Biology ASSIGNMENT 1

Fundamental unit of life

Q1 Write the main function of leucoplast.

Q2 What is the function of SER in liver cells of vertebrates?

Q3 Why the RER appears rough?

Q4 Why viruses are not supposed to be living?

Q5 What is a nucleoid?

Q6 Why dry raisins placed in water swell up?

Q7 In which part of a plant chromoplasts are found?

Q8 Where are genes located?

Q9 What will happen if we keep a plant cell or animal cell in a i) Hypotonic solution ii) Hypertonic solution iii) Isotonic solution.

Q10 Explain the importance of osmosis for living beings?

Q11 Give the historical development of cell theory.

Q12 Who coined the term "cell " and how?

Q13 Write the contribution of (a) Robert Hooke, (b) Leeuwenhoek (c) Robert Brown

Q14 Draw a large diagram of an animal cell as seen through aan electron microscope. Label the parts that carry on the function of Respiration, secretion, protein synthesis, transport of material.

Q15 Which substance is responsible for transfer of characters from one generation to another?

EAST POINT SCHOOL

WORKSHHET-1

CLASS-9TH Bio

Chp- Fundamental unit of life -CELL

QI- Answer the following questions marking of questions are given besides each question.

Ch. – Cell – The unit of life

1. State the function of chromosome in a cell. 1

2. Write two similarities and one dissimilarity between mitochondria and plastid. 3

3. Name the cell organelle that you would associate with elimination of old and worn out cells. 1

4. List two types of plastids and state one function of each. 2

5. Name two cell organelles that contain their own genetic material. 1

6. Division of labour exists even at intracellular level, justify the statement by giving two examples. 2

7. Identify and name the following cell structure: 1

a) the undefined nuclear region of prokaryotic cell

b) site of energy release inside the cell

8. a) List any two structural differences and two similarities between animal cell and plant cell. 3

b) What would happen if an animal cell is kept in distilled water for 24 hrs.

9. When a living plant cell loses water throiugh osmosis, there is contraction of the contents of the cell

away from the cell wall. What is this phenomenon called? 1

10. a) Write two points of difference between nuclear region of bacterial cell and animal cell. 3

b) Which structure present in the nuclear region of living cell bears genes?

11. List any two single celled organisms. 1

12. Draw a diagram of plant cell and label its any two parts. 2

VIDEO LINK

https://youtu.be/ij3qHqY2KFwchp

1. Read the following passage and answer the questions that follow.

i. If you are a poet, you will have no difficulty seeing the cloud floating in this sheet of paper. If there are no clouds, there will be no rain; and if there is no rain, the trees will not grow; and if there are no trees, we cannot make paper. That explains why the cloud is essential for the paper to exist. If the cloud is not here, the sheet of paper cannot be here either. So we can say that the cloud and the paper inter-are... If we look into this sheet of paper even more deeply, we can see the sunshine in it. If the sunshine is not there, the forest cannot grow. In fact, nothing can grow. Even we cannot grow without sunshine. And so, we know that the sunshine is also in this sheet of paper. The paper and the sunshine inter-are.

ii. And if we continue to look, we can see the logger who cut the tree and brought it to the mill to be transformed into paper. And we see the wheat. We know that the logger cannot exist without his daily bread, and therefore the wheat that became his bread is also in this sheet of paper. And the logger's father and mother are in it too. When we look in this way, we see that without all of these things, this sheet of paper cannot exist.

iii. Looking even more deeply, we can see we are in it too. This is not difficult to see, because when we look at a sheet of paper, the sheet of paper is part of our perception. You mind is in here and mine is also. So we can say that everything is in here with this sheet of paper. You cannot point out one thing that is not here-time, space, the earth, the rain, the minerals in the soil, the sunshine, the cloud, the river, the heat. Everything co-exists with this sheet of paper. This is why I think the word inter-be should be in the dictionary. "To be" is to inter-be. You cannot just be by yourself alone. You have to inter-be with every other thing. This sheet of paper is because everything else is.

Now answer these questions.
a. Why is cloud essential for the paper to exist?
b. Why can't the logger exist without the trees?
c. What is the theme of the passage?
d. Why does the author feel that *inter* be added to the dictionary?
e. Vocabulary
   i. Find the word from the passage which means similar to **necessary**(para i)
   ii. Find the word from the passage which means the opposite of **cease/stop**(para ii)
   iii. Write the noun form of **transformed.**
   iv. Write the verb form of **perception**.

2. Read the following passage and answer the questions that follow.

i. The shoemaker had for ages suffered from a heart condition and five years ago, after an attack, it had appeared as though he would either have to sacrifice his business upon the auction block and live on a pittance thereafter, or put himself at the mercy of some unscrupulous employee who would in the end probably ruin him. But just at the moment of his darkest despair, this Polish refugee, Sobel appeared one night from the street and begged for work. He was a stocky man, poorly dressed, with a bald head, a severely plain face and soft blue eyes phone to tears over the sad books he read. Though he confessed he knew nothing of shoemaking, he said he was apt and would work for very little if Feld taught him the trade. Feld took him on and within six weeks the refugee rebuilt as good a shoe as he, and not long thereafter expertly ran the business for the shoemaker.

ii. Feld could trust him with anything and did frequently, going home after an hour or two at the store, leaving all the money in the till, knowing Sobel would guard every cent of it. The amazing thing was that he demanded so little. His wants were few; in money he wasn't interested- in nothing but books, it seemed – which he one by

one lent to Feld's daughter, Miriam together with his profuse queer written comments, manufactured during his lonely evenings, which his daughter, from her fourteenth year, read page by sanctified page, as if the word of God were inscribed on them.

iii. Feld's conscience bothered him for not insisting that his assistant accept a better wage than he was getting, though Feld had honestly told him he could earn a handsome salary if he worked elsewhere, or maybe opened a place of his own. But the assistant answered, somewhat ungraciously, that he was not interested in going elsewhere. Feld frequently asked himself what kept him there, why did he stay? He finally told himself that the man, no doubt because of his terrible experiences as a refugee, was afraid of the world.

Now answer these questions.

a. What did the shoemaker realise after an attack?

b. Describe the Polish refugee?

c. What was Sobel interested in? How did Feld help in that?

d. Why according to Feld did Sobel stay?

e. Vocabulary

    i. Find a word from the passage which is the synonym of **nothing/little**.(para i)

    ii. Find a word from the passage which is the antonym of **indifferent.** (para iii)

    iii. Find the adjectival form of **expertly.**

    iv. Find the adverbial form of **unscrupulous**.

EAST POINT SCHOOL
CHEMISRTY
MATTER IN OUR SURROUNDING

1. Particle Nature of Matter

[refer NCERT text book activities 1.1 to 1.8]

- ➢ Anything that occupies space and has mass and is felt by senses is calledmatter.
- ➢ Matter is the form of five basic elements the Panch tatva – air , earth ,fire , sky and water.
- ➢ **Characteristics of particles ofmatter**
  - Made of tinyparticles.
  - Vacant spaces exist inparticles.
  - Particles are in continuousmotion.
  - Particles are held together by forces ofattraction.

> Q.1 Definematter.
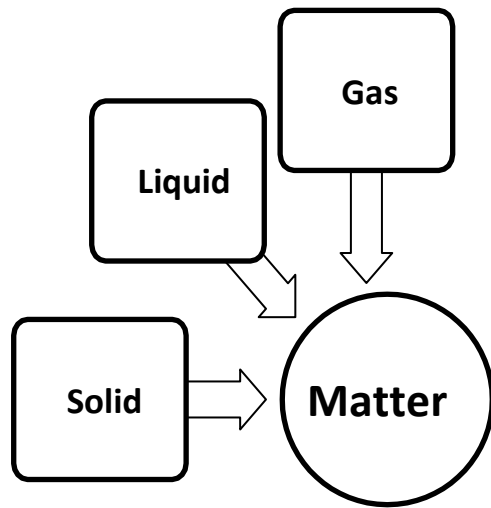> Q.2 What happens if you put copper sulphate crystals inwater?
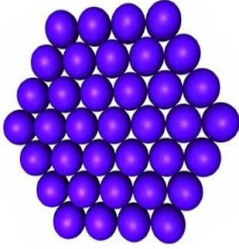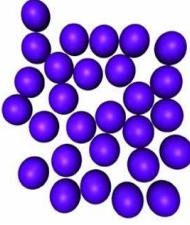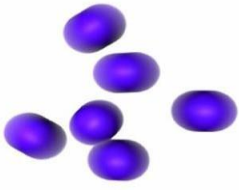
2. States of Matter

[refer NCERT text book activities 1.9 to 1.11]

Basis of Classification of Types

- Based upon particlearrangement
- Based upon energy ofparticles
- Based upon distance between particles

- ➢ **Three states ofmatter**

Gas

Liquid

Solid

Matter

(i) SOLID	(ii) LIQUID	(iii) GAS
• Fixed shapeand definite volume .	• Not fixed shape butfixed volume.	• Neither fixedshape nor fixed volume.
• Inter particledistances are smallest.	• Inter particledistances are larger.	• Inter particledistances are largest.
• Incompressible.	• Almostincompressible.	• Highly compressible.
• High density anddo not diffuse.	• Density is lowerthan solids and diffuse.	• Density is leastand diffuse.
• Inter particle forcesof attraction are strongest.	• Inter particle forcesof attraction are weaker than solids .	• Inter particle forces of attraction areweakest.
• Constituentparticles are very closely packed.	• Constituent particles are less closelypacked.	• Constituentparticles are free to move about.

Microscopic Explanation for Properties of Solids

Solids have a definite shape and a definite volume because the particles are locked into place	Solids do not flow easily because the particles cannot move/slide past one another	Solids are not easily compressible because there is little free space between particles

Microscopic Explanation for Properties of Liquids

Liquids are not easily compressible and have a definite volume because there is little free space between particles.	Liquids have an indefinite shape because the particles can lide past one another.	Liquids flow easily because the particles can move/slide past one another.

Microscopic Explanation for Properties of Gases

Gases are easily compressible because there is a great deal of free space between particles	Gases flow very easily because the particles randomly move past one another.	Gases have an indefinite shape and an indefinite volume because the particles can move past one another.

Q.1 A substance has a definite volume but no definite shape ? State whether this substance is a solid , a liquid or agas.

Q.2 Arrange the following substances in increasing order of force of attraction betweenthe particles.(a)Milk   (b) Salt (c)Oxygen.

Q.3 A substance has neither a fixed shape nor a fixed volume . State whether it is a solid , a liquid or agas.

Q.4 The melting point of a substance is below the room temperature . Predict itsphysical state.

Extra questions

1. Pressure on the surface of a gas is increased. What will happen to the inter particle forces?

2. Name the three states ofmatter.

3. List two properties that liquids have in common withsolids.

4. List two properties that liquids have in common withgases.

5. How will you show that air has maximumcompressibility?

VIDEO LINK
https://youtu.be/-9aGVrvPqzE

ENGLISH WORKSHEET ON INTEGRATIVE GRAMMAR

CLASS IX

A. The following passage has not been edited. There is an error in each line. Write the incorrect and correct word.

	INORRECT	CORRECT
Have you ever ate a food that might kill you?	a)……………	………
That is what thousands of Koreans done every year	b)………………….	……………
when they sit down to the delicious meal of fugu fish.	c)………………….	……………
In English, fugu is known like puffer fish.	d)………………….	……………
There are above 120 species of puffers in a world's oceans	e)……………	………………
They are relative small, and they have spikes	f)…………………	……………
who pop up when they sense danger.	g)………………….	……………
Through this spikes the puffers can inject a deadly venom	h)………………	………………
into their attackers.		

	Incorrect	Correct
1. Hunger or thirst are the two	eg.. or	and
basic conditions for living who	(a) ……..	……..
are the reminder to our bodies	(b) ……..	……..
that the body should be	(c) ……..	……..
fed by water and food. Our	(d) ……..	……..
bodies need water for time to time.	(e) ……..	……..
But on summer our need to drink water	(f) ……..	……..
grows strongest. We need more water	(g) ……..	……..
as the body water evaporate through	(h) ……..	……..
perspiration.		

B. Read the passage and complete the gaps by choosing the correct option.

1. Mark Twain was the pen name of Samuel Langhorne Clemens (a) _____ was one of (b) _____ greatest fiction writers of America. He grew up in a small town (c) _____ the bank of the Mississippi River. (d) _____ a small boy he moved to Hannibal on the banks of the river (e) _____ he experienced (f) _____ excitement of river travel.

a. i) Which   ii) who   iii) that   iv) he

b.   i) an   ii) a   iii) the   iv) his

c.   i) on   ii) in   iii) at   iv) upon

d.   i) since   ii) from   iii) till   iv)of

e.   i) when   ii) where   iii) whenever   iv) hence

f.   i) a   ii) his   iii) an   iv) the

2. If the modern man wants tips (a)……………. good child care, he could (b) ……………… at a couple of frogs in Papua New Guinea. (c)…………… remarkable behaviour of two species, (d) …………which males (e)………… only bear sole responsibility for looking (f) …………. their offspring but (g)…………. take the entire family for piggy-back rides (h) ……………. the forest, came to light recently.

(a)(i) regarding   (ii) regard   (iii) regards   (iv) regarded

(b)(i) take   (ii) observe   (iii) look   (iv) up

(c) (i) A   (ii) The   (iii) An   (iv) Some

(d)(i) out   (ii) in   (iii) of   (iv) an

(e)(i) not   (ii) no   (iii) know   (iv) note

(f) (i) up   (ii) under   (iii) across   (iv) after

(j) (i) and   (ii) come   (iii) also   (iv) through

(h) (i) over   (ii) when   (iii) upon   (iv) through

C. Rearrange the words to form meaningful sentences.
   I.   should begin / everyone / a private library / youth / collecting / in /

  II.   converse with / in / you / at any moment / a private library/ Socrates or Shakespeare / can

  III.   the hand / your library / should be / as well as / free / accessible / to / to the eye / and /

  IV.   . of mankind / the habit / reading is / one of / resources / of / the greatest /

  V.   b. are / we enjoy / that / belong to us / than if / much more / they / borrowed / reading books /

Class 9 Social Science

Important Questions

Civics Chapter-2

What is Democracy? Why Democracy

1. What amendments did Pervez Musharraf bring in the constitution of Pakistan by issuing a legal framework order?

Ans. In August 2002 he issued a legal framework order that amended the constitution of Pakistan.

According to this order, the president can dismiss the national or provincial assemblies.The work of the civilians' cabinet is supervised by a National Security Council which is dominated by military officers.

2. Pakistan under General Pervez Musharaff was a democratic country or non democratic. Give reasons.

Ans. Pakistan under General Pervez Musharaff was a non democratic country.

He amended constitution according to his own will and for his personal benefits.

He dismissed the national and provincial assemblies.

Final power was rests with military officers.

3. 'Some countries are not ready to give voting rights to its citizens'. Explain.

Ans. In Saudi Arabia women do not have the right to vote.

Estonia had made its citizenship rules in such a way that people belonging to Russian minority find it difficult to get the right to vote.

In Fiji the electoral system was is such that the vote of an indigenous Fiji has more value than that of an Indian Fijian.

4. What dirty practices were used by IRP to win the elections in Mexico?

Ans. The PRI was known to use many dirty tricks to win elections.

All those who were employed in government offices had to attend its party meetings.

Teachers of government schools used to force parents to vote for the PRI.

Media largely ignored the activities of opposition political parties except to criticize them.

5. Name any two countries where elections are held regularly but they cannot be

considered as democratic countries. Explain.

Ans. Mexico and China are two countries where elections are held regularly but they cannot be considered as democratic countries.

In china before contesting elections a candidate need the approval of the Chinese Communist Party. People have no choice. The government is always formed by the communist party. This is against the democratic system of elections.

In Mexico, PRI was known to use many dirty tricks to win elections. All those who were employed in government offices had to attend its party meetings. Teachers of government schools used to force parents to vote for the PRI. Media largely ignored the activities of opposition political parties except to criticize them. This is against the democratic system of elections.

6. How is the dignity of citizens enhanced in democracy?

Ans. Democracy enhances the dignity of citizens.

Democracy is based on the principle of political equality, on recognizing that the poorest and the least educated have the same status as the rich and the educated.

People are not subjected of a ruler, they are the rulers themselves. All the citizens are equal before law.

7. How do democracy provide platform to deal with differences and conflict?

Ans. Democracy provides the method to deal with differences and conflict.

In any society people are bound to have differences of opinion and interests. These differences are particularly sharp in country like ours which has an amazing social diversity. Democracy provides the only peaceful solution to this problem. In democracy no one is the permanent winner. No one is the permanent looser. Different groups can live with one another peacefully.

8. Why is democracy considered the best form of government?

Ans. Democracy provides the method to deal with differences and conflict.

Democracy allows us to correct its own mistakes.

Democracy improves the quality of decision making.

Democracy enhances the dignity of citizens.

9. How does democracy allow us to correct its own mistakes?

Ans. There is no guarantee that mistakes cannot be made in democracy.

No form of government can guarantee that. The advantage in a democracy that such

mistakes cannot be hidden for long.

There is a space for public discussion on these mistakes. And there is a room for correction.

Either the rulers have to change their decisions, or the rulers can be changed.

10. How does democracy improve the quality of decision making?

Ans. Democracy is based on consultations and discussion.

A democratic decision always involves many persons, discussions and meetings.

When a number of people put their heads together, they are able to point out

possible mistakes in any decision.

This takes time. But there is a big advantage in taking time over important decisions.

11. Under what conditions government run after the elections?

Ans. A democratic government cannot do whatever it likes, simply because it has won

an election.

It has to respect some basic rules. In particular it has to respect some guarantees to the

minorities.

Every major decision has to go through a series of consultations. Every office bearer has

certain rights and responsibilities assigned by the constitution and the law.

VIDEO LINK

https://www.youtube.com/watch?v=UfbJs6pdpOc&authuser=0

EAST POINT SCHOOL

REPORTED SPEECH

A. Fill in the blanks with the correct tense forms

1. Tanmya said," Namrata is coming today."

   Tanmaya said that Namrata _____

2. Reni said," I drink butter milk after the meal."

   Reni said that_____

3. He said, " Rain fell last night."

   He said that _____

4. Manu said," Shri was dancing."

   Manu said that_____

5. Saint said,"Man is mortal."

   Saint said that_____

6. Preeti says,"The dinner is ready."

   Preeti says that_____

7. He said,"My pen is lost."

   He said that_____

8. She says," The man is talking too loud."

   She says that the man_____

B. Change the following in reported speech.

1. I said," I am getting bored." I said that I am getting bored .

   _____

2. Roy says,"I am getting late for the concert." Roy said that he was getting late for the concert .

   _____

3. Tiya said," Where does Farhan live?" Tiya asked that where did farhan live .

   _____

4. He said," Is Rohit coming with us?" He asked us was Rohit coming .

   _____

5. The teacher said," The Earth is spherical." The teacher said that The Earth is spherical .

   _____

6. The policeman says,"Drop your guns." The policeman commanded them to drop their guns .

   _____

7. She said to the boys," You should do your duty." She commanded the boys to do their duty .

   _____

8. Zayed said," Please, wait till I come." Zayed requested them to wait until he came .

   _____

9. "What a terrible day it is!" She said. She exclaimed it was a terrible day .

   _____

10. She said,"Hurrah! MY sister has passed!" She exclaimed with joy her sister had passed .

    _____

C. Change the following to direct speech.
1. The teacher asked him how old he was. The teacher said , " How old are you ? "

2. I requested him not to walk so fast. I said , " Don't walk so fast ."

3. He asked if I could lend him that pen. He said , " Could you lend me the pen ?"

4. The boy says that he is busy today. The boy said , " I am busy today ."

5. She said that she would be leaving for Paris the following week. She said , " I will leave for paris next week .

6. Father said that early worm catches the bird. Father said

7. The king commanded them to bring the prisoner before him.

8. Rita exclaimed that they had won the match.

9. The guard advised us not to pluck any flowers.

10. She requested if she could use the phone.

D. Change the following passage into indirect speech.

The old man said," I was passing the river when I saw a girl crossing the bridge, she looked upset. I
decided that I would ask her what had happened." He asked her," Why are you so upset?" . She answered,"
I have lost my sheep." Then the old man said," I saw a sheep grazing over the valley." The girl thanked
the old man. The old man said," I feel so happy as I made a girl happy."

Class: IXth   Subject: Social Science (Economics)
Chapter 1: The Story of Village Palampur1^st April to 15th April 2020
STUDY NOTES

Introduction to the village Palampur

- ❖ This is a hypothetical village.
- ❖ **Farming** is the main production activity.
- ❖ Dairy, transport, small scale manufacturing are a few other activities.
- ❖ **Well connected** with neighbouring villages and towns like Raiganj and Shahpur.
- ❖ Bullock carts, tongas, bogeys, motorcycles, jeeps, tractors, trucks, can be seen on the **'All Weather road'**.
- ❖ Village has about **450** families of several different castes. Out of them 80 are upper caste who live in big & cemented houses and one third are SC who live in small houses in one corner of the village.
- ❖ Most houses have **electric connection.**
- ❖ Village has two **primary schools** and one **high school**.
- ❖ A primary **health center** runs by government and one private dispensary.

Aim of production- To produce goods and services that we require and want.

Organization of Production or (Factors / Requirements of Production)

- ❖ **Land** and other natural resources such as **water, forests, minerals** etc.
- ❖ **Labour**- some production activities require highly educated workers and others require workers who can do manual work. Each worker is providing the labour necessary for production.
- ❖ **Physical Capital**- i.e. variety of inputs required at every stage during production
    - ➢ **Fixed Capital**-tools, machines and buildings which can be used over many years like generators, tractors, computer etc.
    - ➢ **Working Capital**- raw material and money in hand which are used up in production.
- ❖ **Human Capital**- knowledge and enterprise to put together land, labour and physical capital and produce an output.

Every production is organized by combining land, labour, physical capital, which are known as *Factors of Production.*

Farming in Palampur

- ❖ Farming is the main production activity.
- ❖ **75%** of the people who are working are dependent on farming for their livelihood.
- ❖ They are farmers or farm labourers.
- ❖ **Constraint -** Land area under cultivation is fixed. Some of the wastelands had been converted to cultivable land but there is no further scope to increase farm production by bringing new land under cultivation.

Ways to grow more from same land

- ❖ **Multiple Cropping-** To grow more than one crop on a piece of land during the year is known as multiple cropping.
- ❖ **Modern Farming Method-** Use of modern techniques in farming like HYV seeds, chemical fertilizers, irrigation facilities like tube wells, pesticides, modern machinery like tractors, threshers, harvesters etc.

Difference between Traditional Farming and Modern Farming

❖ Seeds used in cultivation were **traditional** ones with low yield.	❖ High yielding variety **(HYV)** seeds are used.
❖ Traditional seeds needed **less** irrigation.	❖ HYV seeds need **plenty** of water.
❖ Cow-dung and other natural manure were used as fertilizers.	❖ **Chemical fertilizers** and pesticides are used to produce best results.
❖ **Yield-1300** kg per hectare.	❖ **Yield-3200** kg per hectare.
❖ Sickle, wooden plough and other traditional tools were used	❖ Modern machines like tractors, threshers, harvesters are used.

Subject:-Social Science (Economics)   Class:- IX

Chapter 1:- The Story of Village Palampur   Assignment No.:-1

1) **What is the main production activity in villages across India?**   **(1)**

2) **Name any three non-farming activities in Palampur village.**   **(1)**

3) **Who owns the majority of land in Palampur village?**   **(1)**

4) **What health facilities are available in Palampur village?**   **(1)**

5) **What is called 'Working Capital?**   **(1)**

6) **What does 'human Capital' mean?**   **(1)**

7) **Name the states that benefited the most from Green Revolution.**   **(1)**

8) **Which mechanical devices were used after Green Revolution?**   **(1)**

9) **How did the spread of electricity help farmers in Palampur?**   **(3)**

10) **What is the main aim of production? Explain the four essential requirements for production? (5)**

11) **State differences between the KharifSeason and Rabi Season.**   **(3)**

12) **What do you mean by multiple cropping?**   **(3)**

13) **What are the different ways of increasing production on the same piece of land? Use examples to explain.**   **(5)**

VIDEO LINK

https://www.youtube.com/watch?v=qPDelGpElg0
https://www.youtube.com/watch?v=2ZQbjraZfPI
https://www.youtube.com/watch?v=k-iWtZeIgYY

Summary

The story opens with Margie writing in her diary about an old book that Tommy had found. Margie was reminded of her grandfather who had once talked about his grandfather who went to an actual school where the students were taught by human teachers.

However, Margie and Tommy lived in the future world,in the year 2157 where education was completely computerized. They did not go to schools. Instead, they had a special study room where a computer taught them. The computer teacher was programmed and adjusted according to the needs of each child. Now and then the computer teacher developed faults which were fixed by a County Inspector.

Both Tommy and Margie wondered at the book found by Tommy in his attic. They wondered at it as they read books on the screen of their computer teacher. Margie felt that the computer teacher was boring; she disliked the mechanical teaching and learning. She also wondered how much fun it would be studying in a school. Studying in a fun way, with other children and that too from a human teacher.

Margie Jones

Margie Jones is the main character and one of the protagonists of the story. The story is set in her house, and she often leads the conversation with the other protagonist, Tommy. After Tommy found a physical book in his home, Margie talks to him about what it would have been like to go to a real school, showing her inquisitive personality. She, along with Tommy, conclude that it would have been much more fun to go to a real school rather than be taught by a robotic teacher.

Tommy

Tommy is the neighbor of Margie Jones, and the other protagonist of the story. Along with Margie, he contemplates what life would have been like if children went to actual school buildings. He is the one that brought a book from his attic to Margie's house that sparked this conversation. Tommy also mentions that his grandfather had gone to an actual school with human teachers.

Robotic Teacher

Although not shown much in the story, the robotic teacher is presumed to be the antagonist of the story. Although it cannot be proven that the teacher is as bad as the children say it is, the book portrays advanced technology in general as a bad thing. Rather, it is better to have a human instructor that can infuse emotion into lessons.

Learning

In the story, Margie and Tommy are unhappy with their current learning environment, and realize that learning is important. Although they are unable to change their situation,

they think about what it would be like if they could. If they were able to go to an actual school, they would be able to make friends and incorporate different and diverse ideas into their learning experience, things that they realize are important.

Technology

In his story, Asimov is trying to prove that too much technology is not a good thing. Although technology can often help humans do things better, it cannot be used a replacement for human intellect. The robotic teacher in the story represents what technology can do to harm a generation.

Appreciation

In the story, Margie and Tommy mutually decide that it would have been better to go to an actual school with real people, saying that the children that did this must have had much more fun. The irony in this, however, is that many children are unhappy with going to school in an actual building, and do not appreciate the opportunity that they have for them, that others may not have.

"They turned the pages, which were yellow and crinkly, and it was awfully funny to read words that stood still instead of moving the way they were supposed to - on a screen, you know."

The Narrator

Here, the narrator describes Margie and Tommy reading the old book. The pages are described as "yellow and crinkly" which emphasizes how old the book seems to the children. The narrator also suggests how different the book is from what the children are used to, as they no longer have access to paper books. Instead, the children read "telebooks" which are on a screen and can hold millions of books.

"Margie was disappointed. She had been hoping they would take the teacher away altogether. They had once taken Tommy's teacher away for nearly a month because the history sector had blanked out completely."

The Narrator

When the County Inspector discovers that Margie's teacher is broken, she hopes that the teacher will be taken away. Here, we see that Margie hates school, as most children do. In this passage, we also learn that the robot teachers are prone to faults, and therefore this new way of teaching is not perfect. The fact that Tommy's teacher's history sector had broken represents the fact that the children no longer have a connection with the past.

"Margie was thinking about how the kids must have loved it in the old days. She was thinking about the fun they had."

The Narrator

While Margie is bored at school, she begins to daydream about the school of the past, where children learned together in a school. She romanticizes the past, thinking about how

much fun the kids had, and how they must have loved school. As such, the short story ends on an ironic note, as we know most children hate school.

Genre

A short story

Setting and Context

The events take place in far future, the year is 2155.

Narrator and Point of View

The narration is third-person omniscient.

Tone and Mood

Tone of the story is subdued and soft-focused, and the mood conveys sadness.

Protagonist and Antagonist

The protagonist of the story is a 11-year-old girl named Margie. The antagonist is a mechanical teacher, which embodies technological progress in general.

Major Conflict

The story's major conflict is presented by technical progress, which might lead people to a lack of communication with each other. The world of the future is a world of technologies, robots, and mechanical teachers.

Climax

The climax is reached when Margie assumes that children loved to visit an actual school, which existed many years ago.

Foreshadowing

"Today Tommy has found a real book!" Margie's words in the very fist line of the story foreshadow that the children are going to find out something new for them, something that they are not familiar with. The world of "real books" for their generation is already in the past.

Class: IXth   **Subject: Social Science (Geography)**
Chapter 1: India: Size and Location

STUDY NOTES

Introduction:

- ❖ India is one of the oldest civilisations, with a rich cultural heritage.
- ❖ After Independence from British rule, it achieved multi-faceted socio-economic progress.
- ❖ Also made a remarkable progress in the field of agriculture, industry, technology and overall economic development.

India's Location

- ❖ Lies entirely in Northern and Eastern Hemisphere between latitudes 8°4' N and 37°6' N and longitudes 68°7' E and 97°25' E.
- ❖ Divided by Tropic of cancer (23°30' N) in almost two equal parts.
- ❖ In Southeast, Andaman and Nicobar islands lie in Bay of Bengal.
- ❖ In Southwest, Lakshadweep islands lie in Arabian Sea.

India's Size

- ❖ Total Area of India is 3.28 million square km which is 2.4 percent of the total area of the world.
- ❖ It is seventh largest country in the world in terms of landmass.
- ❖ It has land boundary about 15,200 km and the total length of the coast line of the mainland including Andaman and Nicobar and Lakshadweep islands is 7,516.6 km.
- ❖ In the northwest, north and north east of India, young folds mountains bounds it.
- ❖ South of about 22° north latitude, India narrows and finally extends towards the Indian Ocean. It also divides it into two seas, the Arabian Sea on the west and the Bay of Bengal on its east.
- ❖ The latitudinal and longitudinal extent of the mainland is about 30°.
- ❖ India's east-west extent appears to be smaller than the north-south extent.
- ❖ The time along the Standard Meridian (82°30' E) passing through Mirzapur in UP is taken as the Indian Standard Time for whole country.
- ❖ The time gap between Arunachal Pradesh present in the east and Gujarat present in the west is about 2 hours. The latitudinal extent influences the duration of day and night, as one moves from south to north.

1) In which hemisphere India is located?   (1)

2) What is the latitudinal and longitudinal extent of India?   (1)

3) Which tropic divides India into almost two equal parts?   (1)

4) Name the two Island groups of India.   (1)

5) What is total area of Indian landmass?   (1)

6) Name the countries which are larger than India.   (1)

7) The number of Union Territories along the western and eastern coasts.   (1)

8) Area-wise which is the smallest and which is the largest state?   (1)

9) The states which do not have an international border or lie on the coast: (1)

10) Classify the states into four groups each having common frontiers with (i) Pakistan, (ii) China, (iii) Myanmar, and (iv) Bangladesh.   (1+1+1+1=4)

Video Links

https://www.youtube.com/watch?v=N4LHJz0TMPw

https://www.youtube.com/watch?v=_w4BwzQPqjA

EAST POINT SCHOOL

ENGLISH WORKSHEET FOR CLASS 9TH

A. Read the passage and answer the questions that follow.

1. Our house is filled with photos. They cover the walls of my kitchen, dining room and den. I see our family's entire history, starting with my wedding, continuing through the births of both sons, buying a home, family gatherings and vacations. When my sons were little, they loved to pose. They waved, danced, climbed trees, batted balls, hung upside down from the jungle gym and did anything for a picture. But when they reached adolescence, picture-taking changed into something they barely tolerated. Their bodies were growing at haphazard speeds. Reluctantly they stood with us or with their grandparents at birthday celebrations and smiled weakly at the camera for as short a time as possible.

2. I am the chronicler of our photographs. I select those to be framed and arrange the others in albums. The process is addictive, and as the shelves that hold our albums become fuller and fuller, I wonder what will become of them. Will anyone look at these photographs in future years? If my sons look at them, what will they think of us and of themselves? One bright afternoon, I took some photographs of my father with my husband as they fished in a lake near our vacation house. As my sons and I sat on the shore and watched them row away, I picked the camera up and photographed the beautiful lake surrounded by green trees. The two men I loved gradually grew smaller until all I could see were my father's red shirt, and the tan and blue caps on their heads.

3. My father died a week later, and suddenly those photos became priceless to me. I wept when I pasted them in our album. I wept again afterwards when I saw my younger son looking at them. It was a few days before he went away to college. He had taken all our albums down from the bookshelves in the den and spread them out on the carpet. It had been a very long time since I had seen him doing this. Once he stopped posing for pictures, he seemed to lose interest in looking at them. But now he was on the verge of leaving home. This was his special time to look ahead and look back. I stood for a moment in the hall by the den, and then tiptoed away. I didn't take a photo of my son that afternoon, but I will remember how he looked for as long as I live. Some pictures, I learned, don't have to be taken with a camera.

1. On the basis of your reading answer the following question.
    1.1 The writer could see_____ through his photos.   (1)
    1.2 How did the writer's sons change after adolescence?   (1)
    1.3 Why did the younger son take out all the pictures?   (1)
    1.4 What did the writer learn?   (1)
    1.5 Find words which are similar in meaning.   (1)
    a. random/jumbled_____(para1)   b.   precious/invaluable_____(para3)

B. Read the conversation given below and complete the paragraph that follows.
    1. ROY: When are you submitting your project?
    TANYA: I will be submitting it tomorrow.
    ROY: Why didn't you submit it today?

TANYA: I was not well yesterday, so couldn't complete it on time.
ROY: Ok.

Roy asked Tanya_____. Tanya replied
that_____. Roy
enquired_____ to which Tanya replied
_____.

2. **JAMES:** Did you inform the landlord that we will be leaving tomorrow?
   MARTIN: I forgot. I will tell him in the evening.
   JAMES: Ok. When are we supposed to pay the house rent?
   MARTIN: By 4th of next month.
   JAMES: Should we pay the rent before we leave?
   MARTIN: I think that's a good idea.

   James asked Martin_____. Martin
   answered that _____ and he_____.
   James inquired _____. Martin said that
   they have to pay the rent by 4th. James asked_____.
   Martin agreed and said_____.

3. **MAYA**: Please, pass me a blank sheet of paper.
   ANITA: Why do you need it?
   MAYA: I wanted to write an application to the teacher.
   ANITA: What are you going to write in the application?
   MAYA: I want to take two days leave as I have to attend a wedding in my hometown.
   ANITA: Ok. Here is your sheet.

   Maya requested Anita to_____. Anita asked
   her_____. Maya replied _____.
   Anita further inquired _____. Maya
   informed her_____. Anita
   handed her the sheet of paper.

C. Rearrange the words to form meaningful sentences.
   1. is one/summer visitors/the/of the/swallows/best known

   _____

   2. beneath it/at/with/dark red/it's throat/a/it has/blue band

   _____

   3. of animals/with/concerned/large/children's books/proportion/is/a

   _____

   4. themes/timeless/such/this/because/are/is

   _____

EAST POINT SCHOOL

CLASS IXTH ENGLISH

A. Read the passage given below and answer the questions that follow.

Many years ago, when the art of stunting plants was quite unheard of except in remote areas of India, Buddhist monks in isolated monasteries in Tibet stunted trees like oak and orange. They watched with excitement the trees flowering and bearing fruit regardless of this 'deformity'. The trees looked so artistically beautiful and enchanted everyone. Some Chinese monks learnt the art from Tibetan monks and soon 'Bonsai' making became a popular hobby and art in China and every garden had at least six bonsais. India and China claimed rights to the art till Japan followed enamoured by its beauty. Today Japan leads in Bonsai making and has invented new methodologies to make the plants look aesthetic and artistic. The most beautiful is the cherry blossom that is breathtakingly attractive. Bonsais need constant pruning, watering, shaping and correct environment. The trees can be planted in colorful containers of your choice.

Numerous schools have mushroomed where the art is taught and cultivated. Best known among them is the Indian Bonsai Association. India has great demand for bonsais. Hotels, homes, farm houses, restaurants and guest houses use these decorative plants to adorn their lobbies, dining halls and drawing rooms. It is aptly said that a thing of beauty is a joy forever. Indeed the bonsai lasts in one's imagination long after the plant has lived its life span.

Bonsai gardeners use methods including wiring branches, extreme pruning of roots and branches, root binding, grafting and custom soil and cinder mixtures. But perhaps the most important element of all is patience. Instructions for achieving the 'roots over rock' effect give insight into the work of a bonsai artist: trim the roots, place the rock, bind roots, then re-pot and wait for two years. Often a bonsai is created by many hands over the years – a highly priced tree is one where the hand and the ego of the artist become invisible as in the Zen concept of 'artless art'.

<u>Now answer these questions</u>

1. Who first began to stunt trees and plants?

2. Which bonsai is breathtakingly beautiful?

3. Which country leads in the art of stunting today?

4. How can we take care of bonsais?

5. Name a few places where bonsais are used for decoration

6. Why does the writer say 'a thing of beauty is a joy forever'?

7. The word 'enamoured' means ………………..

B. In the given passage one word has been omitted in each line. Write the missing word alongwith the word before and after the word in the space given below.

	BEFORE	WORD	AFTER
They reached the dam at nine.			
In the morning stopped in the	_____	_____	_____

garden near the dam and left their   _____   _____   _____

food in rest room. In the garden   _____   _____   _____

there several beehives. The   _____   _____   _____

boys girls had their tea and went   _____   _____   _____

to the dam. They the sight.   _____   _____   _____

 At night they dinner   _____   _____   _____

and off to sleep after a tiring sleep.   _____   _____   _____

C. Read the conversation and fill in the blanks with appropriate words.

MAN: you are becoming very lazy these days. Didn't I ask you to get my breakfast ready by 8 o'clock?

SERVANT: I am sorry, sir. I got up very late today. That's why I couldn't prepare it on time.

MAN: Didn't you set the alarm before going to sleep?

SERVANT: Yes, I did sir.

MAN: Then, what happened?

SERVANT: I forgot to wind the clock.

The man scolded the servant_____. He questioned

him_____. The servant apologized to him respectfully and explained that

_____. The man asked him whether

he_____ before going to sleep. To this, the servant

answered politely that _____. His master further inquired the reason for the delay. The

servant answered that _____.

D. Rearrange the words to form meaningful sentences.

1. the/ Indian/ English/exploited/the/ farmers

_____

2. pay/the/had to/poor farmers/high fines/very

_____

3. natural disasters/farmers//share of taxes/even/pay/their/in times/the/had to

_____

4. were created/a thousand years ago/ in the sea/ the foundations for/ a whole city

_____

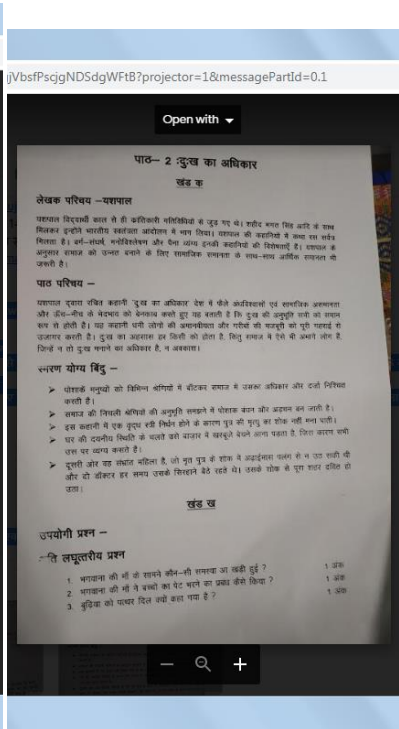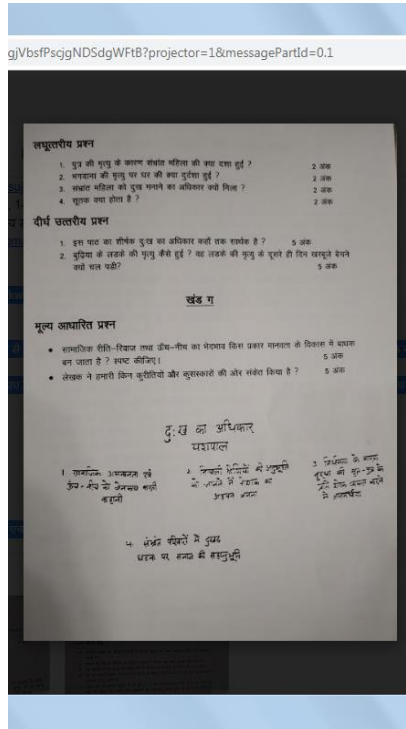5. oil/was found/in the 1960's/North Sea/ the /under

_____

● सभी को अपनी अपनी कॉपियों मे पाठ्य 9 का प्रश्न अध्याय 'सम्पूर्ण पाठ -1' तथा पाठ 'दुःख का अधिकार' में उल्लेख लिखकर उन प्रश्नोत्तर को कंप्लीट कीजिए।

● होमवर्क---प्रश्न 8 में दिया गए समानार्थी, विलोमार्थी तथा पर्यायवाची के आधार पर समानार्थी, विलोमार्थी तथा पर्यायवाची शब्द 10 -10 लिखकर लाएंगे।

उदाहरण ..समानार्थी----पत्थर
विलोमार्थी...सुन्दर
पर्यायवाची....कमल

● लेखन कार्य---- 'दूरदर्शन: एक वरदान' विषय पर 150 शब्दों मे एक अनुच्छेद लिखिए

EAST POINT SCHOOL

MATHEMATICS

CLASS IX   **STUDY MATERIAL (CHAPTER 1 NUMBER SYSTEM)**

REPRESENTATION OF IRRATIONAL NUMBERS ON THE NUMBER LINE

Representation of Irrational numbers on the number line.

1) Pythagoras theorem method

VIDEO LINK

https://youtu.be/cpWiKVEMl3g

2) Geometric method

To represent

$\sqrt{3.5}$

on the number line, we have to follow the steps given below:

(i) Draw a line and mark a point A on it. Mark point B such that AB = 3.5 unit and BC = 1 unit.

(ii) Find the mid-point of AC and mark it as M. Taking M as the center and MA as the radius, draw a semi-circle.

(iii) From B, draw a perpendicular to AC; Let it meet the semi-circle at D. Taking B as the center and BD as the radius, draw an are that intersects the line at E.
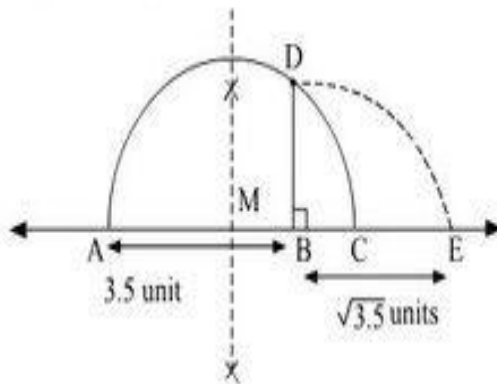
3) Magnifying glass method

Example 11-Visualize 5.37 on the number line up to 4 decimal places
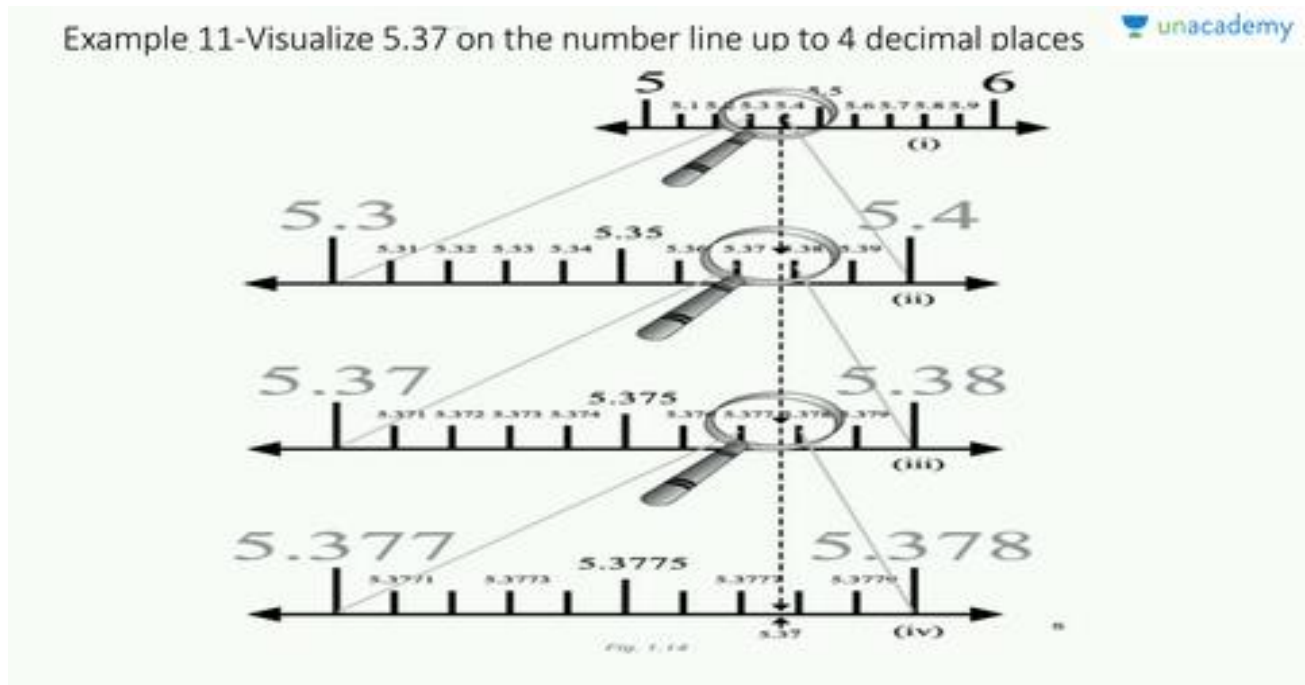
MATHEMATICS ASSIGNMENT

Q1) Represent $\sqrt{5}$ on the number line.

Q2) Represent $\sqrt{17}$ on the number line.

Q3) Represent $\sqrt{13}$ on the number line.

Q4) Represent $\sqrt{8.5}$ geometrically..

Q5) Represent $\sqrt{9.3}$ geometrically..

Q6) Represent $3 + \sqrt{2.6}$ on the number line.

Q7) Visualise 8.6756 on the number line, using successive magnification.

Q8) Visualise $4.\overline{26}$ on the number line, upto 4 decimal places.

Q9) Represent 6.224 on the number line, using successive magnification.

Q10) Represent 5.2645 on the number line, using successive magnification.

Motion-Movement of any object from one position to another position with respect to the observer is called as Motion.

Motion Along a Straight Line:

When an object moves along a straight line, the motion of the object is called rectilinear motion. For example; motion of a car on highway.

Vectors and Scalar Quantities:

- Vector is a quantity which have both magnitude and direction. For examples: Force, position etc.
- Scalar is quantity with which direction is not associated. For examples: Mass, temperature, time etc.

Distance:

- Length of path covered by a moving an object in the given time irrespective of direction is called distance.
- It is a scalar quantity.
- Its SI unit is meter(m).

Displacement:

- The shortest distance measured from initial to the final position of an object is known as the displacement.
- It is a vector quantity.

Uniform Motion:

- When an object covers equal distances in equal intervals of time, it is said to be in uniform motion.

Non-Uniform Motion:

- When an object covers unequal distances in equal intervals of time, it is said to be in non-uniform motion.

Speed (s):

- The distance travelled by an object in unit time is referred to as speed.
- It is represented as:

$$\text{Acceleration} = \frac{\text{Final velocity} - \text{Initial velocity}}{\text{Time}}$$

$$\text{Or} \qquad a = \frac{v - u}{t}$$

$$\Rightarrow \qquad at = v - u$$

$$\Rightarrow \qquad \boxed{v = u + at}$$

- Its SI unit is metre/ second (m/s).
- It is a scalar quantity.
- **Average speed:** For non-uniform motion, the average speed of an object is obtained by dividing the total distance travelled by an object by the total time taken.

$$\text{Average speed} = \frac{\text{Total distance travelled}}{\text{Total time taken}}$$

Velocity (v):
- Speed of an object in a particular direction is named as velocity, i.e., it is t
- displacement of body in unit time.
- It is represented as:

$$\text{Velocity} = \text{displacement/time}$$

- It is a vector quantity.
- Average velocity: It is given by the arithmetic mean of initial velocity and final velocity for a given period of time.

$$\text{Average velocity} = \text{initial velocity} + \text{final velocity}/2$$

Acceleration (a):
- The rate of change of velocity is termed as acceleration.
- It is represented as:

$$\text{Acceleration} = \frac{\text{Final velocity} - \text{Initial velocity}}{\text{Time}}$$

- Its SI unit is metre/seccond^2 (m/s^2).
- It is a vector quantity.
- The acceleration is taken to be positive if it is in the direction of velocity and negative when it is opposite to the direction of velocity.
- Negative acceleration is also named as retardation or deacceleration.
- An object moving on a circular path though with uniform speed, is always said to be accelerated as it changes its direction every moment.
- **Uniform acceleration:** When velocity of body changes by equal amounts in equal time intervals, acceleration is said to be uniform. For example: Motion of a freely falling ball.
- **Non - uniform acceleration:** When velocity of body changes by unequal amounts in equal intervals if time, acceleration is said to be non - uniform. For example: Motion of car.
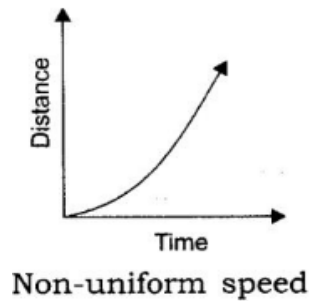
Graphical Representation of Motion

1. Distance -Time Graph for Uniform Speed:

Distance -Time graph for uniform speed, is a straight line as shown below:
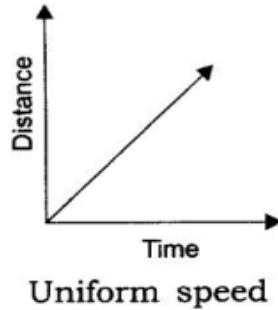
Uniform speed

2. Distance -Time Graph for Non-Uniform Speed:

Distance -Time graph for uniform speed, is obtained in the form of a curve as shown below:

Non-uniform speed

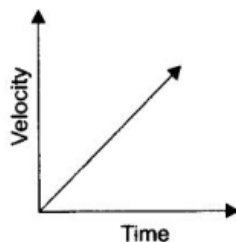## 3. Distance -Time Graph for a Body at Rest:

Distance -Time graph for a body at rest is a straight line parallel to the time axis (x-axis):

Stationary Body
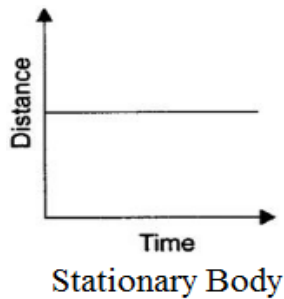
Velocity-Time Graph

1. Velocity-Time Graph for Uniform Acceleration:

Velocity-Time graph for uniform acceleration, is a straight line as shown below:

Uniform acceleration

2. Velocity-Time Graph for Non-Uniform Acceleration:

Velocity-Time graph for non-uniform acceleration, is obtained as a zig-zag line as shown below:

Non-uniform
acceleration

Try following questions:

Q 1. Distinguish between uniform motion and non, uniform motion.

Q 2. Name the quantity which represents rate of change of velocity.

**Q 3.** Find the acceleration of a car and its displacement from the following observations:

Time	Speed (in km/h)
3:15 pm	26
3:45 pm	60

Q 4. What happens to speed, velocity acceleration when an object moves in a circle with uniform speed?

Q 5. What does the slope of Distance– Time graph represent?

**Calculating Displacement from a Velocity-time Graph**

Consider the graph given below. The area under the graph gives the distance traveled between a certain interval of time. Hence, if we want to find out the distance traveled between time interval t_1 and t_2, we need to calculate the area enclosed by the rectangle ABCD where area (ABCD) = AB * AC.

Velocity - Time Graph of an object moving with constant velocity
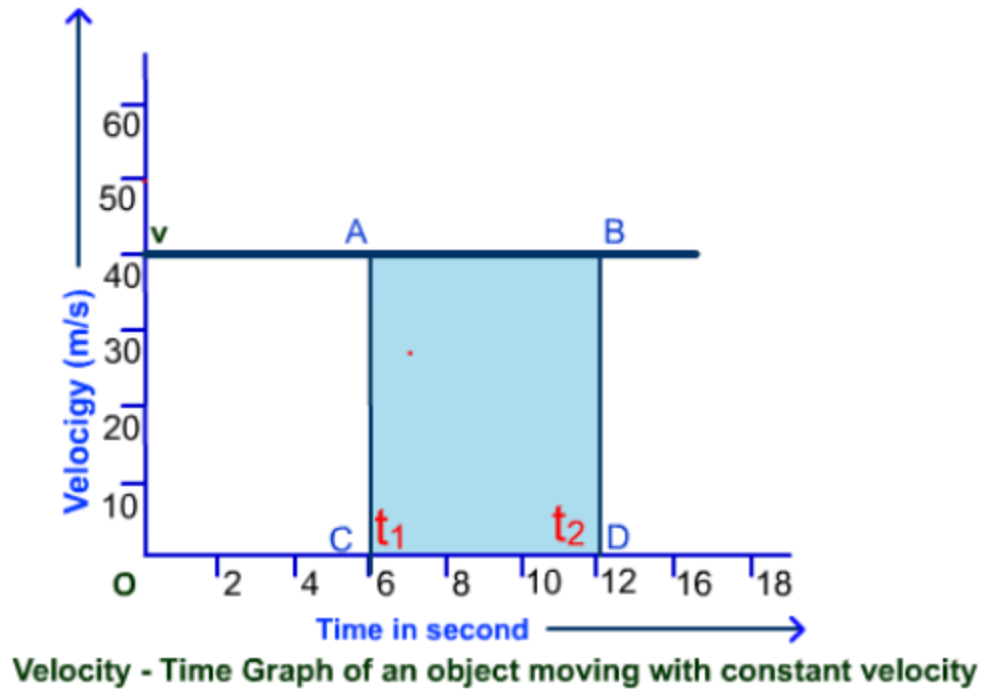
Similarly, to calculate distance traveled in a time interval in case of uniform acceleration, we need to find out the area under the graph, as shown in the figure below.

To calculate the distance between time intervals t_1 and t_2 we need to find out area represented by ABED.

Area of ABED = Area of the rectangle ABCD + Area of the triangle ADE = AB $\times$ BC + 1/ 2 * (AD $\times$ DE)

Velocity - time graph of an object moving with uniform acceleration
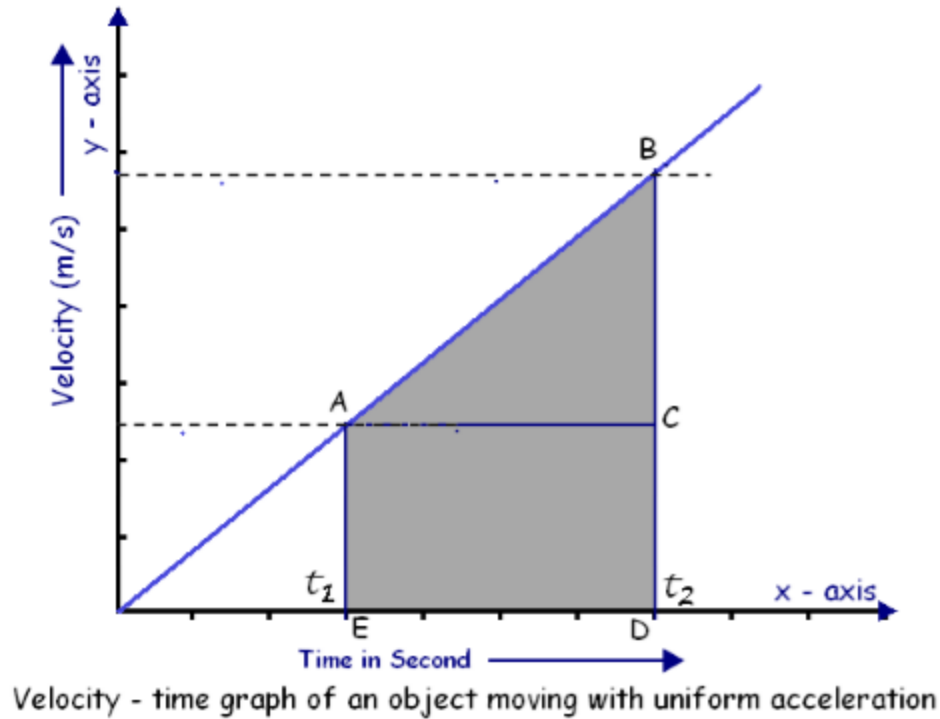
Equations of Motion

The equations of motion represent the relationship between an object's acceleration, velocity and distance covered if and only if,

- The object is moving on a straight path
- The object has a uniform acceleration

Three Equations of Motion
1. The Equation for Velocity – Time Relation

$v = u + at$

2. The Equation for Position – Time Relation
$s = ut + 1/2\ at^2$
3. The Equation for the Position – Velocity Relation
$2a\ s = v^2 - u^2$

Where,

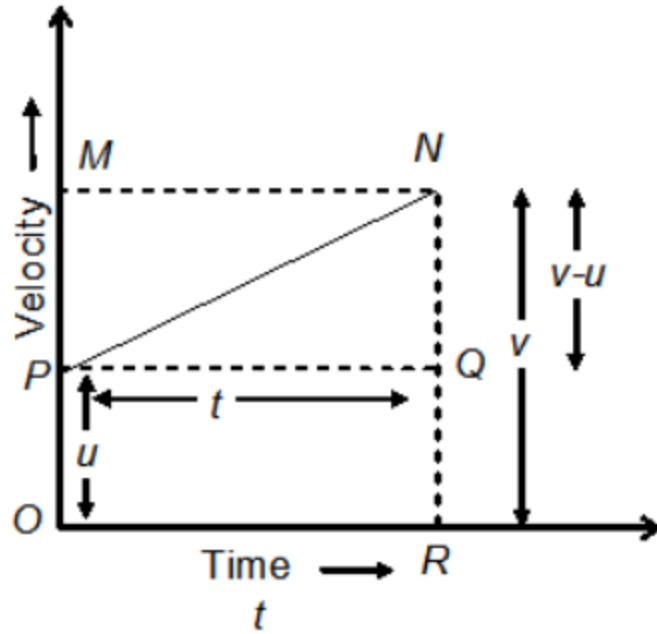**u:** initial velocity
a: uniform acceleration
t: time
v: final velocity
s: distance traveled in time t
Deriving the Equations of Motion Graphically

Figure 12

Study the graph above. The line segment PN shows the relation between velocity and time.

Initial velocity, u can be derived from velocity at point P or by the line segment OP

Final velocity, v can be derived from velocity at point N or by the line segment NR

Also, NQ = NR – PO = v – u

Time interval, t is represented by OR, where OR = PQ = MN

1. Deriving the Equation for Velocity – Time Relation

Acceleration = Change in velocity / time taken

Acceleration = (final velocity – initial velocity) / time

$a = (v - u)/t$

so, $at = v - u$

$v = u + at$

2. Deriving Equation for Position – Time Relation

We know that, distance travelled by an object = Area under the graph

So, Distance travelled = Area of OPNR = Area of rectangle OPQR + Area of triangle PQN

$s = (OP * OR) + (PQ * QN) / 2$

$s = (u * t) + (t * (v - u) / 2)$

$s = ut + 1/2 \, at^2$ [because at = v – u]

3. Deriving the Equation for Position – Velocity Relation

We know that, distance travelled by an object = area under the graph

So, s = Area of OPNR = (Sum of parallel sides * height) / 2

s = ((PO + NR)* PQ)/ 2 = ((v+u) * t)/ 2

2s / (v+u) = t [equation 1]

Also, we know that, (v – u)/ a = t [equation 2]

On equating equations 1 and 2, we get,
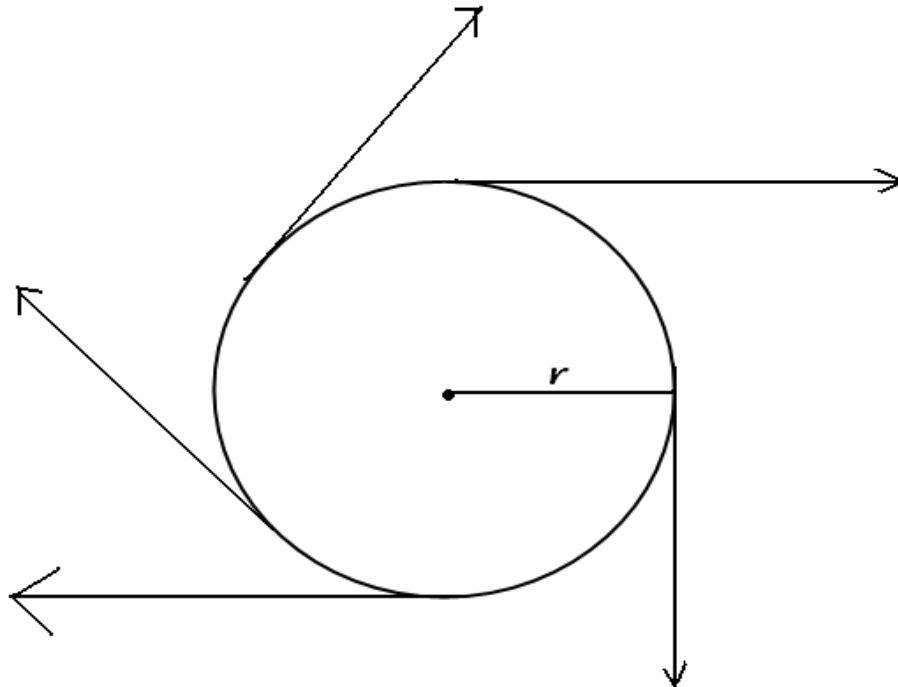
2s / (v + u) = (v – u)/ a

2as = (v + u) (v – u)

$2 \, a \, s = v^2 - u^2$

Uniform Circular Motion

If an object moves in a constant velocity along a circular path, the change in velocity occurs due to the change in direction. Therefore, this is an **accelerated motion**. Consider the figure given below and observe how directions of an object vary at different locations on a circular path.

Direction at different point while circular motion

Uniform Circular Motion – When an object travels in a circular path at a uniform speed the object is said to have a uniform circular motion.

Non-Uniform Circular Motion – When an object travels in a circular path at a non-uniform speed the object is said to have a non-uniform circular motion

Examples of uniform circular motion:

- The motion of a satellite in its orbit
- The motion of planets around the sun

Velocity of Uniform Circular Motion

Velocity = Distance/ Time = Circumference of circle / Time

$v = 2\pi r/ t$

where,

v: velocity of the object
r: radius of the circular path
t: time taken by the object

VIDEO LINK
https://youtu.be/bYgfwuJnpgU