a switch operated unit that converts mains AC electricity into DC electricity that powers all the internal components. These units have many cooling systems to them so that they do not overheat. Also, a fan on the front makes sure that power constantly flows to the PSU and cools the system so it does not break down.

7) POWER CABLE

These cables are connected to the Power Supply Unit and cables that look like this power the motherboard and is the largest connector found on a PC's motherboard. Without these, the computer would not work, so are an essential internal component.

8) FAN

A fan inside a computer is a fan that sucks cool air into the PC case and blows hot air out of the case and stops any key components overheating. This is an essential part of a computer's cooling system. Fans can stop working if they become clogged by dust or any foreign bodies, so require regular cleaning.

9) GRAPHICS CARD

The graphics card is a type of expansion card that processes and produces outputs for displays. These are a vital component that monitors rely on. They also handle output of video to projectors. They also have their own fans as this type of card gets hot quickly and needs instant cooling.

HOME WORK:-

1. Name the main components of hardware.
2. Define the following: - i) Mother Board. ii) Removable Media Device.

CLASS-VII

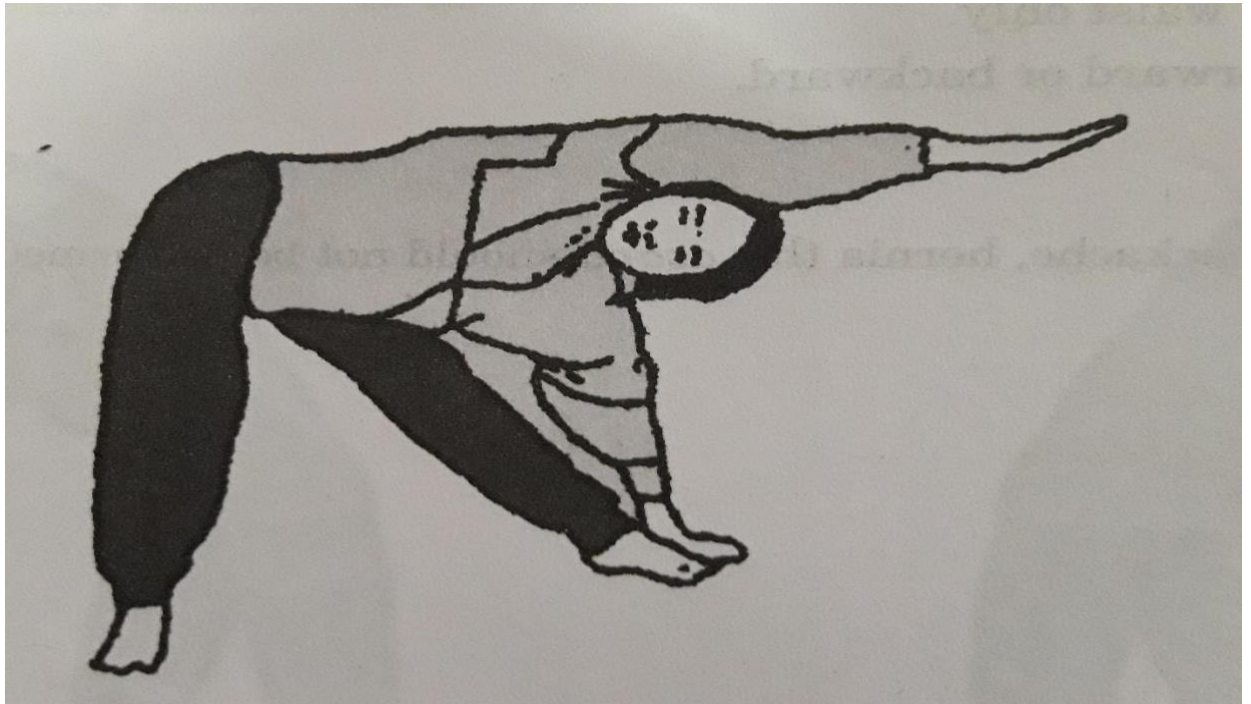
PHYSICAL EDUCATION

- YOGA
- Yoga is most important for everyone' s life as it helps in balancing the relationship between body and mind. Being healthy is the primary aim of life which makes a man self-dependent.

TRIKONASANA

a) **How to Perform**

1. keep both the feet apart at a distance more than the shoulders.
2. Arms firmly close to the body.
3. Inhaling, lift the right arm, close to the ear, stretch it upwards.
4. Left arm stretched downwards, close to the body.
5. knees straight, not to be bent till end.
6. Exhaling, bend from the side towards the left, no forward bending at all.
7. In the final pose, the left palm to touch the ground and the right arm to remain stretched, parallel to the ground.
8. Slowly come back.
9. Repeat similarly on the other side.



b) Benefits

1. Ribs and digestive organs are strengthened.
2. Colon is activated and remains in normal position.