

Assignment for Class: 8TH

Session: 2021-2022

Assignment: PT

SUBJECT: ENGLISH

“POLO- THE KING OF GAMES”

- **Why Polo is called the game of kings?**

Ans. Polo is called the game of kings because in its early stage, it was patronized by kings and horsed cavalry. It was played by the great legends like Darius (King of Persia), Chenghiz Khan (Mongol conqueror), Alexander the Great and Sultan Qutub-ud-din Aibak to test their courage, endurance and power.

- **Where did Polo originate?**

Ans. Polo originated in Central Asia. From the steppes of Central Asia, the game eventually spread up to Japan, China, Tibet and India.

- **What was the status of Polo during the Mughal reign?**

Ans. During the Mughal reign, Polo was the national sport of India. In this period, Polo enjoyed the patronage of kings and nobles and was widely played in the provinces of the Empire and in the courts of the Rajput kings.

- **In whose reign did Polo come to Ladakh and how?**

Ans. According to the historians, Polo came to Ladakh in the 16th century during the reign of King Jamyang Namgyal, who married Gyal Khatun, a princess of Baltistan.

- **How is polo palyed in Ladakh?**

Ans. Polo in Ladakh is played with great verve. The musical instruments ‘surna and daman’ are played at the start and end of the match. At the start and the finish of the play and to celebrate every goal, special Polo music is struck. The game is a part of cultural heritage and draws huge crowds with people donning colourful costumes. Polo in Ladakh is a test of human endurance and the matches are played in the late afternoon.

- **How is Polo in Ladakh different from the international format?**

Ans. Polo in Ladakh differs from the current international format in player count as well as time duration. Here each team consists of six players and the game lasts for an hour with a ten minute break.

“JULIUS CAESAR”

- **Why did a certain party of Romans wish to kill Julius Caesar?**

Ans. A few members of the senate were jealous of Caesar’s growing power. They feared that Caesar might be offered the crown at the National Games. Thus, in order to refrain Caesar’s rise to power, they wished to kill him.

- **Why did Calpurnia beg Caesar not to go to the Capitol?**

Ans. Calpurnia had a nightmare in which she had seen the statue of Caesar streaming with blood and smiling men bathing their hands in it. She took it as an ill omen and feared some grave danger to Caesar’s life. So she begged Caesar not to go to Capitol.

- **What two reasons did Anthony give to show that Caesar was not ambitious?**

Ans. The two reasons that Anthony gave to show that Caesar was not ambitious were:

Firstly, Anthony pointed out that Caesar was always kind and generous to the poor, and had brought enormous wealth and glory to Rome. Secondly, he said that Caesar had three times refused to accept the kingly crown offered at the National Games.

- **Why was Brutus’ decision to march from Sardis to Phillipi wrong?**

Ans. Brutus’ decision to march from Sardis to Phillipi was wrong because Brutus’ army lost the advantage of their positions upon higher grounds. While on the other side, Octavius and Mark Anthony had the advantage of a good defence position as well as a fresh and rested army. With the result, their army defeated Brutus’ army quite easily, and was on the winning side.

- **Why has Brutus been called “the noblest Roman of them all”?**

Ans. While the other conspirators killed Caesar out of envy and ambition, Brutus did so only because of his sheer love for Roman people. He was the only one who had honest thoughts and acted for the benefit of Rome. So, he was called “the noblest Roman of them all.”

“POLYTHENE-A DISASTER”

- **What is polythene? Who discovered it?**

Ans. Polythene is a tough, light, flexible synthetic resin made by polymerizing ethylene, chiefly used for plastic bags, food containers and other packaging.
It was discovered by a German scientist, Hans Von Pechmann.

- **What does Rakesh’s father expect from the kids?**

Ans. Rakesh’s father expects from the kids that they will stop using polythene bags which the elders have so far failed to do.

- **Why is polythene widely used?**

Ans. Polythene is widely used because the bags made from it are cheap and easy to carry. Most people also find it easy to dispose off after use as they are very light and can be easily thrown away.

- **What is biodegradation?**

Ans. Biodegradation is a chemical process by which decaying or decomposition of organic matter takes place. This chemical dissolution of materials is carried out by bacteria, fungi or other biological means.

- **What are the harmful effects of polythene?**

Ans. Polythene has many harmful effects. Diseases like cholera, malaria, etc are caused by the polythene. Since it is non-biodegradable, it increases the infertility of soil. It plays a major role in the blockage of water system like sewerage and water pipes, causing floods during moderate or heavy rainfall.

Nowadays, rivers, lakes and small streams have become dumping sites of polythene bags which has posed threat to plant and animal habitat.

- **How is the soil affected by polythene?**

Ans. Since polythene is non-biodegradable material, it is not decomposed in the soil. After remaining in the soil, it damages the ecosystem of soil by retarding its carrying capacity. Besides, polythene has a property of non-permeability, so it cuts off respiration of soil system which in turn not only affects plant life but other creatures living in the soil.

- **How does polythene affect animals?**

Ans. The polythene bags that lie on the roads are often eaten by stray animals which can cause their death. Besides, it is estimated that about one billion marine animals die each year due to polythene pollution.

- **What is SRO 182?**

Ans. SRO 182 (Statutory rules and orders) is a law made by the Government of J&K on 18th June 2008, by which the use of polythene has been banned within the territorial limits of the state.

- **How can we save our posterity from the harmful effects of polythene?**

Ans. We can save our posterity from the harmful effects of polythene by completely avoiding the use of it. Instead of using polythene, we can use bags made of paper, jute and cotton.

“WRINKLES” --- ARVIND KRISHNA

SUMMARY: The poem “Wrinkles” has been written by Arvind Krishna and translated from the Dogri poem “Jhuriyaan” by Shivnath. The poem describes the infinite sacrifices made by mothers for their children.

In this poem, the poet notices the wrinkles on his mother’s face and intends to iron out these wrinkles. He summons courage to tell his mother of the first wrinkle which she developed at the time of her marriage, when she was uprooted from her garden and planted in the garden of her inlaws. The poet tells his mother that the second wrinkle developed on her face when the poet was conceiving in her womb and nourishing himself on the blood of his mother. The third wrinkle became apparent when she was feeding his son from her breast. It suckled all the attractiveness of her face.

The poet tells his mother that the fourth wrinkle was caused when the poet got married to a girl who tore him away from his mother. The poet desperately asks his mother for the girl whom she has concealed under the folds of his skin. The poet aspires to change his mother back to a girl who used to enjoy life to the fullest. He promises his mother that he would bring everything which she used to enjoy in her youth, only to see her smiling and enjoying her life as a young girl.

Q1. How many wrinkles does the poet find on the mother’s face?

Ans. The poet finds four wrinkles on his mother’s face.

Q2. What does the first wrinkle represent?

Ans. The first wrinkle on the face of the poet’s mother represents the pain that she had at the time of departure from her parent’s home after her marriage.

Q3. What does the second and the third wrinkle represent?

Ans. The second wrinkle represents the suffering that the mother went through when the poet was in her womb sucking every drop of blood in the form of mother’s food.

The third wrinkle represents the time when the poet sucked the attractiveness of her face by sucking milk from her breast.

Q4. What is the poet seeking under the wrinkles of the mother?

Ans. Under the wrinkle of his mother, the poet is seeking the young girl who enjoyed life to the fullest, a girl who was fond of playing hopscotch and the game of pebbles.

Q5. What are the activities the poet’s mother used to do when she was a girl?

Ans. When the poet’s mother was a girl, she used to celebrate Raade festival with fondness. She used to go to the banks of river Tawi to immerse seedlings and bathe during Navratras. She liked to play hopscotch and the game of pebbles.

Q6. How does the poem end?

Ans. The poem ends on an optimistic note. The poet promises his mother to bring her everything which she used to enjoy before her marriage. He says that he will bring colours for Raade, tinsel for her dupatta , the colourful pebbles from across the river Tawi. He urges his mother to become the same girl as she used to be before her marriage.

“MEETING POETS” --- EUNICE DE SOUZA

CENTRAL IDEA: The poets are better assessed through their poems than their personalities. At times, the dress, hair or manner of speech of the poet may confuse or create doubt in our mind but it is always better to aside their looks and go through their poems.

SUMMARY: The poem ‘Meeting Poets’ has been penned down by Eunice De Souza. The poem starts with the poet Eunice stating that she gets confused and disconcerted with the poet sometimes, usually due to their appearance. They are shabby and are not immaculate about their dress and personality. They speak with irritation and bitterness. They have an air of unpleasantness about them yet their poems are beautiful pieces of art. So it is best to assess poets through their poems. The poet says that it is not necessary that a poet who looks shabby and behaves strangely can’t create great works of art. To know a poet truly, we should read his poetry. She compares the poets with cool speckled shells in which one can hear the sound of a sad but distant sea.



Q1. Why is the poet confused when she meets poets?

Ans: The poet is confused when she meets poets because she tries to assess them by their lifestyle. According to her, the poets exhibit dual personality. They may look shabby or behave strangely but their poems can be a great work of art.

Q2. What is the best way to know poets?

Ans: The best way to know poets is to read their poems.

Q3. What does the poet compare the poets with?

Ans: The poet compares the poets with cool speckled shells in which one can hear the sound of a sad but distant sea.

Q4. Explain the phrase _____ wasp in the voice?

Ans: The phrase “wasp in the voice” refers to the bitterness in the speech of the poets.

“STARS SPEAK TO MAN” ---- ABDUL AHAD AZAD

SUMMARY: The poem “Stars Speak To Man” is written by Abdul Ahad Azad in Kashmiri and rendered into English by prof. G.R Malik. The poem is addressed to man. In this poem, the poet tells man that he was born to enlighten the world but he has chosen the fire and showed his insensitiveness, thus putting the humanity to disgrace.

The poet tells man that he was designed to distribute love and affection proportionally among people but he made the business of his religion and thus has lost the faith in religion.

Nature had bestowed him with treasures of bounties to share them equitably, but he, with his selfishness took it all, and sat like a serpent on them, thereby allowing no one to come near it. Man boasts of his love for religion but this love leads him to hate men of other religions. He worships God but follows devil in real life. The poet tells man that his heart is restlessly vibrating and his vision is clouded by fantasies. In his own garden, he cuts the roots while watering twigs and leaves. He has ransacked and ravaged his own home and has forgotten the humbleness, honour, help, sympathy and sharing. The poet asks man to wake up from his fanciful dream and be humane towards his fellow beings.

Q1: What do the stars say to man in the first two lines?

Ans: In the first two lines of the poem, the stars say to man that God had made him the light of reason but he chose to be fire. He became a destroyer. He has put humanity to disgrace and has become callous by heart.

Q2: Nature had fashioned you to apportion love and affection but you took to buying and selling religion and faith instead. Explain these lines?

Ans: In these lines, the poet says that Nature has made man to distribute love and affection among his fellow beings. But instead of spreading love and affection, man started using religion and faith commercially. He forgot the actual purpose he was made for.

Q3: Why is man described as a serpent?

Ans: Nature had thrown open the doors of all its treasures to man. He was supposed to share them equally with his fellow beings. But man confined those treasures to himself only. He sat like a serpent on them, thereby allowing no one to come near it.

OR

Man amasses wealth and sits like a serpent on the treasures God has bestowed him. A man who amasses wealth and makes no good use of it is like a serpent sitting on ground with a treasure underneath. He uses these treasures for himself only, while he was supposed to share them with his fellow beings.

Q4: “that which you call awakening is a stupefying hangover”. Why?

Ans: Man boasts of his love for religion but this love leads him to hate men of other religions. He worships God but follows devil in real life. That is why the poet calls man's awakening nothing but a stupefying hangover. He is drunk with the wine of religion and has forgotten his real self.

Q5: Do you think the poem is a wakeup call? Explain.

Ans: Yes, the poem “stars speak to man” is a wakeup call. In this poem, the poet tries to make man aware of his duties and responsibilities on the earth. He reminds him of what he was made for and what he was doing. With his misdeeds, he has put humanity to disgrace. He is badly caught in the stupefying hangover of selfishness. So the poet asks him to wake up from his fanciful dream and be humane towards his fellow beings.

“SUMMER AND WINTER” --- PERCY BYSSHE SHELLEY.

SUMMARY: The poem entitled “Summer and Winter” has been penned down by Percy Bysshe Shelley. In this poem, the poet makes comparison between summer and winter. Summer symbolizes life and happiness, while winter symbolizes death and lifelessness. The poet begins by describing the bright and cheerful charm of sunny afternoon in the month of June. The poet says that when summer sun rises, all things like the weeds, the rivers, the cornfields and other plants feel happiness. The leaves seem to move freely under the moderate breeze. It seems that summer has brought life on the earth to things that were in a lifeless condition in winter.

In the next stanza, the poet describes winter as lifeless season. The poet says that winter seems to be lifeless for birds; they die’ as they cannot move freely. Fish in this season become firm in the frozen water, which looks slime and sticky. Wrinkled clod becomes hard as brick. The children together with their parents feel cold although in front of fire. The poet feels sorry for the homeless beggars who suffer the harshness of winter and cold.

- **What do the opening lines of the poem describe?**

Ans. The opening lines of the poem describes the sunny afternoon in the month of June when everything seems to be cheerful and full of joy.

- **What is the effect of the shining sun on the objects of nature?**

Ans. Beneath the shining sun, all the objects of nature like weeds, rivers, reeds and cornfields seem to be full of joy. The leaves of trees have become visible in the light and are seen waving here and there.

- **How is winter described in the poem?**

Ans. Winter is described as a terrible season in the poem. Birds begin to die in deep forests. The fish lie stiffened in the translucent ice. People living in comfortable homes gather round the fire and yet they feel cold.

- **Explain the following lines:**

*All things rejoiced beneath the sun...
And firm foliage of the larger trees.*

Ans. In these lines, the poet describes a bright and cheerful summer afternoon. He says that everything on earth seems to be full of joy. The weeds, the rivers, the cornfields, the reeds, the willow leaves glittering in gentle breeze, the firm leaves of larger trees and in fact, all things beneath the sun seem to be full of life and happiness.

- **How does the poem end?**

Ans. The poem ends on a sad note. The poet says that during winter, people living in comfortable homes gather round big fires and yet they feel cold. The poet feels sad to think of the old homeless beggars who have no place to hide their heads in such terrible weather.

LANGUAGE WORK:

- Write down some visual images from the poem.

Ans. Some visual images from the poem are:

Sunny month of June; floating mountains; stainless sky; leaves that glanced; wrinkled clod, etc.

- Pick out the rhyming words from the poem.

Ans. The rhyming words from the poem are:

Afternoon....June;	crowds....clouds;
Weeds....reeds;	breeze....trees;
Die....lie;	makes....lakes;
Cold....old;	when....men;

- Pick out any five adjectives from the poem. Use them in your sentences.

Ans. The five adjectives from the poem are:

- The silver clouds: In summer, we see silver clouds floating in the sky.
- The stainless sky: the stainless sky looks attractive in summer.
- The larger trees: The larger trees are found in the forests of Kashmir.
- The translucent ice: In winter, the translucent ice floats on the surface of water.
- The Homeless beggar: The homeless beggars are always seen begging in the streets of cities.

OR

He has started an institute to help homeless people.

Some other adjectives are:

Cheerful: Everybody likes meeting cheerful people.

Comfortable: My new pair of shoes is very comfortable.

Sunny: It was a bright sunny day.

PLAY “A STRANGE TRAIL”

FROM “ALICE IN WONDERLAND” BY LEWIS CAROLL.

- What did Alice remember?

Ans. Alice remembered following a white rabbit which entered a rabbit hole. Inside the hole, she recalled seeing a whole lot of odd creatures, talking to a king and queen and attending a Mad Tea party. She also remembered drinking a strange liquid which made her grow smaller. Then she ate a cake and began to grow larger again.

- Why, according to Gryphon, were the Jurymen putting down their names?

Ans. According to Gryphon, the Jurors were writing down their names for the fear of forgetting them before the end of the trail.

‘OR’

According to Gryphon, the Jurymen were putting down their names because they feared that they might forget their names before the end of the trial.

- The first witness was: Alice; white Rabbit; Mad Hatter.

Ans. The first witness was Mad Hatter.

- “Give your evidence or I’ll have you executed whether you’re nervous or not.”

(a) Who says these words and to whom?

Ans. The king of Hearts says these words to Mad Hatter.

(b) What do you mean by “I’ll have you executed”?

Ans. It means that the king will give order to his soldiers to kill Hatter.

- What, according to Alice, is the first wise thing that the king has said that day?

Ans. According to Alice, the words “you’re a poor speaker” said by the king to Mad Hatter is the first wise thing that he has said that day.

“OR”

The Mad Hatter pleads in the court that he is a poor man. In reply, the king says that he is a poor speaker. According to Alice, this is the first wise thing that the king has said that day.

- **Knave denies having imitated somebody's handwriting. What evidence does he give?**

Ans. Knave denies having written the letter. As evidence, he says that had he done so, he would have signed it at the end.

"OR"

Knave denies having written the letter. As evidence, he says that there is no name signed at the end of that paper.

- **What happens when the whole pack of cards and all the animals fall upon Alice?**

Ans. When the whole pack of cards and all the animals fall upon Alice, she screams and tries to beat them off. The animals run in different directions and disappear.

- **A strange Trail was a dream which Alice dreamt (T/F)**

Ans. True.

OASIS Hr. Sec. Educational Institute

SUBJECT: SCIENCE

Chapter 14 – Chemical effects of electric current

- The materials which allow electricity to pass through them are called good conductors of electricity. E.g. copper and aluminium
- The materials which do not allow electricity to pass through them easily are called poor conductors or non-conductor of electricity e.g. rubber, plastic and wood.

Conductor of electricity in liquids:

The liquids that conduct electricity are solutions of:

- Acids
- Bases and
- Salts

ACIDS: solutions of sulphuric acid, hydrochloric acid, vinegar containing acetic acid and lemon juice containing citric acid conduct electricity (pH-less than 7)

SALTS: solutions of sodium chloride (common salt), copper sulphate conduct electricity

BASES: solutions of sodium hydroxide, potassium hydroxide and other soluble bases in water conduct electricity (pH above 7)

Difference between solids and liquids as conductors:

Solids	Liquids
1. In solids like copper metal, electricity is passed by electrons (energy flow)	1. In liquids like copper sulphate solution (CuSo_4) electricity is carried by positively charged ions (Cu^{2+}) and negatively charged ions (So_4^{2-}) Cu^{2+} .
2. No chemical change takes place on passage of electric current. Example: if electric current is passed through copper wire, no chemical change takes place in it.	3. A chemical change does take place e.g. if electric current is passed through acidified water it decomposes into hydrogen and oxygen gases. (acidified water-conducts electricity)

Electrolytes:

The liquids which conduct electricity are called “Conducting liquids”

The chemical changes which take place in conducting liquids on passing electric current through them are called ‘chemical effects of electric current’

Therefore a liquid or solution of substance which can conduct electricity is called ‘Electrolyte’ (i.e. a conducting liquid is electrolyte)

Electrolyte is of two types

Strong electrolyte and weak electrolyte

1. **Strong electrolyte:** it is a liquid or solution which conducts electricity very well i.e. good conductor as it contains large no. of ions e.g. sulphuric acid, hydrochloric acid etc.
2. **Weak electrolyte:** it is a liquid which conducts electricity to lesser extent i.e. weak conductor having lesser no. of ions. E.g. lemon juice (citric acid solution); vinegar (acetic acid solution) etc.

Electrode: A solid electrical conductor through which an electric current enters or leaves something like a dry cell is called electrode. They are carbon or metal rods.

Electrodes are of two types:

Anode: the electrode which is connected to positive terminal of battery is called anode (positively charged)

Cathode: The electrode which is connected to negative terminal of battery is called cathode (negatively charged)

Electrolytic cell: an arrangement having two electrodes (cathode and Anode) kept in an electrolyte (conducting liquid) in a vessel is called electrolytic cell. E.g. if we keep two carbon electrodes in a beaker containing acidified water it forms electrolytic cell.

Electrolytic cell is used for carrying out electrolytic chemical reactions by passing electric current through conducting liquid.

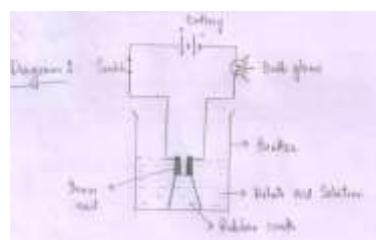
Experiment to show liquid conducts electricity:

The heating effect of current is responsible for glowing of bulb. Take a small beaker. Fix 2 iron nails about 1cm apart on a rubber cork. Place this cork in beaker. The two iron nails will act as 2 electrodes. Connect two nails to two terminals of battery by adding a torch bulb and switch in circuit. Pour a solution of dilute hydrochloric acid in beaker. Now pass electric current, through hydrochloric acid solution. It is observed as we switch on current, the bulb starts glowing. The bulb can glow only if hydrochloric acid solution taken in beaker conducts electricity.

As such glowing bulb in this case tells that hydrochloric acid solution conducts electricity i.e. it is a good conductor of electricity.

In case of bases: e.g. sodium hydroxide and salt like sodium chloride, the bulb also glows but not as brightly as in hydrochloric acid.

(Diagram 1)



Weak conductors of electricity:

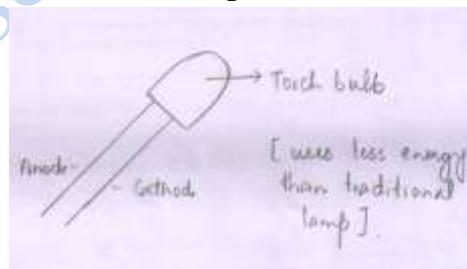
The very dim glowing of bulb indicates that sodium chloride, vinegar and sodium hydroxide conduct electricity but they are weak conductors of electricity.

The weak electric current flowing through liquids having low electrical conductivity can be detected by;

- a) Using light emitting diode: they can be used to detect weak currents as thin filament doesn't require much temperature to glow. They have two terminals called anode and cathode. The length of anode lead is slightly longer than cathode lead and is always connected to positive terminal of battery.

The cathode lead is shorter and is connected to negative terminal of battery. The LED is connected in circuit for detection of electric current where a torch bulb is connected.

(Diagram 2)

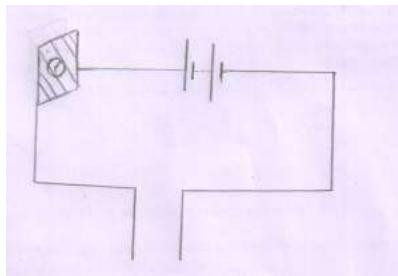


- b) By using compass: the magnetic effect of current is responsible for the deflection in magnetic compass when weak current passes through it. If needle shows deflection, then substance is conducting as illustrated under by using tester:

- Take the tray from inside a blank match box
- Wrap few times an electric wire around tray
- Insert a small compass needle inside it.
- Now connect one free end of wire to the terminal of the battery, leaving other end free.
- Take another piece of wire and connect it to other terminal battery and join two free end of wire together momentarily.
- The compass needle should show deflection. Your tester with two free ends should be ready.
- Touch both ends of tester to any substance to check whether substance is conducting electricity or not.

If deflection is observed in needle then substance is conducting.

(Diagram 3)

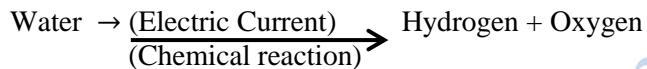


Tap water: the water obtained from various sources like rivers, wells, taps etc. is not in its purest form. It contains many impurities in it. These impurities include different salts. As a result of these salts, the tap water becomes good conductor of electricity.

Distilled water: it is the purest form of water and does not contain any kind of impurities in it. Hence it is bad conductor of electricity

ELECTROLYSIS: the process of decomposition of a chemical compound in a solution, when an electric current passes through it is called electrolysis. Electric current brings about chemical changes and is said to have chemical effect .E.g. when electric current is passed through acidified water by using carbon electrodes, then a chemical reaction takes place to form hydrogen gas and oxygen gas

The chemical reaction can be written as:



- Water is a chemical compound while as hydrogen and oxygen are elements.
- The breaking up of water into hydrogen and oxygen is actually chemical decomposition reaction caused by passing of electric current.

Chemical effects of electric current: some chemical effects of electric current are :

1. **Formation of bubble of gas on electrode**: in 1800 , a British chemist , William Nicholson had shown if electric current is passed through acidified water then :
 - Bubbles of oxygen gas is formed at anode , which is connected to positive terminal of battery and
 - Bubbles of hydrogen gas is formed at cathode connected to negative terminal of battery
2. Deposits of metals may form on electrodes e.g. when electric current is passed through copper sulphate during electroplating.
3. Change of colour occurs when electric current is passed through cut potato

ELECTROPLATING: the process of depositing a thin layer of a desired metal over a metal object with the help of electric current is called electroplating. The metal objects are usually plated with chromium, tin, nickel, silver, gold or copper metals:

The following points should be remembered while electroplating;

- The metal object (e.g. iron object) on which electroplating is to be done is made cathode-connected to negative terminal of battery
- A copper plate metal whose layer is to be deposited is made anode -connected to positive terminal of battery
- A water soluble salt of metal (e.g. copper sulphate solution) is taken as electrolyte. It contains copper metal in dissolved form as copper ions (Cu^{2+})

PROCESS: when electric current is passed through copper sulphate solution, the dissolved copper metal in solution as positively charged copper ions get attracted to negatively charged electrode (i.e. Iron object)

- The positively charged copper ions (Cu^{2+}) lose their positive charge on coming in contact with negatively charged iron object and form copper atoms (Cu).
- These copper atoms deposit on iron object to form thin layer of copper metal all over surface of iron object. In this way copper metal in

electrolyte comes out of solution and form thin layer on iron key. However same amount of copper will get deposited in solution from anode.

Applications of electroplating:

- It is used in industries for coating different metals on other metal objects e.g. chromium which is lustrous , scratch resistant and corrosion free is deposited on materials like car parts, taps, burners etc. to lower manufacturing cost
- Silver and gold are deposited on cheaper materials by jewellers to lower cost by keeping appearance intact.
- Iron cans are electroplated with tin used for storing food as iron gets easily rusted and so protects food from spoiling
- Zinc is deposited on iron used for construction of bridges, vehicles etc. as it protect it from rust and corrosion

TEXTUAL QUESTIONS

2. When free ends of a tester are dipped into solution, the magnetic needle shows deflection. Can you explain a reason?

Ans. The deflection in compass needle shows that current is flowing through wire and hence through the circuit. The circuit is complete since free ends of tester are dipped in a solution. The solution is certainly a conducting solution as a result of which the needle shows deflection.

3. Name 3 liquids which when tested may cause magnetic needle to deflect?

Ans. Liquids like lemon juice, salt water, and vegetable oil allow electricity to pass through them. Hence these liquids can be taken in a beaker to show the passage of electricity as they will show a deflection in magnetic needle.

4. The bulb doesn't glow in the setup. List possible reasons to explain answers?

Ans. The bulb may not glow because of following reasons:
 Liquid in the beaker is non-conducting. In such case, the electric current would not be able to pass through liquid. Hence the circuit is not complete.
 Electric current in the circuit is very weak. This can happen if the material used for making circuit is not good conductor of electricity or battery doesn't have sufficient energy to generate electricity.

5. Explanation of answer: ANSWER IS (i)

The amount of current flowing through a conducting solution depends on conductivity of solution. With more conductivity, more current passes through solution and vice-versa

6. Does pure water conduct electricity? If not, what can we do to make it conducting?

Ans. No, pure water doesn't conduct electricity. This is because pure water is devoid of any salts. Pure water can conduct electricity when a pinch of common salt is added to it, as salt solution is conducting in nature.

7. In case of a fire, before fire man uses hoses, they shut off main electrical supply of area. Explain why do they do this?

Ans. Water may conduct electricity. If the electrical supply for the area is not shut off and water is poured over electrical appliances then electricity may pass through water and harm firemen. That is why, in case of fire, the fireman shuts off electrical supply before they use water hoses.

8. A child staying in a coastal region tests drinking water and also sea water with his tester. He finds compass needle deflects more in case of sea water. Can you explain the reason?

Ans. Sea water contains more dissolved salt than the drinking water. Hence, it is more conducting than drinking water due to which the compass needle deflects more in sea water than in drinking water.

9. Is it safe for electrician to carry out electrical repairs outdoor during heavy down pour? Explain?

Ans. No, it is not safe to repair electrical appliances outdoors during heavy down pour. This is because rain water contains dissolved salts. Therefore, rain water can conduct electricity and the electrician may get electrical shocks while working outdoors during rain.

10. Paheli had heard that rainwater is as good as distilled water. So she collected rainwater in a clean glass tumbler and tested it using a tester. To her surprise she found that the compass needle showed deflection. What could be the reasons?

Ans. Rain water contains dissolved salts which makes it conducting solution. There are no dissolved salts present in distilled water. Hence rain water can allow electricity to pass through it, while distilled water cannot.

11. Prepare a list of objects around you that are electroplated.

Ans. Explained in applications of electroplating-pg. no. 5

12. On book

Ans. Copper ion is positively charged. It is attracted towards the plate which is connected to negative terminal of battery. As copper ions are transferred to thin copper plate, this thin pure copper plate must be connected to negative terminal of battery. Consequently impure copper rod is connected to positive terminal of battery.

“Reproduction in Animals”

1. Explain the importance of Reproduction in organisms?

Ans: - Reproduction is the process by which living organisms produce young ones of their own species. The importance of reproduction in Organisms can be enlisted as:

1. It maintains Continuity of race.
2. Formation and development of reproductive units.
3. Synthesis of proteins.
4. Cell division.

2. Describe the process of Fertilization in Human Beings?

Ans: - Human beings follow the process of Sexual Reproduction characterized by Male and Female Reproductive Organs. The Male Reproductive Organ produce male gametes called ‘Sperm’ while female reproductive organ produce female gametes called ‘Ova or Egg’ cell’.

In Human – beings, internal fertilization takes place where the human male ejects sperms into female reproductive organ called vagina. Inside the body of female, the nucleus of sperm fuses with the ova or egg cell to form a diploid Zygote. This process of fusion is called fertilization. The zygote undergoes repeated division to form a cluster of cells which differentiate into different types of tissues and Organs of body forming ‘Embryo’. Embryo is lined with the uterus of female where it undergoes further development, forming a Foetus having definite body parts and internal organ system.

3. Internal Fertilization occurs in:

1. Female body.
2. Outside Female body.
3. Male body.
4. Outside Male body.

Ans:- In Female body.

b) A tadpole develops into an adult Frog by the process of:

- | | |
|------------------|--------------|
| a) Fertilization | c) Embedding |
| b) Metamorphosis | d) Budding |

Ans:- Metamorphosis:- The Conversion of Late Tadpole into adult Frog.

c) The number of Nuclei present in zygote is:

- | | |
|---------|---------|
| 1) None | 3) Two |
| 2) One | 4) Four |

Ans: - Two Fused Nuclei

5. Give two differences b/w Zygote & Foetus.

Zygote	Foetus
Zygote is a fertilized egg formed mainly after fusion of nuclei of sperm with the nuclei of egg cell or ovum.	It is a stage of embryo that shows all the recognizable body parts of a mature organism.
The zygote divides several times to form an embryo.	An embryo gradually develops into Foetus.

6. Define Asexual Reproduction. Describe two Methods of asexual reproduction in animals?

Ans:- In asexual reproduction a single parent splits, buds or fragments to give rise to two or more young ones that have hereditary traits or genetic composition identical with those of parents. E.g. Amoeba; Hydra; Starfish; Planaria.

The two Methods of asexual Reproduction in animals are.

a) Budding: - In this process the multi cellular organisms E.g. Hydra forms a bulb – like projection called ‘Bud’ on one side of the cell. It results in the formation of a lateral outgrowth. The bud enlarges in size by further cell division and attains shape of parent to which it is attached. Finally it separates from parent body and behaves as new Hydra.

b) Binary Fission: In this process, the parent organism divides into two small, nearly equal sized identical daughter cells. The two daughter cells then grow into adult organisms. Binary Fission involves mitosis, E.g. in unicellular organisms such as Amoeba, Paramecium etc.

7. In which Female reproductive organ does the embryo gets embedded?

Ans: - The Embryo gets lined with the walls of female uterus. The Embryo, Once attached to Uterus gradually develops various body parts such as hands, legs, head, eyes etc. This structure is then called as Foetus.

8. What is Metamorphosis? Give example.

Ans: - Metamorphosis is a biological process in which a larva transforms into an adult. It involves sudden and abrupt changes in the body structure of animal by cell growth and differentiation. It is generally observed in amphibians e.g. frogs and insect's e.g. butterflies etc.

The example of Metamorphosis can be illustrated by the life – cycle of Frog. A frog has three life stages.

a) Eggs: - Eggs are the result of external fertilization which transform into fish like tadpoles. Frog eggs float in a pond called Egg masses.

b) Tadpoles:- Tadpoles hatch from eggs and turn into Froglets. Tadpole has gills, small mouth and fish like tail to swim inside lakes and ponds.

c) Frog: - Tadpoles grow and transform into a small frog capable of jumping and swimming.

9. Differentiate between Internal and External Fertilization?

Internal Fertilization	External Fertilization
It is a process of fusion of male and female gametes inside female body.	The fusion of male and female gametes occurs outside female body.
It does not need water for fertilization of egg cell.	It needs water for fertilization of egg cell.
Survival of organisms produced is higher.	Survival of organisms is lesser.
Low wastage of male and female gametes.	High wastage of male and female gametes.
More parental care is given to offspring.	Unprotected offsprings with no parental care.
E.g. cows, hens, human-beings etc.	E.g. frog, fish etc.

LIGHT

Light: It is a form of energy, which includes sensation of vision in our eyes and makes us able to see various things present in our surroundings

When light falls on an object, some part of light is reflected back to our eyes. It is because of this reflected light we can see different objects.

Properties of light:

- It is a form of energy
- It travels in straight line
- Light can form shadows

Luminous and non-luminous objects:

Luminous objects: the objects which emit their own light are called luminous objects. A luminous object can be seen because the light given by it, enters our eyes e.g. sun, stars, electric bulb, fire flame of a burning candle etc.

Non-luminous objects: the objects which do not emit their own light are called non luminous objects i.e. cannot make their own light e.g. the moon, earth, table, trees, human beings etc.

Experiment on Reflection of light: take a plan strip (plane mirror) and place it sideways on a white sheet of paper so that its reflecting surface is towards the left side. Label it as MM'

Keep the ray box having light bulb inside at position 'A' in front of a plane mirror

By opening slit of ray box, shine a narrow beam of light on plane mirror. Label it 'AO'

It is seen that beam of light AO strikes the mirror surface at point O. It then gets reflected and goes in another direction OB.

Mark point O on sheet of paper and trace path of light rays as AO and OB on paper by using a scale and pencil.

At O draw a line perpendicular to surface of mirror MM'

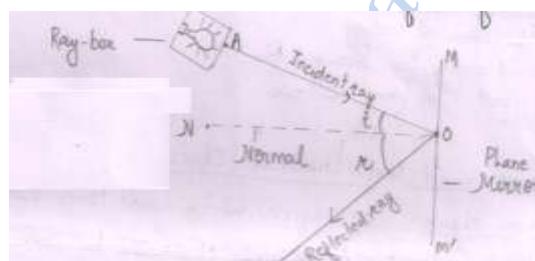


Diagram necessary

Reflection of Light: The process of sending back light rays which fall on the surface of an object is called Reflection of Light.

Important points:

The ray of light which falls on mirror surface is called incident ray.

The point at which incident ray strikes mirror is called point of incidence.

The ray of light which is sent back by mirror is called reflected ray.

The angle between incident ray and normal is called angle of incidence.

The angle between reflected ray and normal is called angle of reflection.

LAWS OF REFLECTION: the reflection of light from a plane mirror takes place according to two laws known as laws of reflection of light.

First law of reflection: the incident ray, the reflected ray and the normal (at point of incidence) all lie in same plane i.e., they are neither coming up out of the paper; nor going down into the paper.

Second law of reflection: the angle of reflection is always equal to angle of incidence.

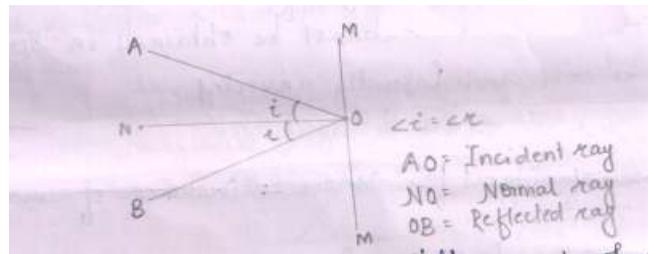


Diagram necessary

Formation of image by plane mirror:

In fig given:

- PQ is plane mirror and 'O' is an object. Incident rays 'OA' and 'OC' are coming from the object. These incident rays are reflected from the mirror and reflected ray emerge as 'AB' and 'CD'. If reflected rays AB and CD are extended behind the mirror, they appear to meet at point I. This is that point where image is formed.

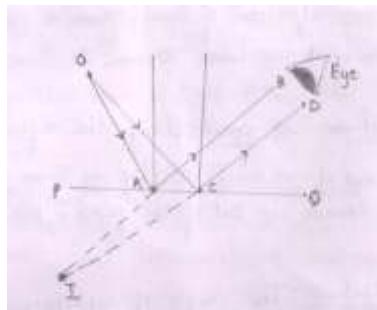


Diagram necessary

- Features of image formed by a plane mirror :

- Obtained image is always formed behind the mirror i.e. image is virtual and cannot be obtained on screen.
- Image is erect and laterally inverted.
- Image size is equal to object size.
- Distance of object from mirror =distance of image from mirror.

Regular and diffused reflection of light:

Regular reflection: in this, a parallel beam of incident light is reflected as a parallel beam in one direction.

Regular reflection of light occurs from smooth, well-polished surfaces of a plane mirror or highly polished metal surface.

All particles of smooth surface are facing in one direction and as such angle of incidence for a parallel beam is same resulting in same angle of reflection.

Regular reflection produces clean image of an object.

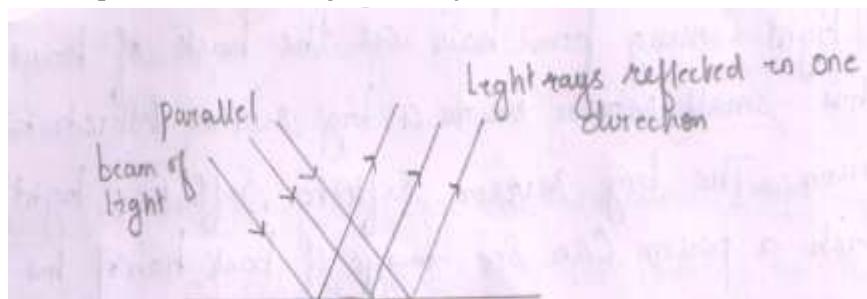


Diagram necessary

Diffused reflection: in this, parallel beam of incident light is reflected in different directions i.e. doesn't remain parallel after reflection.

Diffused reflection: in this, parallel beam of incident light is reflected in different directions i.e. doesn't remain parallel after reflection.

It takes place from rough surfaces like that of paper, chalk, chair, walls etc.

No image is formed in diffused reflection of light.

Diffused reflection is caused by roughness in the reflecting surface of an object

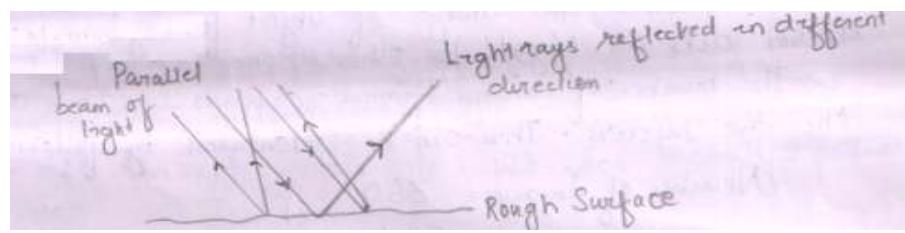


Diagram necessary

Periscope: an optical instrument or device in which reflected light is reflected again is called periscope.

A periscope is a long tubular device through which a person can see objects that are out of direct line of sight .e.g. by using a periscope we can see objects on the other side of a high wall, which cannot be seen by us directly.

Periscope works on reflection of light from 2 plane mirrors arranged parallel to one another.

Example : after giving hair cut to a person , the hair dressers hold a small plane mirror behind his head.

The light coming from hair at the back of head is reflected by this small mirror on to a big mirror which is in front of the person . The big mirror reflects reflected light due to which a person can see image of back hair of his head.

USES of periscope:

1. It is used to see over the heads of crowd.
2. It is used by soldiers sitting in bunker to observe the activities of enemy.

Multiple images: when two plane mirrors are kept inclined at an angle, they can form multiple images for an object. This is because the image of object formed in one plane mirror acts as object for other side of plane mirror.

The number of images formed depends on the angle between the two mirrors. This can be calculated by following formula:

$$\text{Number of images} = 360^\circ / \text{angle} - 1$$

The two planes mirrors inclined at an angle of 90° forms 3 images of an object between them:

$$\text{No. of images} = 360/90 - 1$$

$$= 4 - 1$$

$$= 3$$

Kaleidoscope: it is an instrument containing inclined plane mirrors which produce multiple reflectors of coloured pieces creating beautiful pattern.

Mirrors form multiple images of these glass pieces by repeated reflections which look like beautiful designs.

CONSTRUCTION: it consists of three long and narrow strips of plane mirrors inclined at 60° angles to one another forming a hollow prism; and fitted in a cardboard tube.

One end of cardboard tube is closed by disc having small hole at centre. The other end of cardboard tube is closed with circular disc of glass.

The inner disc is made of transparent glass and outer disc of translucent or ground glass

A no. of small pieces of different coloured glass and having different shapes are kept between 2 discs When we hold the kaleidoscope tube towards light and look inside it through small hole, we see beautiful patterns of coloured glass.

Kaleidoscopes are used by designers of wall papers and fabrics as well as by artists to get new ideas for new patterns.

Dispersion of light: the splitting up of white light into seven colours on passing through a transparent medium like glass prism is called dispersion of light. The seven colours of white light spectrum are violet, indigo, blue, green, yellow, orange and red. Rainbow is natural process showing dispersion of sunlight by tiny rain drops cutting as prism while being suspended in atmosphere.

HUMAN EYE:

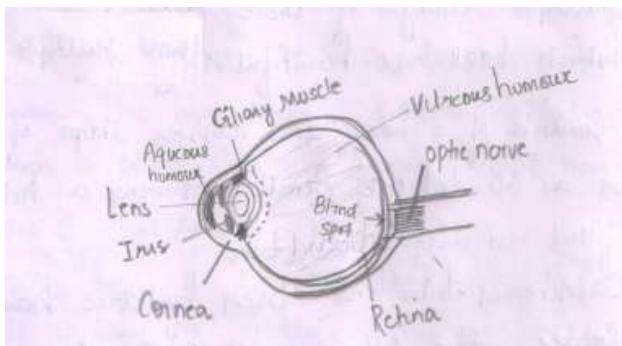


Diagram necessary

The main part of human eye are illustrated as :

1. **Cornea:** the front part of eye is called cornea. It is made up of transparent substance and is bulging outwards .The light coming from an object enters into eye through cornea i.e. by convergence. Its function is to protect eye.
2. **Iris:** It is thin, circular coloured part of eye. It works like the shutter of eye and controls amount of light entering the eye by adjusting size of pupil. The iris has a hole at its centre called pupil.
3. **Pupil:** it appears like a dark spot in the centre of iris because no light is reflected from it. The iris gives distinctive colour to eye e.g. blue eyes ;green eyes
4. **Eye lens:** it is a convex lens made of transparent and flexible material. It is held in position by ciliary muscles and also changes its size as per need
5. **Retina:** the screen of eye is called retina, because the light rays come through pupil and pass through lens to converge on retina. It is light sensitive inner lining at the back of eye.

Optic nerve: It is located at the back of eye. Optic nerve is bundle of over million fibres that carry visual images from retina to brain in the form of electrical signals.

Rods and cons:

RODS: they are rod shaped cells present in retina of an eye which are sensitive to dim light.

They do not provide information about the colour of object

CONS: they are cone shaped cells present in retina of an eye which are sensitive to bright light

Responsible for coloured vision and do not function in dim light.

BLIND SPOT: At the junction of optic nerve and retina in the eye, there are no light sensitive cells (no rods and cons) due to which no vision is possible at that spot. This is called blind spot.

Persistence of vision: the image of an object seen by our eyes remains on retina for about 1/16th of a second even after the object has disappeared from our eyes. This happens because the stimulated light sensitive cells of retina take a little time to return to their original state. Hence the ability of an eye to see the image of an object for a very short duration of even after the object has disappeared from view is called persistence of vision.

This is because if the still pictures of a moving object are flashed on our eyes at a rate faster than 16 pictures per second then because of persistence vision eyes perceive object as moving.

Vision defects: some vision defects are:

1. **Myopia:** (short sightedness) in this eye defect a person cannot see the distant objects clearly, though he can see the nearby objects.
In myopia, image of distant objects is formed in front of retina due to which the person cannot see it.
It is corrected by using spectacles containing concave lenses (diverging lenses).
2. **Hyper metropia:** (far sightedness) in this eye defect a person cannot see nearby objects clearly though he cannot see the distant objects.
In this, the image of object is formed behind the retina, due to which a person cannot see nearby objects clearly.
It is corrected by using spectacles containing convex lens (converging lenses).

CATARACT: the medical condition in which lens of eye of a person becomes cloudy due to formation of membrane over it resulting in blurred vision is called cataract.

It reduces the clear vision of eye and may lead to total loss of vision.

It can be corrected by surgery.

Visually challenged persons: The persons who are unable to see are known as visually challenged person's i.e. disability of vision. Such persons develop their other senses like sense of hearing and touching sharply. For such persons, followings aids are used.

Optical aids: It helps a person who is partially visually challenged.

These aids enlarge an image or text so that they could be visible e.g. magnifying lenses, contact lenses, etc.

Non – optical aids: they are designed for complete visually impaired persons and include

Tactual aids: Braille writer slate.

Auditory aids: talking books, cassettes, tape-recorder audio cd's and voice boxes.

Braille script: it was developed by Louis Braille, who himself was visually challenged. Braille code is used for common language mathematics and scientific notation.

This system has 63 raised dot pattern or character. Each character represents a letter combination of letters. A common word or a grammatical sign dots is arranged in cells of 2 vertical rows of 3 dots each. A reader needs to touch the Braille script.

TEXTUAL QUESTIONS

Q1. Suppose you are in a dark room. Can you see objects in the room? Can you see objects outside the room? Explain.

Ans.. If we are in a dark room, then it is not possible for us to see objects in room. However objects, outside the room are visible to us

An object becomes visible when light reaches our eye after being reflected from object. If there is no light in the room, then objects inside the room cannot reflect any light hence we cannot see in darkroom. If there is light present outside the room, then we can see objects outside the room

Q2. Differentiate between regular and diffused reflection. Does diffused reflection mean the failure of the laws of reflection?

Ans. Regular reflection takes place from a smooth, well-polished surfaces e.g. plane mirror. In regular reflection, all reflected rays are parallel to each other for parallel incident rays. On the other hands, diffused reflection takes place from an irregular surface. In the diffused reflection, the reflected rays are not parallel to each other for parallel incident rays.

This happens because of the presence of irregular microscope surface, due to which the parallel incident rays reflect in different directions. However, each ray obeys the laws of reflection. Therefore laws of reflection are not violated in diffused reflection

Q3. Mention against each of the following whether regular or diffused reflection will take place when a beam of light strikes. Justify your answer.

a. Polished wooden table

b. Chalk powder

c. Cardboard surface

d. Marble floor with water spread over it

e. Mirror

f. Piece of paper

a) Polished wooden surface: shows regular reflection. A polished surface is an example of smooth surface hence reflection from polished table will be regular.

b) Chalk powder: shows diffused reflection Chalk powder spread on a surface is example of an irregular surface. It is not smooth. Therefore reflections from chalk powder will be of diffused pattern.

c) Cardboard surface: diffused reflection cardboard surface is also an example of irregular surface as such reflections will be diffused.

d) Marble floor with water spread over it: shows regular reflection. It is an example of regular surface as water makes the surface of marble smooth, hence will reflect regular reflection.

e) Piece of paper: show diffused reflection although paper may look smooth but it has many irregularities on its surface

Q4. State laws of reflection?

Ans. Already explained

Q5. Describe an activity to show that the incident ray, the reflected ray and the normal at the point of incidence lie in the same plane?

Ans. Explained under reflection of light

Q9. Describe the construction of a kaleidoscope.

Ans: - Explained

Q11. Gurmit wanted to perform activity 16.8 using a laser torch. Her teacher advised her not to do so. Can you explain the basis of the teacher's advice?

Ans: Laser light is harmful for the human eye because its intensity is very high it can cause damage to retina and lead to blindness. Hence it is advisable not to look at a laser beam directly.

Q12. Explain how you can take care of your eyes.

Ans: In order to protect your eye the given points should be taken into account

- Visit an eye specialist regularly
- Avoid reading in dim light and very bright light
- Avoid direct exposure of eyes to sunlight
- Clean your eyes with cold water quickly if dust particles or small insects enter your eye
- Do not rub your eyes
- Maintain a distance of atleast 25cm between the book and your eyes while reading

Q13. What is the angle of incidence of a ray if the reflected ray is at an angle of 90° to the incident ray?

Ans: If the reflected ray is at an angle of 90° to the incident ray, the angle of incidence = 45°
According to the law of reflection the angle of incidence is equal to angle of reflection therefore the angle of incidence and angle of reflection both are $90^{\circ}/2= 45^{\circ}$.

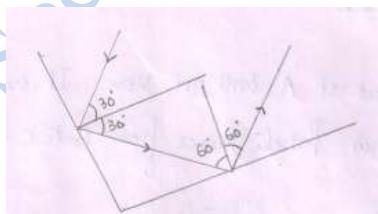
Q14. How many images of a candle will be formed if it is placed between two parallel plane mirrors separated by 40cm?

Ans: Infinite images or multiple images of the candle will be formed because of multiple reflections between the mirrors. When two mirrors are placed parallel to each other then multiple no. of images are formed

Q15. Two mirrors meet at right angles. A ray of light is incident on one at an angle of 30° as shown in figure. Draw the reflected ray from the second mirror.

Ans:

Figure



The 1st law of reflection is used to obtain the path of reflected light. It can be observed that given ray of light from the second mirror at an angle of 60°

The 1st law of reflection is used to obtain the path of reflected light. It can be observed that given ray of light from the second mirror at an angle of 60°

Q16. Yasir stands at A just on the side of a plane mirror as shown in fig. 12.20. Can he see himself in the mirror? Also can he see the images of objects situated at P,Q and R?

Ans:

Figure



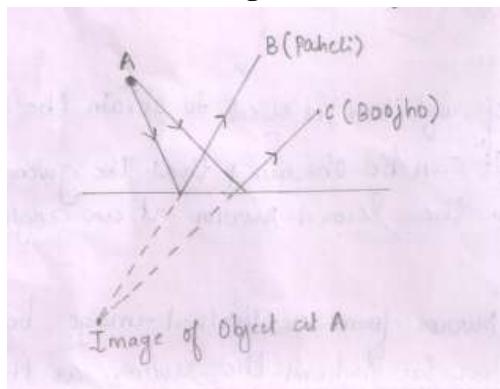
A plane mirror forms a virtual image behind the mirror the image is as far behind the mirror as the object is in front of it. 'A' cannot see his image because length of mirror is too short on his side however he can see the objects placed at points P and Q but not the object placed at the point R

Q17. Find out the position of the image of an object situated at A in the plane mirror. (Fig 12.21)

Ans:

- (a) image of object placed at A is formed behind the mirror and distance of image from mirror is equal to distance of object i.e. A from mirror
- (b): yes
- (c): yes
- (d): image of object at A will not move. It will remain at same position when paheli moves from B to C

Figure



Chapter: 18

Pollution of air and water

Pollution: The presence of unusually high concentrations of harmful or poisonous substances in environment is called pollution.

- **Air Pollution:** Air is mixture of gases. The two main gases present in air are: Nitrogen (78%) Oxygen (21%)

Air also contains small amount of Carbon dioxide, argon, water vapour etc.

The contamination of air with harmful gases (like sulphur dioxide, nitrogen oxides, carbon monoxide) smoke and dust is called air pollution.

A substance becomes an air pollutant when it is present in air in such concentration which is high enough to have harmful effect on living or nonliving things.

Sources of Air pollution: The various sources of Air pollution are enlisted as:

- Use of chlorofluorocarbons in refrigeration, air conditioning and aerosols sprays causes air pollution
- Smoke emitted from homes by burning of fuels like wood, cow dung cakes, coal and kerosene causes air pollution.
- Exhaust gases emitted by motor vehicles due to burning of petrol and diesel cause air pollution.
- Smoke emitted by factories and thermal power plants due to burning of coal causes air pollution.
- Oil refineries and industries engaged in production of metals and manufacture of chemicals causes pollution of air.
- Smoking also causes air pollution.

Harmful effects of air pollution:

- **Sulphur dioxide:** It is produced by burning of coal in industries and by burning of petrol and diesel in automobiles. Such fuels contain sulphur as impurity which burns to produce sulphur dioxide gas. Sulphur dioxide gas in polluted air causes respiratory problems, even leading to permanent lung damage.

- **Nitrogen Oxides:** It is produced by burning of fuels like coal, petrol and diesel. The high temperature produced by burning of fuels makes some nitrogen and oxygen to combine forming nitrogen oxides. Nitrogen oxides attack breathing system, leading to lung congestion. They also attack skin.
- **Carbon monoxide:** It is produced by incomplete combustion of fuels like wood, coal, kerosene and diesel in homes, motor vehicles and factories. It is poisonous gas as on inhalation it combines with hemoglobin of blood and reduces oxygen carrying capacity of blood. This lack of oxygen causes respiratory problems and suffocation.
- **Chlorofluorocarbons (CFC's):** They are chemical compounds made of chlorine ,fluorine and carbon elements They are responsible for depletion of ozone layer of upper atmosphere .The depletion of ozone layer by CFC's will allow extremely harmful ultraviolet radiations of sun to reach earth, causing skin cancer, cataract and destruction of plants including crops.
- **Carbon dioxide:** It is produced by burning of large quantities of fuel such as wood, kerosene, LPG, CNG, petrol and diesel in homes, factories, automobiles etc. It is the main greenhouse gas which traps sun's heat in atmosphere by producing greenhouse effect which leads to Global warming.
Sulphur dioxide and nitrogen oxides also lead to formation of deadly air pollutant called smog.

Acid Rain:

The acid rain is that rain which contains small amount of acids formed from acidic gases like sulphur dioxide and nitrogen oxides present in polluted air.

Acid rain contains very dilute solutions of sulphuric acid and nitric acid, causing damage to living and nonliving things.

The harmful effects of Acid rain are:

- Acid rain damages forests by destroying their leaves. It causes leaves to turn yellow and fall off. In absence of leaves, the roots of trees cannot absorb water from soil and as a result the trees die as soil turns acidic.
- Acid rain causes the water in ponds, lakes and rivers to become much more acidic by increased absorption of aluminium that makes its way from soil into lakes and streams. This makes water unsuitable for survival of crayfish, clams, aquatic plants and other aquatic organisms.
- Acid rain corrodes statues, buildings and historical monuments.

The acid present in acid rain reacts with carbonates present in marble or limestone of monuments and buildings making them to crumble away slowly.

Case study of Taj Mahal:

The Taj Mahal at Agra is beautiful historical monument made of pure, white marbles .The Mathura oil refinery near Agra and various Industries in and around Agra are emitting gaseous pollutants such as sulphur dioxide and nitrogen oxides into air which cause acid rain.

The acids present in acid rain react with marble of Taj Mahal to form a powder like substance causing its discoloring and corroding it slowly. This process is also known as 'Marble Cancer'.

The suspended particulate matter like soot particles emitted in smoke from Mathura oil refinery is discoloring pure white marble of Taj Mahal by turning it yellowish.

As such the Supreme Court has ordered all industries in Agra to switch to cleaner fuels like CNG and LPG to reduce air pollution. (Marble Calcium Carbonate)

Green House Effect: The warming up or heating of earth's atmosphere due to trapping of sun's heat rays by carbon dioxide gas in atmosphere is called greenhouse effect.

Carbon dioxide allows sun's rays to pass through it to reach earth but prevents heat rays reflected from earth's surface from passing out into space, causing earth to warm up. It is due to this warming effect that earth has become habitable planet for millions of life forms.

However due to the rapid burning of fossil fuels and decrease in forests, the amount of carbon dioxide gas in atmosphere is increasing steadily .As a result the extra CO₂ present in atmosphere is trapping more heat energy of sun due to increased greenhouse effect. If amount of CO₂ gas in atmosphere goes on increasing then temperature of earth's atmosphere will also rise thus contributing for global warming.

Global warming: The undue rise in temperature due to excessive greenhouse effect produced by increasing amount of CO₂ gas in atmosphere is called global warming.

The harmful effects of global warming include:

1. It can cause sea levels to increase dramatically by rise in temperature of atmosphere due to increased greenhouse effect, causing melting of ice in Polar Regions.
2. Global warming can reduce rainfall in some areas of earth leading to drought, and as such affecting plants, animals, forests etc.

Green House Gases: These include along with Carbon dioxide, Methane, Nitrous oxide, and CFC's Water vapour.

Measures to control Air Pollution:

- It can be controlled by using smokeless fuels like LPG, piped natural gas (PNG), biogas, solar cookers and solar water heaters.
- The pollution from automobiles can be reduced by using CNG as fuel.
- The pollution from factories, thermal plants, oil refineries etc. can be controlled by washing down their smoke and waste gases with jets of water.
- Plantation of more trees to reduce amount of carbon dioxide responsible for greenhouse effect.
- Natural resources like wind energy, solar energy and hydro energy should be used.

Individual Role in Controlling Air pollution:

Following steps should be taken into consideration:

- Leaves should be converted into compost by burying in a pit, used papers should be sent to paper mill for re use and garbage dumped properly in garbage bins to lower air pollution.
- Planting more and more trees by organizing plantation drive in schools, colleges societies etc.
- Use of bicycles instead of burning fuels like petrol and diesel in vehicles for covering small distances.
- Organising 'Say No to Crackers' during an occasion to reduce level of air pollution.
- Controlling emissions from vehicles and household chimneys.

Water Pollution: The Contamination of water of rivers, lakes, ponds etc. with unwanted and harmful substances is called water pollution. Water is said to be polluted when it becomes unfit for drinking or bathing.

The unwanted and harmful substances which make water impure are called water pollutants.

Sources of water pollution:

The various sources include:

- Dumping of untreated sewage into rivers causes water pollution.
- Use of fertilizers and pesticides in agriculture causes water pollution.
- Discharge of untreated industrial waste into rivers and lakes also causes water pollution.

Harmful effects of water pollution:

- Drinking of water polluted with untreated sewage can cause diseases like cholera, typhoid, dysentery, diarrhea and jaundice.
- Waters of lakes and rivers polluted with fertilizers and pesticides can kill aquatic animals like fish and damage our health through food chain.
- Waters of lakes and rivers polluted with toxic industrial wastes such as mercury, lead, arsenic, nickel and cadmium kills aquatic animals, damages human nervous system and causes diseases such as blood poisoning and cancer.

Measures to control Water pollution:

- Sewage should be properly treated at sewage treatment plants to make it harmless before discharging into nearby rivers.
- Farmers should use limited amount of fertilizers and pesticides in fields so that excessive amount of these harmful chemicals aren't discharged into rivers, lakes and ponds.
- All Industries should treat toxic wastes produced by them to make them harmless before discharging into rivers, lakes etc.
- Garbage should not be thrown into open waters, lakes, rivers etc.

- Water pollution prohibition law for industries producing toxic chemical products should be implemented strictly.
- The idea of reduce; reuse and recycle should be incorporated to reduce water pollution.

3 R's for preventing water population:

It includes:

REDUCE: waste prevention reduces generation of waste which in turn causes reduction in pollution.

E.g.

- While brushing teeth, the tap should not be left open as it wastes several liters of water.
- Reduce use of non-biodegradable materials like things made of plastic, polythene etc.

REUSE: we can reuse the things of daily routine work. E.g.

- Reusing water used for washing vegetables and other household tasks to water garden plants.
- Use cotton or jute bags instead of polythene carrying bag.

RECYCLE: It prevents generation of many greenhouse gases and water pollutants. e.g.

- Materials made of plastic, glass, paper and metal should be recycled to make new items as it generates less solid wastage.

Potable Water: The water which is safe for drinking or consumption is called Potable water. The various methods which can be used to make water potable are:

- By filtering using porcelain candle filter or electric water filter.
- By boiling
- By chlorination i.e., adding chlorine tablets or bleaching powder in required amount of water.

These all methods kill harmful microorganisms present in water and make it suitable for utilization.

Pollution of river Ganga:

It has been highly polluted by village's towns and cities by throwing large quantities of garbage, untreated sewage, toxic industrial wastes, dead bodies of infants, polythene bags and many harmful things directly into the river.

The pollution level in water of river Ganga has been rising for many years. To this effect, a plan to cleanse highly polluted river Ganga and save it was launched in 1985. It is called 'Ganga Action Plan's. The aim is to reduce the pollution in water of river Ganga. However increasing population and industrialization has already damaged river beyond repair.

TEXTUAL QUESTIONS

Q1: What are the different ways by which water gets contaminated?

The water gets contaminated by:

And. Agricultural Chemicals: Farmers use excessive amounts of pesticides and fertilizers to increase crop production. These chemicals get carried away to water bodies due to rains and floods leading to water pollution.

Industrial wastes: Industries release harmful chemicals into water sources, thereby polluting them.

Wastes: Waste materials from kitchens, laundry and toilet sources are also responsible for contaminating water. (also explained in additional Q's)

Q2: At individual level, how can you help reduce air pollution?

Explained on Page no 11/12

Q3: Clear, Transparent water is always fit for drinking. Comment.

No, clear and transparent water is not always fit for drinking. Water might appear clean, but it may contain some diseases causing microorganisms and other dissolved impurities. Hence it is advised to purify water before drinking which can be done by installing purifying systems or by boiling water at 100°C.

Q4: You are a member of municipal body of your town. Make list of measures that would help your town to ensure supply of clean water to all residents.

1. Procurement of required amount of water for all residents should be ensured.
2. Wastage of water by leakage at various places should be taken in account.
3. Proper water treatment must be ensured.
4. Must have sufficient amount of water in tanks to meet emergency situations.
(Also explained on p. No. 12)
5. The area around water pipes must be clean.

Q5. Explain difference b/w pure and polluted air.

Pure air contains around 78% nitrogen, 21% oxygen and 0.03% carbon dioxide. Other gases such as methane, argon, ozone and water vapours are also present in traces.

When this Composition of air is altered by addition of harmful substances or gases such as sulphur dioxide, nitrogen oxide, carbon monoxide and particulate matter, then air is said to be polluted.

Q6: Explain circumstances leading to acid rain. How acid rains affect us?

Burning of fossil fuels such as coal, diesel and petrol releases a variety of pollutants like sulphur dioxide and nitrogen dioxide into atmosphere. These pollutants react with water vapours present in atmosphere to form sulphuric and nitric acid respectively. These acids come down with rain forming acid rain.

(Effects explained on page 10)

Q8: Describe Green House effect.

(Explained on pg – 11) with global warming.

Q9: Prepare a brief speech on Global warming that you have to make in class.

(Explained on page 11)

Q10: Describe threat to beauty of Taj Mahal. (See page 10 & 11)

Q11: Why does increased level of nutrients in water affect survival of aquatic Organisms?

Ans. Do yourself.

Chapter 12

Friction

- **Friction:** The force which always opposes the Motion of one object over another object in contact with it is called Friction. Friction occurs between two surfaces which are in contact with each other e.g when we push a heavy box kept on floor, the force of friction occur between the surface of floor and bottom of a box.
- **Causes of Friction:** Every object has a rough surface, though the surface may appear smooth. However when viewed under Microscope, it is found that surface of all objects have rough edges. Some of the particles on the surface of objects are in the form of tiny hills while others form grooves. The tiny hills and groove's on the surface of objects are called 'Irregularities of surface'. Thus friction is caused by interlocking of irregularities in surface of two objects which are in contact with each other.
- The force of friction is greater if very rough surfaces are involved.
- **Direction of force of friction:-**The force of friction acts in a direction opposite of the direction in which an object moves or tends to move.
- **Example:** - Place a book on the table. Give a push to this book towards the right side. We will find that the book moves for some distance to right and then stops. Since the book moving towards right side stops on its own, which means that, the force of friction is acting on it in opposite direction (Towards left) which is opposing its Motion and Making it stop. Thus the force of friction acts in a direction opposite to the direction of motion of an object.

3. Types of Friction: Friction is of 3 types.

- **Static Friction:** The Maximum frictional force present between any two objects when one objects tends to move or slip over the surface of other object is called Static Friction.
- It is a kind of Starting friction in which the object is actually not moving or sliding over the other object, it only tends to move or slide e.g. hiking in woods, there is static friction between the shoes and trail each time, the foot touches ground, without static friction the feet would slip, making it difficult to move.
- **Sliding Friction:** -The frictional force present when an object moves slowly (or slides) over the surface of another object is known as sliding friction. Sliding friction comes into play when an object is sliding (moving slowly but continuous) over another object. E.g. sliding of a book or a box over ground.
- **Rolling Friction:** -When an object like a wheel rolls over the surface of other objects, the resistance to its motion is called rolling friction. It is always easier to roll than to slide an object over another object. So rolling friction is much less than sliding friction e.g. Use of wheels in auto Mobiles, bicycles, skate boards etc.
- Ball bearing in wheels is also examples of rolling friction.
- **Factors affecting Friction:** Two factors are involved.

a) **Dependence of Friction of Nature of two Surfaces:-** Friction depends on the smoothness or roughness of the two surface which are in contact with each other.

When two surfaces in contact are smooth, then friction b/w them will be small because of less interlocking of smooth surfaces.

- However when the two surfaces in contact are rough, then friction between them will be large because of too much interlocking of rough surfaces.

E.g. place a brick on floor. Tie string around brick and connect it to hooks of spring balance. Apply pulling force to brick by pulling the other end of spring balance till the brick begins to slide on floor and note down reading of spring balance.

Now wrap a piece of polythene around brick and repeat above activity. Note the spring balance reading again. It is observed that this reading of spring balance is smaller than first reading, indicating force of friction has decreased as polythene sheet has made the surface of brick smooth due to which friction of floor decreases.

b) **Dependence of friction on the force with which 2 surfaces are pressed together:** Friction is also caused by the inter locking of irregularities b/w 2 surface in contact. If two surfaces of objects are pressed together harder by a greater force, then friction will increase as it will increase the interlocking in the two surfaces.

Suppose we have two boxes of same size but one box is light and other box is heavy. If we push both the boxes on floor then:

It is easier to push a light box having less weight, as it presses the floor with less force & hence producing less friction.

However, it is difficult to push a heavy box having more weight as it presses the floor harder with greater force & produces more friction.

Note that weight is also a force, acting in downward direction.

- **Advantages of Friction:-**

- Friction enables us to walk without slipping by forming contact between sole of shoes & ground.

- Friction b/w tyres of car & road enable a car to Move forward without skidding.

- Friction enables us to apply brakes and slow down or stop a Moving car.

- Friction by forming a contact between hands & objects enable us to pick up & hold things in our hand.

- Friction b/w pen and paper enables us to write on a sheet of paper.

- **Disadvantages of Friction:**

- The soles of shoes and types of vehicles gradually wear out because of friction.

- Friction wears out the rubbing machine parts.

- Friction produces heat which may damage machines.
- Friction reduces the efficiency of machines and slowdowns its motion.

Methods of Increasing Friction:

- Grooves are made in the soles of shoes to increase friction in order to walk safely without risk of slipping.
- Treads are made in the tyres of vehicles to increase friction and prevent skidding of vehicles on wet roads as presence of water on road surfaces reduces friction and weakens tyres grip on road.
- Spikes are provided in the shoes of players and athletes to increase friction and prevent slipping.
- Gymnasts apply some coarse substance on their hands to increase friction for better grip.
- Machine belts like in flour mills are made of special materials to increase friction and drive machine wheels properly.

Methods of Reducing Friction:

- Friction can be reduced by making the surface smooth by polishing e.g. a slide in the park is polished to make its surface smooth so that children can slide down easily.
- Friction can be reduced by applying lubricants (like oil, grease or fine powder) to rubbing surfaces e.g. when oil or grease is applied to moving parts of machine, then their surface do not rub directly against each other. Instead they rub through a layer of oil or grease which is smooth.
- Friction can be reduced by using wheels to move objects as rolling friction is very small. E.g. all moving vehicles and even heavy suitcases are fitted with wheels to reduce friction.
- Friction can be reduced by using ball bearing between moving parts of machines. Ball bearing is a device which consists of a ring of small metal balls. These balls roll freely and hence are designed to make moving parts of a machine to roll over each other than to slide.

1. **Fluid Friction:** - The substances which are able to flow easily are called fluids. Liquids and gases are fluids as they have no definite shape. Thus water and air are most common fluids.
2. There is friction whenever an object moves through a fluid. It is called fluid friction.
3. Air exerts frictional force on cars, buses, aeroplanes etc.
4. Water exerts frictional force on boats, ships, fishes etc.
5. The frictional force exerted by a fluid is called Drag or drag force.
6. The Magnitude of drag exerted by fluids, depends on:
 - a) Higher the speed of an object moving through a fluid, greater will be the drag or frictional force.
 - b) The objects having streamlined shapes face much less frictional force when moving through a liquid than objects which do not have streamlined shapes. e.g. a car has streamlined shape like wedge, which faces less drag than a bus which doesn't have streamlined shape.
 - c) Larger the size of an object moving through a fluid, greater will be the drag acting on it. e.g. a big flying aeroplane faces more drag than a smaller aeroplane.

Disadvantage of fluid friction:

- It reduces the speed of objects moving through fluid by opposing their Motion and hence makes speeding up harder.
- When objects move through fluids, they lose some of their energy in overcoming fluid friction, decreasing their efficiency.

Methods of Reducing Fluid Friction:-

The fluid friction can be reduced or minimized by giving special shape called 'Streamlined shape' to objects which move through liquid e.g. cars and aeroplane are built with streamlined body shape to reduce its resistance.

The shape of an aeroplane is similar to shape of a bird in flight having streamlined body in middle, 2 thin wings and a tail to overcome drag.



TEXTUAL QUESTIONS

Q1. Why are the worn out tyres discarded?

Ans: The worn out tyres are discarded because their tread are worn off and limiting their effectiveness of providing required amount of friction.

Q2. Why do carom coins move faster on carom board when dusted with talcum powder?

Ans: By adding talcum powder to the board, you are simply reducing friction on the board which is indirectly increasing the tendency of carom coins to move easily.

Q3. Why is the surface of a conveyor belt made rough?

Ans: Rough surface promotes friction. Therefore, roughness of conveyor belt prevents the load from slipping.

Q4. Why a sewing machine is often oiled?

Ans: The sewing machine is often oiled for the smooth functioning of the machine .The oil acts as a lubricant and reduces the friction between the machine parts allowing them to move freely without any disturbance.

Q5. Why new automobile tyres have deep grooves?

Ans: Automobile tyres have deep grooves so that the tyres can grip over the road and land.

Q6. Why does a ball rolling on the ground slow down?

Ans: A ball rolling on the ground slows down due to the force of friction. The force of friction always acts in the opposite direction to the applied force. It opposes the motion of the ball and tries to stop it.

Q7. Why are the boats and aeroplanes given special shapes?

Answer. The aeroplanes and ships have streamlined shaped bodies to reduce drag. The streamlined shaped body experiences minimum resistance when travelling through water or air. It helps to reduce friction.

Q8. Why do meteors burn on entering into the atmosphere?

Ans: The meteors burn on entering into the atmosphere because friction is produced between air and the meteor. The friction produces heat and burns it. Thus, saving us from the impact of meteors.

Q9. Why do painters use sandpaper in polishing doors?

Ans: Sandpapers provide very high force of friction. Painters rub the sandpaper on the wall and on the door for increasing the roughness of the surface of the wall and the door. When roughness increases, force of friction increases and thus adhesive force also increases which helps paint to stick to the door.

Q10. Why is it easier to tie a knot with cotton string as compared to silk string?

Ans: It is easier to tie a knot with a cotton string as compared to silk string because silk string has a polished surface which when knot, slips off its own surface but while in case of cotton it is not as slippery as silk though it also has some small thread like structure which also help in friction.

Fill ups

1. Opposite
2. Static
3. Movement
4. Sliding
5. Streamlined.

Correct statements

1. Sliding friction is less than the limiting friction.
2. The conveyor belts are made rough, in order to increase friction.
3. The friction between two surfaces increases with the increase in the weight of a body.
4. The friction offered by the wheels is called rolling friction.
5. The friction does not depend on area of contact at the two surfaces.

SUBJECT: SOCIAL SCIENCE

GEOGRAPHY

Topic: Human Resources

Q1. Find out of the world's total population which continent has.

- (a) Only 5 per cent (b) Only 13 per cent (c) Only 1 per cent (d) Only 12 per cent

Ans. (a) North America (b) Africa, (c) Oceania (d) Europe

Answer the following questions

Q2. Why people are considered a resource?

Ans. People are considered a resource of a nation. Nature's bounty is also exploited by the people only. Healthy, educated and motivated people develop resources as per their demand.

Q3. What are the causes for the uneven distribution of population in the world?

Ans. The causes and factors for the uneven distribution of population in the world are:

(a) Geographical factors:

- (i) Relief features like plains, plateaus, desert, etc.
- (ii) Climate like extreme or moderate climate.
- (iii) Fertile soil with more agriculture.
- (iv) Minerals attracting industry and people.

(b) Social and economic factors:

- (i) Social facilities like housing, health and education.
- (ii) Economic facilities like employment generating industry.

Q4. The world population has grown very rapidly. Why?

Ans. The world population has grown very rapidly because of many factors:

- (i) Rapid increase in Natural Growth Rate.
- (ii) Eradication of many deadly dangerous diseases.
- (ii) Migration of the people from developing countries to developed nations.

Q5. Discuss the role of any two factors influencing population change?

Ans. The main factors influencing population change are:

- (a) The difference between the birth rate and death rate which is called natural growth rate is the main cause of population change.
- (b) Migration is also one of the main factors that bring about population change. Migration refers to the movement of people in and out of an area or country.

Q6. What is meant by population composition?

Ans. Population composition means the structure of the population that gives a fair idea about age, sex, literacy level, income level, health conditions and occupations of the people.

Q7. What are population pyramids? How do they help in understanding about the population of a country?

Ans. The population Pyramids are the graphical method to show:

- (a) Total population into male and female i.e. sex composition.
- (b) Age group from 0-14, 15-59, 59 years and above.
- (c) Work force.
- (d) Dependent and productive population.

The shape of the population pyramid helps us to know about the people living in that particular country. The numbers of children below 15 years age-group are shown at the bottom and reflect the level of births. The size of the top shows the numbers of aged people above the age-group of 60 years and reflects the number of deaths. The population pyramid also shows that how many dependents and working force/class are there in a country.

Q8. Tick the correct answer:

- (i) What does the term population distribution refer to?

- (a) How population in a specified area changes over time.

- (b) The number of people who die in relation to the number of people born in a specified area.



(c) The way in which people are spread across a given area.

Ans. (c)

(ii) Which are three main factors that cause population change?

- (a) Births, deaths and marriage.
- (b) Births, deaths and migration.
- (c) Births, deaths and life expectancy.

Ans. (b)

(iii) In 1999, the world population reached

- (a) 1 billion
- (b) 3 billion
- (c) 6 billion

Ans. (c)

(iv) What is a population Pyramid?

- (a) A graphical presentation of the age, sex Composition of a population.
- (b) When the population density of an area is so high that people live in tall buildings
- (c) Pattern of population distribution in large urban areas.

Ans. (a)

Q9. Complete the sentences below using some of the following words.

(Sparsely, favourable, fallow, artificial, fertile, natural, extreme, densely)

When people are attracted to an area, it becomes..... populated.

Factors that influence this include.....Climate; good supplies of.....resources and..... land.

Ans. Densely, favourable, natural, fertile.

Q10. Discuss the characteristics of a society with ""too many under 15's" and one with "too few under 15's"

"Hint: Need for schools, pension schemes, teachers, toys, wheel chairs, labour supply, and hospitals.

Ans. People of different age groups have different requirements. If a society has too many under 15s, it will require more teachers, toys, schools as per the needs of children. Labour supply will be less. If a society has too few under 15s, it implies that it has more adult population which will require more pension schemes, hospitals, wheel chairs, labour supply will be more.

Short Answer (SA) Type Questions

Q11. 'Each human is a potential resource for society'. Define?

Ans. Each human is a potential resource for society. Healthy, educated and motivated people develop resources as per their requirements.

In the process, they make several discoveries, inventions and make contributions in several other aspects, leading to the development of their countries and its people.

Q12. What is birth rate?

Ans. Birth rate is one of the influencing factors of population change. Births are usually measured using the birth rate i.e. the number of live births per 1000 people. When birth rate is more than death rate, it is population increase.

Q13. Define death rate.

Ans. Death rate is an influencing factor of population change. Deaths are usually measured using the death rate i.e. the number of deaths per 1000 people. When death rate is more than birth rate, it is population decrease.

Q14. Why is the population pyramid of Kenya broad at the base and narrow towards the top?

Ans. The population pyramid of Kenya is broad at the base and narrows towards the top because:

- many children are born
- a large percentage of them die in their infancy
- relatively few become adults and there are very few old people.

Q15. Explain the population pyramid of Japan?

Ans. The pyramid of Japan is narrow at the base which means low birth rate. Decreased birth rate allows less number of people to reach old age.

The working population is more compared to the children and old population.



Industries of Jammu Kashmir and Ladakh

QUESTIONS WITH ANSWERS

1. Kashmir is known for handicrafts. Discuss?

Ans: A large proportion of population in Kashmir is involved in handicrafts and is getting good economic returns. The Kashmiri handicraft includes the making of qaleens, paper machie, embroidery, metal ware, wicker work, leather and wood carving. The finished products are exported all over the world. Namdas are made of wool of inferior quality and old woollen blankets are used for making gabbas. This industry is concentrated in Anantnag, Rainawari in Srinagar and Baramulla districts.

2. Discuss the mineral based industries of Jammu and Kashmir.

Ans: The extraction of minerals has come up in various parts of Jammu and Kashmir and as such many mineral based industries have been established in public as well as private sector. The calcareous and argillaceous minerals i.e., limestone, gypsum, bauxite and clay are the main ingredients of cement industry and are mainly available in Baramulla, Anantnag, Reasi and Basohli. Some public sector cement plants have been established such as Wuyan cement factory, PCF Ban Brahma run by JK Minerals Ltd and Khrew cement factory run by JK cements Ltd. Besides bricks and tools factories are also located at various locations over the regions. A modern industrial centre is fast emerging at Ban Brahma Jammu which has provided boost to the manufacturing sector in J&K. It deals mostly with fast moving consumer goods (FMCG) and other consumer durables

3. Write a short note on agro based industries of Jammu Kashmir and Ladakh.

Ans: Jammu and Kashmir is an agrarian economy, and agro based industry is the most important industry and even provides raw material for other industries. Paddy is produced in large quantities in this region a modern rice plant has been established at Lethpora Pulwama in 1981. Horticulture is also well established in the valley and a large section of people are directly or indirectly associated with this sector. Fruits such as apples, cherries, apricots etc are exported in large quantities, and also have a well-developed infrastructure for producing finished products like jams, juice and beverages in and around Srinagar, Sopore and Bari Brahma. Many cold storage chains have been established in Lassipora, Pulwama, Srinagar and Jammu regions.

4. Write a short note on the tourism industry of Jammu Kashmir and Ladakh.

Ans: Tourism Industry is being considered as the backbone of the economy for Jammu, Kashmir and Ladakh. The beautiful valleys, snow clad peaks, lakes and springs, attracts people from all over the world. Besides Archaeological, cultural, religious places offer the opportunities for trekking, mountaineering, skiing etc. Many high end hotels are fast coming up at various places across the union territories. Furthermore the growth of adventure tourism and cable car projects provide large employment opportunities across the regions especially in the hospitality sector.

5. Write a short note on paper Machie.

Ans: Paper Machie is a unique, attractive and exclusive handicraft of Kashmir. Paper and pulp are shaped into a variety of decorative articles and colourful designs are painted on them. The centres of production include Rainawari in Srinagar and Anantnag Districts.

Match the following

Carpets (qaleens)	-----	oldest industry
Kangri making	-----	wicker willow
Paper Machie	-----	unique and exclusive handicraft of Kashmir
Pashmina shawl industry	-----	Shahtoosh, Ring shawl, Kanijama
Basohli painting	-----	Jammu Region

Fill in the blanks:

- The ancient and medieval rulers patronised the Handicraft and crafts were flourished very well during the reign of Zain ul Abdin.
- Rambagh silk factory was established in 1897.

HISTORY

Topic: India after Independence

Q1. Imagine that you are a British administrator leaving India in 1947. You are writing a letter home where you discuss what is likely to happen to India without the British. What would be your views about the future of India?

Ans. Students can write letter by including the following points:

- (i) As India is a vast country with diversities of dresses, foods and languages, thus it is very difficult for Indians to survive for a long time. It is very difficult to remain united.
- (ii) Only Britisher can give the enlightenment and happiness to the Indian people. India is not capable of progress without the help of Britishers.
- (iii) Indians must follow European civilisation. Only Britishers can teach them European manners, arts, technology and laws. Without these, Indians cannot claim themselves as civilised.

Q2. Imagine a conversation between a father and son in a Muslim family. After Partition, the son thinks it would be wiser for them to move to Pakistan while the father believes that they should continue to live in India. Taking information from the chapter so far act out what each would say?

Ans. A conversation between a father and son in a Muslim family is as follows:

Father: How is the business for today?

Son: Nothing, there is no buyer. People don't have Shelter or food. How can they buy gold jewellery?

Father: It will take some time for everything to normalise. Be patient.

Son: How can I be patient? The condition of business is miserable. Large number of refugees make the situation worse. Always there is a fear of vandalism. Government does not have enough machinery to control this anarchism. I don't feel safe here. I think we have to shift to Pakistan like Uncle's family.

Father; No, we should not leave our motherland. Why should we go? I have full faith on our leaders.

Son: What will your leaders do for us?

Father: they are trying their best to build up the partitioned' nation. All these problems are temporary. We will all live together peacefully like before. It is only a transitory phase.

Son I know you will not agree. I also love my country. But the depressing condition makes me think otherwise.

Q3. Discuss in your class, one advantage and one disadvantage today of the decision to keep English as a language of India?

Ans. The Constituent Assembly took the decision that while Hindi would be the official language of India, English would be used in the courts, the services and communications between one state and another.

The advantage of this decision is:

It would keep the whole of India united. The South Indian states would not separate themselves from India.

The disadvantage of this decision is:

It would hamper the development and growth of Hindi all over India.

Q4. Discuss in your class whether Mira Behn was right in her view that science and machinery would create problems for human beings. You may like to think about examples of the effects of industrial pollution and deforestation on the world today.

Ans. Yes, Mira Behn was right in her views. Today science and machinery has created immense environmental disorder which is very harmful for human beings.

The examples of the effects of industrial pollution and deforestation are as follows:

Effects of Industrial Pollution

Effects of industrial pollution are:

- i) It contaminates sources of drinking water.
- ii) It releases unwanted toxins into the air.

Effects of Deforestation



Effects of deforestation are:

- (i) It affects the climate in more than one ways. Trees release water vapour and provide required shade that keeps the soil moist.
- (ii) With the clearance of tree cover, the soil is directly exposed to the Sun, making it dry.

Q5 Fill in the blanks

(a) Subjects that were placed on the Union List were....., and.....
Ans. taxes, defence, foreign affairs.

(b) Subjects on the Concurrent List were.....and.....
Ans. forests, agriculture

(c) Economic planning by which both the State and the private sector played a role in the development was called amodel.
Ans. Mixed Economy

(d) The death of sparked off such violent protests that the government was forced to give in to the demand for the linguistic state of Andhra.

Ans. Potti Sriramulu.

Q6. State whether true or false

(a) At independence, the majority of Indians lived in village.
Ans. True

(b) The Constituent Assembly was made up of members of the Congress Party.
Ans. False

(c) In the first national election, only men were allowed to vote.
Ans. False.

(d) The Second Five Year Plan focused on the development of heavy industry.
Ans. True

Q7. What did Dr. Ambedkar mean when he said that "In politics we will have equality, and in social and economic life we will have inequality"?

Ans. Dr. BR Ambedkar played an important role in drafting the Indian Constitution. He felt that political democracy had to be accompanied by economic and social democracy. He felt that giving all the people the right to vote did not make them equal socially or economically. In politics we have recognised the principle of one man one vote and one value.

But in our social and economic structure, we continue to deny the principle of one man one value.

Dr. Ambedkar reiterated that the division between the upper caste and the lower caste has to be wiped out for India to be a true democracy.

Q8. After Independence why was there a reluctance to divide the country on linguistic lines?

Ans. Gandhi's dream of one nation was shattered due to the partition of India, into India and Pakistan. The Congress leaders were sceptical about a further division of states on the basis of language.

The partition of India resulted in the death of millions of people who were killed in the riots between the Hindus and the Muslims.

They feared that this may happen if the country was further divided on linguistic lines.

Prime Minister Jawaharlal Nehru and Deputy Prime Minister Vallabhbhai Patel were against the creation of linguistic states.

Q9. Give one reason why English continued to be used in India after Independence?

Ans. Many members of the Constituent Assembly believed that the English language should be replaced by Hindi. But this idea was opposed by the leaders from non-Hindi areas. They did not want an imposition of Hindi on the people of these areas. They even threatened to

separate themselves from India if Hindi was imposed on them. Finally it was decided that while Hindi would be the official language, English would be used for communication among various States.

Q10. How was the economic development of India visualised in the early decades after Independence?

Ans. The major objectives of India after Independence were lifting India and Indians out of poverty and building a modern technical and industrial base for the country. In 1950, the government set-up a Planning Commission to help design and execute suitable policies for economic development.

There was a broad agreement on what was called a 'mixed economy' model. Here both the State and the Private sector would play important and complementary roles in increasing production and generating jobs.

Q11. who was Mira Behn? Find out more about her life and her ideas?

Ans. Mira Behn (Madeleine Slade 1892-1982), daughter of the British Rear-Admiral Sir Edmond Slade, was a British woman who left her home in Britain to live and work with Mahatma Gandhi.

Madeleine devoted her life to human development, the advancement of Gandhiji's principles and the freedom struggle in India.

Gandhiji gave her the name 'Mira Behn', after Mira Bai, the great devotee of Lord Krishna. She arrived in India in 1925 and took active part in Non-cooperation Movement and imprisoned during 1932-33. She established the Kisan Ashram near Roorkee. After Independence, she

established Pashulok Ashram near Rishikesh and a settlement name Bapu Gram and the Gopal Ashram in Bhilangana in 1952.

Q12. Find out more about the language divisions in Pakistan that led to the creation of the new nation of Bangladesh. How did Bangladesh achieve independence from Pakistan?

Ans. After division of India in 1947 into India and Pakistan (West and East), the Urdu speaking rulers of West Pakistan kept torturing the Bengali speaking population of East Pakistan. A time came when the East Pakistani Population rose in revolt against West Pakistan. The government committed atrocities on the Bengalis and thousands of them came to India as refugees.

The Bengali population formed Mukti Vahini under the leadership of Muziburr Rehman. After a long Struggle Bangladesh achieved Independence in 1971.

Short Answer (SA) Type Questions

Q1. Why was the nation in mourning less than 6 month after Independence ?

Ans. Less than six months after Independence, the nation was in mourning as on 30th January, 1948, the father of the Nation Mahatma Gandhi was assassinated. He was assassinated by a fanatic Nathuram Godse. Nathuram Godse did not believe in Gandhiji's conviction that Hindus and Muslims should live together in harmony. So he Killed Mahatma. Jawaharlal Nehru described it as "the light has gone out of our lives and there is darkness everywhere.'

Q2. How was the right to vote granted in United Kingdom and the United States?

Ans. The right to vote in the United Kingdom and united states was granted in stages. In first stage only men holding the property had the right to vote. Then, men who were educated constituted the second stage. Lastly, men belonging to working class had the right to vote only after long struggle. The American and British women were also granted the voting right after a long struggle.

Q3. How did the new state of Andhra came into being?

Ans. A veteran Gandhian Potti Sriramulu went on a hunger strike demanding the formation of Andhra state to protect the interests of Telugu speakers. As the fast went on, it attracted much support, hartals and bandhs were observed. When Potti Sriramulu died on 15th December 1952, the protest became intense and widespread. The Central Government had no option but to admit the demand of separate state. On 1st October, 1953, new state Andhra Pradesh came into being.

Topic: The making of National Movements 1870s-1947

Q1. Find out about the Jallianwala Bagh Massacre.

(i) What is Jallianwala Bagh?

Ans. Jallianwala Bagh is a garden near the Harmandir Sahib in Amritsar.

(ii) What atrocities were committed there? How were they committed?

Ans. On 13th April, 1919 on the day of traditional Baisakhi festival, thousands of Sikhs, Muslims, and Hindus gathered in Jallianwala Bagh. On hearing that a meeting had assembled at Jallianwala Bagh, General Dyer went with his army and ordered them to shoot at the crowd. Without warning the crowd to disperse he blocked the main exits.

Q2. Why were people dissatisfied with British rule in the 1870s and 1880s?

Ans. People were dissatisfied with the British rule in the 1870s and 1880s.

The reasons behind this were:

- i) The Arms Act was passed in 1878. The Act disallowed Indians from possessing arms.
- ii) The government tried to introduce Ilbert Bill in 1883. The bill made provisions for trial of British or European persons by Indians.

Q3. Who did the Indian National Congress wish to speak for?

Ans. The Indian National Congress wished to speak for all the people of India, irrespective of class, colour, caste, creed, language or gender. It stated that India, its resources and systems were not for any one class or community of India, but for all the different communities of India.

Q4. What economic impact did the First World War have on India?

Ans. The First World War changed the economic and political situation in India as:

- (i) There was a huge rise in the defence expenditure of the Government of India.
- (ii) The government increased tax on individual incomes and business profits.
- (iii) There was a great demand for industrial goods due to the war and this resulted in the decline of European goods being imported into India. This in turn gave the Indian Industrialists a chance to expand their production.

Q5. What did the Muslim League resolution of 1940 ask for?

Ans. In 1940 the Muslim League passed a resolution demanding "Independent States" for Muslims in the North-Western and Eastern areas of the country. The resolution did not mention partition of India or Pakistan.

Q6. Who were the Moderates? How did they propose to struggle against British rule?

Ans. During the first twenty years, after its formation the Congress was "moderate" in its objectives and methods. Some of the moderate leaders were Dadabhai Naoroji, Pherozeshah Mehta, Badruddin Tyabji, WC Bonnerji, Surendranath Banerji, Romesh Chandra Dutt, S Subramania Iyer.

- (i) They proposed to struggle against the British in a non-violent manner, which the Radicals called the politics of prayers.
- (ii) They demanded that Indians be placed in high positions in the government.
- (iii) They wanted the Legislative Council to be made more representative, given more power and introduced in provinces where it was not.
- (iv) They criticised British rule and sent representatives to different parts of the country to mobilise public opinion.

Q7. How was the politics of the Radicals Within the Congress different from that of the moderates?

Ans. In Bengal, Maharashtra and Punjab, many leaders adapted more radical means to gain freedom from the British. Some of the important Radical leaders were Bipin Chandra Pal, Bal Gangadhar Tilak and

Lala Lajpat Rai who were known as Lal Bal Pal. They criticised the moderates for their politics of prayers and emphasised the importance of



self-reliance and constructive work. Radicals argued that people rely on their own strength, not on the good intentions of the colonial power.

Q8. Discuss the various forms that the Non-cooperation Movement took in different parts of India. How did the people understand Gandhiji?

Ans. During 1921 and 1922 the Non-Cooperation movement gained impetus. Thousands of students left government controlled schools and colleges. Many lawyers like, Motilal Nehru, CR Das, Raja Gopalachari and Asaf Ali gave up their practices.

People lit public bonfires of foreign cloth. The imports of foreign cloth fell drastically between 1920-1922.

In Kheda, Gujarat, Patidar peasants organised non-violent, campaigns against high land revenue fixed by the British.

Q9. Why did Gandhiji choose to break the Salt Law?

Ans. The British introduced a law stating that the state had a monopoly on the manufacture and sale of salt. It also imposed a tax on the sale of salt. Mahatma Gandhi and other national leaders felt that it was wrong to impose tax on salt which was an essential commodity for food. The leaders decided to oppose this tax. In 1930, Gandhiji declared that he would lead a march to break the Salt Law. The Salt March was related to the desire for freedom felt by all the rich and the poor. Gandhiji and his followers marched for over 240 miles from Sabarmati to the coastal town of Dandi where they broke the government law by gathering natural salt found on the sea shore and boiled sea water to produce salt. Peasants, tribals and women participated in large numbers. Pamphlets were published on the Salt Satyagraha.

Q10. Discuss those developments of the 1937-47 period that led to the creation of Pakistan?

Ans. The developments of the 1937-47 period that led to the creation of Pakistani are follows:

(i) In 1937, the government announced elections to the provincial legislatures. The Congress was victorious in 7 out of 11 provinces and formed governments in the 7 provinces. This result convinced the Muslim League that Muslims were a minority.

(ii) In 1940, the Muslim League passed a resolution demanding 'Independent States' for Muslims in the North-Western and Eastern areas of the country.

(iii) In 1946, elections to the provinces were held. The Congress did well in the 'general constituencies' at the same time the Muslim League succeeded very well in areas where seats were reserved for Muslims.

Q11. Find out how the National Movement was organised in your city, district, area or state. Who participated in it and who led it? What did the movement in your area achieve?

Ans. Organisation of National Movement in our city:

- Visit of Gandhiji
- Formation of Action committees.
- Prabhat Pheries and Rallies
- Protest march to district headquarters.

Q12. Find out more about the life and work of any two participants or leaders of the National Movement and write a short essay about them. You may choose a person not mentioned in this chapter.

Ans. Life and work of two leaders

Chakravarti Rajagopalachari

- He is speaking to Gandhiji before the Gandhi-Jinnah talks, 1944.
- A veteran nationalist and leader of the Salt Satyagraha in the South. C.

Rajagopalachari is popularly known as Rajaji.

- He served as member of the Interim Government of 1946 and as free India's first Indian Governor-General.

Sardar Vallabhbhai Patel

He played an important role in the negotiations for independence during 1945-47.

- Patel hailed from an impoverished peasant-proprietor family of Nadiad, Gujarat.

- A foremost organiser of the freedom movement from 1918 onwards, Patel served as President of the Congress in 1931.

Short Answer (SA) Type Questions

Q1. Explain the consequences of the partition of Bengal?

Ans. The consequence of the partition of Bengal were:

- The partition of Bengal made people angry all over India.
- All sections of the Congress including moderates and radicals opposed it.
- Large public meeting, demonstrations were organised and new methods of mass protest took place.

Q2. Name the Congress leader who did not share Gandhiji's ideal of Ahimsa but respected him as the 'Father of the Nation'.

Ans. Netaji Subhas Chandra Bose did not share Gandhiji's ideal of Ahimsa, but he respected him as the 'Father of the Nation'.

Q3. Name a significant woman leader of Dandi March?

Ans. Sarojini Naidu was a significant leader of the Dandi March.

Q4. Name the President of the Nabrangpur Congress, Orissa in the 1930s.

Ans. Baji Mohammed was the President of the Nabrangpur Congress, Orissa in the 1930s.

Q5. What was the main slogan of the demonstration against the Simon Commission?

Ans. Simon Commission was met with demonstration with banners saying 'Simon Go Back'.

Q6. What was the slogan of Quit India Movement?

Ans. The slogan of 'Quit India Movement' was "Do or Die".

Formation of erstwhile Jammu and Kashmir state and the Dogra Rule

1. Match the Following

Gulab Singh	-----	regularized the shali system
Ranbir Singh	-----	civil and criminal code of law
Pratap Singh	-----	state council
Hari Singh	-----	Land alienation Regulation of 1933

2. Fill in the blanks

- Gulab Singh formed the state of Jammu and Kashmir.
- The establishment of Raghunath Patshala and library was done by Maharaja Ranbir Singh.
- Beggar was the most inhuman practice where the peasants were forced to work without wages.
- Walter Lawrence was appointed as the Revenue Settlement Commissioner of Kashmir in 1889.
- Maharaja Hari Singh passed regulations against untouchability and threw open the doors of temples for the lower castes.

3. State whether true or false.

- Residency was established during the reign of Maharaja Ranbir Singh. **False**
- Dar ul Terjimah was the finance department of the state. **False**
- Gurmat Kanya Pathshala was the first girl's school in Jammu region. **True**
- The agriculturist Relief Regulation was passed in 1926. **True**

4. Let's discuss.

a) Discuss the role of Maharaja Ranbir Singh in the field of education.

Ans: Maharaja Ranbir Singh was himself a Persian scholar and he encouraged religious education through the study of classical languages-Persian, Arabic and Sanskrit. Institutions such as the Raghunath Temple Pathshala, a library and a Mahavidyalaya were established. The Dogra court patronized all languages and scripts. Maharaja's unprecedented zeal for dissemination of knowledge resulted in the establishment of Ranbir Press in 1882 CE, perhaps considered as being the first press in the state, Maharaja Ranbir Singh believed in providing education for all classes of its subjects and founded a few state sponsored institutions. |

b) Briefly describe the steps taken by Maharaja Hari Singh to ameliorate the position of women in the state?

Ans:- Maharaja Hari Singh on his accession to the throne took stringent measures to eradicate the evil practices like sati, child marriage, prohibition of widow remarriage, female infanticide and immoral trafficking etc. and hence tried to ameliorate the position of women. Some measures are listed below

- A special trust called Dhandevi Memorial Trust was created. This trust extended financial help to the girls at the time of their marriage out of Dhandevi Kanya Fund.
- To prevent child marriage, Maharaja passed Infant Marriage Prevention Regulation in 1928AD.
- Widow Remarriage Act and Property Regulation of 1931 AD gave liberty to the widows to remarry and live their lives according to their own will.

c) Write a short note on the cultural development in Jammu during the Dogra period with special reference to theatre and drama.

Ans:- The Dogra state patronized local theatrical groups in Jammu after taking cue from the annually visiting Ramleela and Rasleela companies from Mathura and Vrindavan. The first native performing group was Raghunath Theatrical Company which was set up inside the premises of Raghunath Temple. In the later years of Dogra rule, the Dogri Sanstha established in 1943 (AD) promoted Dogra culture and initiated the process of performing original Dogri plays like Baba Jitto, Sarpanch, Nama Gran, etc. During the 19th and 20th century, Jammu region had active regional folk theatres like Tamachra, Bhagtaian and Haran.

d) Highlight the major public welfare works undertaken during the Dogra period in Jammu and Kashmir.

Ans: Establishment of Local Self Government

With the establishment of Regency in the state in 1885, the state government took initiative and passed Municipal Act of 1886 to give representation to the common people in the local bodies. Thus, Municipalities were set up in the capital towns of Jammu and Kashmir.

Roads and Railways

The construction of roads and railways network was also taken up which connected the state to the outer world and led to the flourishing of trade and commerce in the state.

Irrigation

Several irrigation projects were taken up during the 'Dogra rule. Martand Canal, Pratap Canal, Basantarpur Canal and Upper Jhelum canal were opened up. The Ranbir canal was the largest one in Jammu province used to irrigate the entire area from Akhnoor to Ranbir Singh Pura tehsil. For free and potable supply of water, modern water boxes were established in both the provinces of the region. For generation of power, hydroelectric power plants were set up, one at Mohra, in Kashmir in 1902 (AD) and the other in Jammu.

Public Health care

The modern medical facilities came into existence during the later period of the Dogra rule.

In order to provide better health facilities, the state Government took initiatives to fight epidemics like cholera and small pox. Maternity hospitals and sanatoriums were established in both the provinces of Jammu and Kashmir. During the reign of Maharaja Hari Singh, Sri Maharaja Gulab Singh Hospital (SMGS) was established in Jammu and Sri Maharaja Hari Singh Hospital (SMHS) was opened in Srinagar.

Sericulture and Horticulture

Strenuous efforts to revive the sericulture department were taken up during Maharaja Pratap Singh's reign. A cocoon rearing factory was established in Srinagar in 1907. Seeds for rearing silkworms were imported from Italy and France and were distributed among the peasants. Due to these efforts the state became the largest producer of raw cocoons in the world.

OASIS Hr. Sec. Educational Institute

CIVICS

Topic: Public Facilities

Q1. You have seen the four situations are illustrated. Based on these, what impression do you get of the water situation in Chennai?

Ans. From this, we get the impression that water situation is not good in Chennai. There is shortage of supply and demand is high. As a result of this, only those who can afford to pay more have sufficient access to water and those who are poor cannot.

Q2. Pick out the various sources of water for household use from the description alongside?

Ans. Municipal water, private borewell, water tanker are some of the various sources of water for house hold use.

Q3. What, in your view, is similar and what is different in Subramanian's and Padma's experiences?

Ans. Similarities in Subramanian and Padmas experiences are as follows:

- Both face the problem of water shortage.
- Both use borewell water.
- Both get water from tankers.

Difference in Subramanians and Padmas experiences are as follows:

- Subramanian gets municipal water once in two days. Padma does not have a tap connection.
- Subramanian uses borewell water for washing and sanitation purposes. Padma uses borewell water for washing and drinking.
- Subramanian spends upto 500-600 per month on buying water from the tankers.

Padma cannot afford money for buying water.

Q4. What are public facilities? Why should the government be responsible for providing public facilities?

Ans. The facilities of basic necessities that are required by every person for a decent and dignified living are called public facilities. These include water, electricity, transport, schools, sanitation, etc. It is the government which has to take the responsibility of providing public facilities because private Companies work for their profit whereas the government works for public welfare.

Q5. Why do you think there are so few cases of private water supply in the world?

Ans. This is because private companies work for profit and not for public welfare. They provide water supply at a price which only some people can afford. This leads to huge protests by the people thereby forcing the government to take back the service from private companies. This is why; there are so few cases of private water supply in the world.

Q6. Do you think water in Chennai is available to and affordable by all?

Ans. No, in Chennai, water is not available to all equally and it is not affordable by all. The municipal water supply meets only half the needs of the people of the city. There are areas which receive more water than others as they are closer to the storage point. The poor people are the worst sufferers as they do not have a water connection and even the brackish water from borewell is available for only 20 minutes every day. They cannot afford to buy bottled water, so they have to make do with the poor quality and limited supply of water. Those comparatively well-off get submersible pumps installed and buy bottled water.

Q7. How is the sale of water by farmers to water dealers in Chennai affecting the local people? Do you think local people can object to such exploitation of groundwater? Can the government do anything in this regard?

Ans. The sale of water by farmers to water dealers in Chennai has affected the lives of local people adversely. They are facing severe water shortage because of this. Yes, the local people can object to such exploitation of groundwater as it is a public good and its over-exploitation is leading to water shortage in the locality. The government can do a lot in this regard. It can



ban private companies from entering in monetary transactions with villagers and buying water resources from them. Villagers should also be prohibited from selling water for money.

Q8. Why are most of the private hospitals and private schools located in major cities and not in towns or rural areas?

Ans. Private Schools and hospitals work for profit; they do not have public welfare as their priority. They exist in major cities because people there can afford to pay higher for the services whereas people living in towns and rural areas cannot.

Q9. Do you think the distribution of public facilities in our country is adequate and fair? Give an example of your own to explain?

Ans. No, the distribution of public facilities in our country is not adequate and fair. All persons living in our society do not have equal access to public facilities. For instance, water supply system is better in localities comprising wealthy people. Moreover, they can buy packaged water from private companies. In poor localities, there is always a problem of water shortage. Nor can they afford to buy water from private companies. The situation is same with regard to healthcare and hospitals too.

Q10. Take some of the public facilities in your area, such as water, electricity, etc. Is there a scope to improve these? What in your opinion should be done? Complete the table.

	Is it Available?	How can it be Improved?
Water		
Electricity		
Roads		
Public Transport		
Ans.	Is it Available?	How can it be Improved?
Water	Yes	Quality of water should be checked and monitored. Saving, conserving and recycling of water should be encouraged.
Electricity	Yes	By saving it, avoiding wastage and checking illegal connections/power theft.
Roads	Yes	By using better material and ensuring regular repair and maintenance. There should be footpaths on either side
Public Transport	Yes	Better connectivity and more number of buses on roads.

Q11. Are the above public facilities shared equally by all the people in your area? Elaborate?

Ans. No, the above public facilities are not shared equally by all the people in my area. The public facilities like water, electricity, health care do exist but the richer people have better access to them because they can afford to pay more for those services.

Since, the poor cannot afford to pay much, they avail government subsidized public facilities which are very poor in quality.

Q12. Data on some of the public facilities are collected as part of the census. Discuss with your teacher when and how the census is conducted.

Ans. The census is conducted every 10 years. It is for counting the entire population of the country. It also collects detailed information about the people living in India- their age, schooling, profession, religion etc. The information is collected in a prescribed form. It is collected by enumerators who visit each and every household.

Q13. Private educational institutions- schools, colleges, universities, technical and vocational training institutes are coming up in our country in a big way. On the other hand, educational institutes run by the government are becoming relatively less important. What do you think would be the impact of this? Discuss.

Ans. The private educational institutions are coming up in a big way in our country today. But if this continues, then there would be a monopoly of private educational institutions.

Since private institutions work with profit motive, they keep the prices high. The high fees will deprive poor people from getting education. Thus, it is important for government to run educational institutions to work towards providing affordable education to all.

Social exclusion and inclusive policy in Jammu and Kashmir

TEXTUAL QUESTIONS

1. How would you explain social exclusion?

Social Exclusion is a condition in which individuals are unable to participate fully in political, social, economic and cultural life. Social exclusion is not only a phenomenon but a process too. Social exclusion got its first existence in France, where it was used by Paul Lenior in 1974. Social exclusion refers to identify the situation of certain excluded groups under one umbrella which includes physically and mentally challenged children, substance abusers, delinquents, single parents and marginal. Social exclusion is a complex and multi-dimensional situation having political, social and cultural ramifications.

2. Do you think some people feel socially excluded? If so, why?

Yes, there are certain groups of people who feel socially excluded due to various reasons. Some forms of social exclusion include:-

- a. Economic Exclusion: Deprivation in relation to basic needs and material goods. It is inadequate access to government and non-government healthcare, education, housing, employment, insurance etc.
- b. Political Exclusion: Inadequate participation and representation in democratic institutions and processes. These institutions and processes include expressing opinions, elections, political parties, parliament etc. It is the deprivation of opportunity to engage with and contribute to functioning of these institutions and processes.
- c. Cultural Exclusion: A lack of consonance with basic rules of society.
- d. Social Exclusion: A lack of participation in formal and informal social networks.

3. How special ability leads to social exclusion?

People with special abilities are undoubtedly among the most vulnerable and remain at risk of social exclusion. More than any other socially excluded group, people with special abilities remain invisible in political agendas, human rights struggle, development strategies and in science research. Generally, for Special Abled People the world is beyond reach. The most ordinary aspirations like to enter educational institution, to work, to go out to worship, get married etc. are frequently denied. Persons with special abilities have remained at the outer periphery of both society and Government policies.

4. Describe initiatives for social inclusion in Jammu and Kashmir.

The Government of Jammu and Kashmir has been working towards strengthening norms and values of social inclusion. The department of Social Welfare, Nodal Agencies of Govt. of Jammu and Kashmir work in holistic manner with other Government Departments, agencies, NGOs and civil society for more inclusion of Specially Abled persons to make the society more inclusive. Social Welfare Department of Jammu & Kashmir Government has formulated various policies and programs like Pre-Matric and Post-Matric Scholarship Schemes for students with special ability. Reservations for specially abled in Educational Institutions, in Public Employment etc. were in accordance with the Fundamental Rights as enshrined in the constitution of India. The Government has been providing special unemployment allowances to all educated unemployed specially abled persons. The schemes are applicable to a person with minimum qualification from matric to Master's degree.

5. Who used the term social exclusion for the first time?

Paul Lenior used the term social exclusion for the first time in 1974.

6. What is the total population of especially abled in J&K?

The total population of especially abled persons in erstwhile state of J and k is 363105 lakhs.

7. What is the nomenclature used for dumb and deaf?

Nomenclature for dumb and deaf is 'hearing impaired'

Law and Social Justices

Q1. Talk to two workers (for example, construction workers, farm workers, factory workers, workers at any shop) to find out if they are receiving the minimum wages laid down by law?

Ans. Construction workers do not receive the minimum wages. Factory workers do get minimum wages.

Q2. What are the advantages to foreign companies in setting up production in India?

Ans. Following are the advantages to foreign companies in setting up production in India:

- (i) Cheap labour
- (ii) Fewer additional expenses (housing facilities etc.)
- (iii) No strict safety standards to follow

Q3. Do you think the victims of the Bhopal gas tragedy got justice? Discuss.

Ans. No, the victims of the Bhopal gas tragedy did not get justice. The victims of the gas leak have still not been rehabilitated. Three decades later, they are still fighting for safe drinking water, health standards and jobs for living. They are yet to get adequate compensation for the suffering caused. Their cases are still pending in numerous courts.

Q4. What do we mean when we speak of law enforcement? Who is responsible for enforcement? Why is enforcement so important?

Ans. Law enforcement means implementation of the laws made by the government on ground without discrimination. The government is responsible for enforcement.

Enforcement of laws is important because:

- (i) Rules and procedures would be flouted rampantly without it.
- (ii) The Bhopal gas tragedy took place because of lax safety laws in the country.

Q5. How can laws ensure that markets working a manner that is fair? Give two examples to support your answer.

Ans. Laws can ensure that markets work in a fair manner by:

- (i) Enforcing the law against black marketing by regular surprise checks to curb hoarding of items.
- (ii) Anti Child Labour Act must be enforced to check exploitation of children by sealing shops and industries those employee children.

Q6. Imagine yourself to be a worker working in a chemical factory, which has received orders from the government to move to a different site 100 kms away from the present location. Write about how your life would change. Read out your responses in the classroom.

Ans. I work in a chemical factory. This factory is going to be shifted to another town which is 100 kms away from here. This is because the factory has received orders from the government to shift location. I am in a big dilemma. I cannot leave the job because I do not have any other livelihood and I am the only bread-earner of the family. There are many expenses at home like house rent, children's education etc. If I shift my location to somewhere close to the factory, then there would be increase in expenditure, I will have to pay for house rents and other facilities for two settlements. If I shift my family to the new town, then my children's education will be affected as there is no proper school there with affordable fees. If I leave them here, I will also be constantly worried about their safety. I do not know what to do.

Q7. Write a paragraph on the various roles of the government that you have read about in this unit.

Ans. Various roles of the government are as follows:

- Provide public facilities for a decent standard of living of all citizens.
- Make laws for the protection of people from exploitation by the market.
- Enforce laws to ensure their proper implementation and punish those who flout the rules/disobey the laws.



Q8. What are the sources of environmental pollution in your area? Discuss with respect to:

- (a) air (b) water and (c) soil.

What are the steps being taken to reduce the pollution? Can you suggest some other measures?

Ans. Sources of environmental pollution in my area are:

- (a) Air: Vehicular emissions, factories emitting hazardous gases.
- (b) Water: Disposal of industrial waste in the rivers, throwing of garbage
- (c) Soil: Industrial effluents

Steps being taken to reduce pollution are:

- Old vehicles emitting polluting gases have been Banned
- Disposal of industrial and household waste/garbage into the rivers prohibited.
- Crackdown on factories emitting pollutants.

Some other suggestions are:

- Promote the use of public transport as much as possible.
- Promote environment friendly ways of disposing waste. For example composting.
- Generate awareness among citizens about the harmful effects of polluting the environment.

Q9. How was environment treated earlier? What has been the change in perception? Discuss.

Ans. Earlier, there were very few laws for the protection of environment in India and there was hardly any enforcement of these laws.

Environment used to be treated as a 'free entity'. Any industry could pollute the air and water without any restrictions. Whether it be the rivers, air, groundwater- the environment was being polluted without any concern for the health of the people.

There has been a change in perception with regard to the environment, especially after the Bhopal Gas Tragedy which took place in 1984. It has been realized that the environment needs to be protected for the health and welfare of people as well as future citizens.

The courts have also given a number of Judgments upholding the right to a healthy environment as intrinsic to the Fundamental Right to Life. Now, there are strict punishments for polluters. The government is responsible for setting up laws and procedures that can check pollution, clean rivers and introduce heavy fines for those who are responsible for pollution.

Short Answer (SA) Type Questions

Q1. What can the government do to ensure that laws are fully implemented?

Ans. The government can ensure laws are fully implemented by conducting surprise raids and check the workplace. It can, for instance, ensure that every worker gets fair wages by regularly inspecting work sites and punish those who violate the law.

Q2. What did the Supreme Court state in the Subhash Kumar vs State of Bihar (1991) case?

Ans. In this case, the Supreme Court held that the Right to Life is a Fundamental Right under Article 21 of the Constitution and it includes the right to the enjoyment of pollution-free water and air for full enjoyment of life.

Q3. Why is the perceived worth of an Indian worker so low?

Ans. The perceived worth of an Indian worker is low because of high population and large-scale unemployment. Here one worker can easily replace another. Since there is so much unemployment, there are many workers who are willing to work in unsafe conditions in return for a wage. Employers use this vulnerability of workers and ignore safety measures in Workplaces.

Q4. Was the Bhopal gas tragedy an accident? Give reasons for your answer.

Ans. The Bhopal gas tragedy was not an accident. Union Carbide had deliberately ignored the essential safety measures in order to cut costs. Much before the Bhopal disaster in 1984, there had been incidents of gas leak killing a worker and injuring several others.

ثرم دوم

سبق: زعفران

سوالات و جوابات

س) کس شاعر نے اپنی کتابوں میں زعفران کی جا بجا تعریف کی ہے؟

ج) مشہور شاعر کالیداس نے اپنی کتابوں میں زعفران کی جا بجا تعریف کی ہے۔

س) کس پھول کو بادشاہوں کا پھول سمجھا جاتا ہے۔

ج) زعفران کے پھول کو بادشاہوں کا پھول سمجھا جاتا ہے۔

س) وادی کشمیر میں زعفران کی کاشت کہاں کہاں کی جاتی ہے؟

ج) پانپورا اور اس کے علاوہ کئی اور علاقوں میں زعفران کی کاشت کی جاتی ہے۔

س) کس ملک میں زعفران کوشائی رنگ سمجھا جاتا ہے؟

ج) یونان میں زعفران کوشائی رنگ سمجھا جاتا ہے۔

س) زعفران کی کاشت کے لیے کس قسم کی زمین درکار ہے؟

ج) زعفران کی کاشت کے لئے خاص قسم کی ڈھلوان زمین درکار ہے۔

خالی جگہوں کو پڑ کیجیے۔

۱۔ زعفران کی کاشت ایک مستقل فن ہے۔

۲۔ زعفران کو بادشاہوں کا پھول سمجھا گیا ہے۔

۳۔ کشمیری زعفران کی تجارت بڑھتی جا رہی ہے۔

۴۔ اکتوبر میں پھول نکل آتے ہیں۔

۵۔ اس کی کاشت کے لئے خاص قسم کی ڈھلوان زمین درکار ہے۔

س) زعفران کے عنوان پر ایک مختصر نوٹ لکھیے۔

ج) زعفران کو انگریزی میں Saffran کہتے ہیں اور اس کا دوسرا نام کیسر ہے۔ زعفران کا پودا پیاز سے ملتا جلتا ہے۔ یہ مختلف قسم کے کھانوں اور دوائیوں میں استعمال ہوتا ہے۔ شاہی زعفران، مونگر اور چھاؤغیرہ اسکی فرمیں ہیں۔ زعفران کی خوشبو بہت دلکش ہوتی ہے۔ کشمیر میں پانپور کے علاوہ کئی علاقوں میں اس کی کاشت بڑے پیمانے پر ہوتی ہے۔ اسکی کاشت ایک مستقل فن ہے۔ اسے کشمی راجہ (کشمیر راجہ) بھی کہا جاتا ہے۔ اس کا رنگ اتنا حسین ہوتا ہے۔ جسے دیکھنے والے کا سر جھک جاتا اور وہ اسکی خوبصورتی میں کھو جاتا ہے۔ اس کے پھول اکتوبر میں نکل آتے ہیں۔ زعفران کے پھول کو بادشاہوں کا پھول سمجھا جاتا ہے۔

سبق نمبر ۱۸۔ کمپیوٹر کا ارتقائی سفر

سوچیے اور بتائیے

ج ۱) کمپیوٹر ایک ایسی مشین کو کہا جاتا ہے جو حساب لگانے کا کام کرتی ہے۔ یہ جوڑ اور گھٹا تو کرتی ہی ہے اس کے علاوہ اور بہت سے کام بھی اس سے لیے جاتے ہیں۔

ج ۲) کمپیوٹر سے ان گنت کام لیے جاتے ہیں۔ موجودہ دور میں ہوائی جہاز بھی کمپیوٹر سے اڑائے جاتے ہیں۔ ریڈیو، ٹیلی ویژن، ریل گاڑیاں، چھاپے خانے، غرض کہ ہر کوئی کام انجام دینے کے لئے کمپیوٹر سے مدد لی جاتی ہے۔

ج ۳) آج کے دور میں دو قسم کے کمپیوٹر بنائے جاتے ہیں جن میں سے ایک قسم کو ”ڈجیٹل“ (Digital) یعنی ہندسوں کا کمپیوٹر کہا جاتا ہے اور دوسرے قسم کے ”انالوگ“ (Analog) کمپیوٹر کہلاتے ہیں۔
ج ۵) ایک کمپیوٹر کو پانچ حصوں میں بانٹا جاسکتا ہے۔

پہلا درآمد (Input) کا حصہ، دوسرا حصہ ذخیرہ یا مال گودام یعنی (Memory) کا حصہ، تیسرا حصہ حساب و کتاب کا حصہ، چوتھا کنٹرول یونٹ اور پانچواں برآمدیا (Output) کہلاتا ہے۔
ج ۶) تیسرا نسل کا کمپیوٹر ۱۹۶۰ء سے لے کر ۱۹۷۰ء تک استعمال ہوتا رہا۔
ج ۷) ڈیکٹاپ - لیپ ٹاپ - آئی پیڈ اور ٹبلٹ۔

سبق نمبر ۱۹ میر اوطن

۱۔ وہ چڑیا، وہ طوطا.....

..... یہ میر اوطن ہے

شاعر شفیع الدین نیر لظم کے اس بند میں اپنے وطن کی تعریفیں بیان کرتے ہوئے فرماتے ہیں کہ میرے وطن میں طرح طرح کے خوبصورت اور خوش آواز پرندے ہیں۔ خوشنا جھیلیں، دریا اور جھرنے ہیں۔ ہرے بھرے جنگل اور اونچے اونچے پہاڑ ہیں۔ صاف و شفاف پانی کا شور ہر طرف رواں ہے۔

۲۔ وہ غلے، وہ میوے.....

..... یہ میر اوطن

شاعر فرماتے ہیں کہ میرے وطن کی زمین زرخیز ہے جس میں اناج، میوے، سبزیاں اور خوشنا پھول اُگتے ہیں، جہاں نظر پڑتی ہے خوبصورت اور سرسبز باغ، پھولوں سے بھرے پڑے دکھائی دیتے ہیں۔ میر اوطن بالکل جنت کے مانند ہے جسے قدرت نے ہر طرح کی نعمتوں سے نوازا ہے۔

۳۔ پہاڑوں کا منظر.....

یہ میرا وطن.....

شاعر فرماتے ہیں کہ میرے وطن میں ہزاروں ندی، نالے اور چشے بہتے ہیں۔ میرا وطن ہر طرف خوبصورت پہاڑوں اور سرسبز جنگلوں سے گھیرا ہوا ہے۔ خود سے مخاطب ہو کر فرماتے ہیں کہ خوبیاں کہاں تک بیان کروں اس میں اتنی خوبیاں بھری پڑی ہیں جنہیں بیان کرنا مشکل ہی نہیں بلکہ ناممکن ہے کیونکہ میرے وطن پر جنت بھی رشک کرتا ہے۔ مختصر آشاعر اپنے وطن کو جنت سے کم نہیں سمجھتا اور اسے جنت کے دو باغوں یعنی باغِ ارم اور باغِ عدن تشبیہ دی ہے۔
سوالات کے جوابات لکھیے۔

س) شاعر نے نظم میں کن کن پرندوں کا ذکر کیا ہے؟

ج) شاعر نے نظم میں درج ذیل پرندوں کا ذکر کیا ہے: چڑیا۔ طوطا، مینا۔ مور، کوئل، بلبل، قمری اور چکور۔

س) دلکش چمن کس کو کہا گیا ہے؟

ج) دلکش چمن وطن کو کہا گیا ہے۔

س) اس نظم میں ہمارے وطن کی کیا کیا خوبیاں بیان کی گئی ہیں؟

ج) وطن میں مختلف قسم کے خوبصورت رنگ برنگے اور خوش آواز پرندے ہیں۔ جھیلیں، دریا، جھرنے اور صاف و شفاف پانی کا شور ہے۔ زمین زرخیز ہے جس میں خوش رنگ پھول، میوے۔ اناج اور ترکاریاں اگتی ہیں۔ وطن خوبصورت پہاڑوں اور مالا مال جنگلوں سے بھرا پڑا ہے گویا ہمارا وطن جنت کی طرح حسین وجمیل ہے۔

س) اس نظم کے شاعر کا نام لکھیے۔

ج) اس نظم کے شاعر کا نام شفیع الدین نیر ہے۔
 س) شاعر اس نظم میں کیا پیغام دینا چاہتا ہے؟
 ج) شاعر اس نظم میں وطن دوستی کا جذبہ ابھارنے کی کوشش کرتے ہیں اور ان خوبصورت نعمتوں کی قدر کرنے کی تلقین کرتے ہیں۔

سوال) نیچے لکھے ہوئے الفاظوں کو اپنے جملوں میں استعمال کیجیے۔

لفظ	جملہ
دریا	دریا جہلم کا منع ویری ناگ ہے
پہاڑ	پہاڑ پر چڑھنا آسان کام نہیں ہے۔
وطن	مجھے اپنے وطن سے بے حد لگاؤ ہے۔
منظر	یہ منظر قابل دیدہ ہے۔
چمن	اس چمن میں رنگ برنگے پھول کھلے ہوئے ہیں
سماءں	یہ سماءں بہت سُہانا ہے۔

سوال) املا درست کیجیے۔

غلط:	ترقاریاں	باگوں	منظر	وتن	صرسبز
درست:	ترکاریاں	باغوں	منظر	وطن	سرسبز
سوال) مصروع مکمل کیجیے۔					

۱۔ وہ چڑیا، وہ طوطا، وہ مینا، وہ مور

۲۔ وہ کوئل، وہ بلبل، وہ قمری، وہ چکور

۳۔ وہ سربراں کے پھاڑ اور بن

۴۔ یہ میراوطن ہے، یہ میراوطن

سوال) واحد سے جمع اور جمع سے واحد بنائیئے

میوے میوہ۔ چڑیاں چڑیا۔ بلبل بلبلیں۔ جھیل جھیلیں۔

دریا دریاؤں۔ جھرنوں جھرنا۔ پھاڑ پھاڑوں۔

سوال) مصریوں کو صحیح ترتیب سے لکھ کر مکمل کیجیے۔

وہ غلے، وہ میوے، وہ ترکاریاں

وہ خوش رنگ پھولوں کی گل کاریاں

وہ سربراں باغوں کی پھلواریاں

وہ سیراب اور خوش نما کیاریاں

کھاتک بیان اس کی ہوں خوبیاں

ہے فردوس کا اس چمن پر گماں

وہ جھیلوں کی لہریں، وہ دریا کا ذر

وہ جھرنوں کا گرنا، وہ پانی کا شور

سبق: اُف! یہ ماحولیاتی آلو دگی

سوالات کے جوابات

ج: آلو دگی کی مختلف شکلیں ہیں جیسے آبی آلو دگی، ہوا کی آلو دگی، شور کی آلو دگی وغیرہ۔

ج: آلو دگی سے انسانی زندگی پر بہت برا اثر پڑتا ہے۔ آلو دگی سے کئی بیماریاں جنم لیتی ہیں مثلاً تپ دق کھانسی وغیرہ۔

ج: کیمیاولی کھاد اور کیٹرے ماردواؤں کا استعمال اس لئے کیا جاتا ہے تاکہ انہیں، بچلوں اور سبزیوں کی پیداوار میں اضافہ ہو اور ساتھ ہی زمینی کیڑوں سے بچنے کے لئے بھی ان کا استعمال کیا جاتا ہے۔

ج: کیٹرے ماردواؤں کے چھڑکاؤ کی وجہ سے یہ غذا میں بیماریوں کا سبب بنتی ہیں۔

ج: دھوئیں کی وجہ سے ہوا میں موجود پرت (ozone) میں سوراخ پیدا ہو جاتے ہیں۔ اس لئے دھوئیں کو خطرناک کہا گیا ہے۔

ج: اوزون پرت ایک ایسی گیس کی پرت ہے۔ جو سورج سے آنے والی خطرناک شعاعوں سے ہمیں بچاتی ہیں۔

ج: کیونکہ شور سے ہمارے جسم کے مختلف اعضاء خاص کر کانوں اور دماغ پر کافی برا اثر پڑتا ہے۔ اس وجہ سے شور کو خطرناک آلو دگی کہا گیا ہے۔

ج: اس کے لئے ضروری ہے کہ زیادہ سے زیادہ درخت لگائے جائیں۔ جھیلوں، دریاؤں، تالابوں اور چشمتوں کے کنارے پر رہنے والی آبادی کو پانی کے ان وسائل سے ذرا دور بسا جائیں، اور جھیلوں و پانی کے دیگر ذخائر کے ارد گرد مکان وغیرہ تعمیر کرنے پر پابندی لگائیں۔

وَاحِدٌ جُمْعٌ

خواہش خواہشات

اختیار اختیارات

ترقی ترقیات

ممکن ممکنات

سوال سوالات

نیچے لکھے ہوئے ادھورے جملوں کو مکمل کیجیے۔

۱۔ دھوال اُگلتی دوڑ رہی ہیں

۲۔ جھنجوڑ رہی ہے

۳۔ بھرمار ہے

۴۔ آلو دگی کا شکار ہیں

۵۔ چھڑ کا و بھی کیا جاتا ہے

۶۔ ایک بڑھتا ہوا سیلا ب ہے، اس کی تباہ کاریاں ہیں

۷۔ ٹھکانے لگایا جائے

سبق: راجا جامبھولوچن

سوالات جوابات

ا: جامبھولوچن فیاض اور سخنی راجا تھا اس کے راج میں رعا یا خوش حال تھی اور ملک میں ہر طرف امن و سکون تھا۔

۲: جامبھولوچن نے ایک شکار کے دوران ایک تالاب پر شیر اور بکری کو اکھٹے پانی پیتے دیکھا، یہ منظر دیکھ کر راجا حیران ہوا اور اسی جگہ پر ایک شہر بسایا اور اپنے نام پر اس شہر کا نام جامبھور کھا جو بعد میں جموں کے نام سے مشہور ہوا۔

۳: شکار کے وقت جامبھولوچن نے شیر اور بکری کو اکھٹے پانی پیتے دیکھا۔ حالانکہ شیر عام طور پر بکری کو کھا جاتا ہے یہ منظر دیکھ کر راجا حیران ہو گیا۔

۴: خاص واقعہ یہ ہے ایک بار راجا جامبھولوچن شکار کی تلاش میں جنگل میں کئی دن گھومتا رہا وہاں اس شکار کے دوران ایک تالاب پر شیر اور بکری کو اکھٹے پانی پیتے دیکھا، حالانکہ شیر عام طور پر بکری کو کھا جاتا ہے یہ منظر دیکھ کر راجا حیران ہوا کہ کتنے پیار سے دونوں اکھٹے پانی پی رہے ہیں۔ راجا کے دل میں ہمدردی اور رحم کے جذبات پیدا ہو گئے اور اس نے ہمیشہ کے لئے شکار ترک کر دیا اور اسی جگہ پر ایک شہر بسایا اور اپنے نام پر اس شہر کا نام جامبھور کھا جو بعد میں آہستہ آہستہ جموں کے نام سے مشہور ہو گیا۔

واحد	جمع
ادیب	ادب
شاعر	شعراء
منادر	منادر
مساجد	مساجد
مناظر	مناظر
قصبه جات	قصبه جات

مقامات	مقام
اسم	صفت
دریادلی	دریادل
محنت	محنتی
جفاکشی	جفاکش
محتاجی	محتاج
خوشحالی	خوشحال

سائنس اور انسان

انسان کی زندگی میں مجموعی طور پر زبرست تبدیلیاں ہوتی ہیں اور اب انسان کا ذہن ایک نئی دنیا میں سوچتا ہے۔ سائنس کے طفیل آج انسان اپنے آپ کو واقعی نئی دنیا میں پاتا ہے۔ وہی دنیا جو انسان کے لئے مصائب اور مشکلات کی وجہ سے دوزخ قرادی گئی تھی آج حقیقی معنوں میں بہشت جیسی ہے۔

سائنس نے دنیا میں تو ہم پرستی، فرسودہ خیالات اور پرانے نظریات کو تبدیل کر دیا۔ اس طرح سائنس کی وجہ سے ہماری زندگی پر بڑا اثر پڑا ہے۔ آج ہم قدم قدم پہ سائنس سے فائدہ اٹھارہے ہیں۔ سائنس کے فیض سے انسان قوت ملی، ہواوں اور پانی کا رُخ موڑ سکتے ہیں اور ان سے کام لے سکتے ہیں۔

سائنس کی بدولت ہمارے آنے جانے کے ذرائع میں ترقی ہوتی ہے۔ دور دراز ملکوں کا سفر صرف چند گھنٹوں میں طے کیا سکتا ہے۔ پیغام رسائی اور خبروں کے ایک جگہ سے دوسری جگہ پہنچنے میں ذرا بھی

وقت نہیں لگتا۔ ایسا محسوس ہوتا ہے کہ تمام دنیا کے ممالک ایک دوسرے کے نزدیک سمت آئے ہیں۔ گھروں میں انسان سائنس کی برکتوں سے مالامال ہے۔ ہمارے روزمرہ کے کاموں کے لئے سائنس نے بھلی کی مشین ایجاد کی ہیں جیسے روشنی، ٹیلی فون۔ پنکھا۔ ہیٹر وغیرہ۔ صنعت اور زراعت میں مشینوں کے ذریعے بہت کم وقت میں زیادہ کام ہوتا ہے اور آدمیوں کی محنت اور روپے بچت ہوتے ہے۔

بیماریوں کی روک تھام اور علاج و معالجے میں بھی سائنس نے بے پناہ آسانیاں پیدا کی ہیں۔ سخت سے سخت درد اور تکلیف کو دواوں اور اپریشن کے جدید طریقوں سے دور کیا جاسکتا ہے۔ بلکہ اب اعضاء کو بدلابھی جاسکتا ہے۔

ان فائدوں کے علاوہ سائنس کے عروج کے پچھنچانات بھی ہیں۔ سائنس نے انسان کو اخلاقی قدریوں سے محروم کر دیا۔ ہر طرف ظلم اور بدی دیکھنے میں آتی ہے۔ اخلاق کا دیوالیہ نکل رہا ہے۔ بڑائی بڑھ رہی ہے اور سچائی گھٹ رہی ہے۔ مشینوں نے انسانوں کی جگہ لی ہے۔ اکثر لوگ بے روزگار ہو گئے ہیں۔ ان باتوں کے باوجود سائنس سے انکار کرنا ناشکری ہے۔ سائنس ہمیں اسی وقت تک فائدہ دے سکے گی جب ہم سائنس کے وسیلے سے مادی ترقی کو منزل نہیں سمجھیں گے بلکہ انسانیت کے اصل اور بڑے مقصد حاصل کرنے کا ذریعہ بنائیں گے۔

نظم

نظم شاعری کی وہ شکل ہے جس میں کوئی قصہ، کوئی خیال، کوئی تجربہ یا کوئی واقعہ تسلسل کے ساتھ پیش کیا گیا ہو۔ کیونکہ نظم کے لغوی معنی پرونا، یکجا کرنا یا آراستہ کرنا وغیرہ ہیں۔ نظم کی کوئی معین شکل یا معین

موضوع نہیں ہے۔ ہر شکل میں شعراء نے اپنے خیالات کا اظہار کیا ہے۔ نظم شاعری کی اس صنف کو کہتے ہیں جس میں ایک عنوان کے تحت کسی بھی طرح کے خیال، واقعہ یا تجربہ کو ربط و سلسلہ کے ساتھ شعری تقاضوں کے مطابق بیان کیا جاتا ہے۔ نظم کے لئے نہ تو موضوعات کی کوئی قید ہے اور نہ شکل یا ہمیت کی۔ لیکن نظم کے لیے یہ ضروری ہے کہ خیال یا معنی کے اعتبار سے اس میں سلسلہ ہو اور ایک شعر دوسرے شعر میں پیوست ہوتا چلا جائے۔

اُردو نظم کے ابتدائی نمونے دکن میں قطب شاہ، حاتم، آبرو، میر، سودا نے پیش کئے۔

موجودہ دور میں نئی پودکی ایک بڑی تعداد نظم نگاری کی طرف مائل ہے۔ لہذا یہ اُمید کی جاسکتی ہے کہ اُردو نظم نگاری کا مستقبل کافی تابناک اور روشن ہو گا۔

ڈراما

ڈراما یونانی زبان کے لفظ 'ڈراو' سے مشتق ہے، جس کے معنی ہیں عمل یا ایکشن۔ ڈرامے کی ابتداء نقایی سے ہوئی ہے۔ ڈرامے نے ہندوستان اور یونان میں آنکھیں کھولیں۔ بھرت منی نے ہندوستان میں اور ارسطو نے یونان میں اسکے مسائل پر غور کیا۔ ارسطو ڈرامہ کی نقل کرتے ہیں۔ ڈراما کی دو فرمیں ہیں: ٹریجڈی یعنی حزینہ اور دوسرا کو میڈی یعنی طربیہ۔

اُردو میں سلطان واجد علی شاہ کو پہلا ڈرامہ نگار تصور کیا جاتا ہے۔ اُردو ڈرامہ نگاری کی تمام خامیوں کو امتیاز علی تاج نے دُور کیا۔ ان کا مشہور ڈرامہ "انارکلی" اُردو ڈرامے کی تاریخ میں سنگ میل کی حیثیت رکھتا ہے۔

کرشن چندر، سعارت حسن منٹو، خواجہ احمد عباس جدید دور کے بڑے ڈرامہ نگار ہیں۔

ڈراما: پوتھیں جن کے سوالات

۱۔ گاؤں کے کسان سرچج کے صحن میں اسلئے جمع ہوئے کیونکہ وہ شکایت کر رہے تھے کہ ان کے بال بچے بھوک سے مر جائیں گے کیونکہ پچھلے سال کی طرح اس سال بھی ان کے کھیتوں سے فصل کا ایک دانہ بھی نہیں اُگا تھا۔

۲۔ سرچج اور کسانوں کے مطابق زمین سے فصل اسلئے نہیں اُگ رہی تھی کیونکہ انکے کھیتوں پر کسی دیویا جن کا سایہ تھا۔

۳۔ ماہر نے مٹی کی جانچ کے بعد کہا کہ کسانوں کے کھیت بیمار ہو گئے ہیں۔ پوتھیں لفافوں سے مٹی کو خطرناک بیماری لگ گئی ہے۔ پوتھیں نے مٹی کو زہریلا بنایا ہے۔

۴۔ ۱۔ پوتھیں مٹی کی آلو دگی کا سب سے بڑا عنصر ہے۔

۲۔ اس سے مٹی کی زرخیزی ختم ہو جاتی ہے۔

۳۔ پوتھیں جلانے سے زہریلا دھواں ہوا میں تخلیل ہو کر ہوا کی آلو دگی میں اضافہ کرتا ہے۔

۴۔ اسی آلو دھواں سے کینسر جیسی مہلک بیماریاں لگ جاتی ہیں۔

موضوع: یتھریش وار و پستار اچھے

سوال نمبر: ۲

س۔ ا۔ ریش وار کیا چھوئندی اندی؟

ج۔ ریش وار چھوئندی سونہ پسندی سنگر، روپہ کوہ مالہ، سرسیز جنگل، مرگہ تھے پوشک باغ۔

س۔ ۲۔ وپستا کتھے چھے رائچھے؟

ج۔ وپستا چھے ریش وار اکشیس رائچھے۔

س۔ ۳۔ کس چھوئی تھے بھٹک خانقاہتے پر تھ درشن دار گن پکان۔

ج۔ لوکھے لوکھے کو راسہ ویتھ بھٹک خانقاہتے پر تھ درشن دار گن پکان۔

س۔ ۴۔ اتحھے واس کموجھ رُزھرو وومت؟

ج۔ پیند یوتھ مسلمانو چھو اتحھے واس رُزھرو وومت۔

س۔ ۵۔ وہ تھ کمن کمن رازن کھڑھ تاری؟

ج۔ وہ تھ کھڑھ للتا دتس تھے بدھ شاہ ہو بن رازن تار۔

سوال نمبر ۳: خالی جا پہ پر وو:

- | | | | | |
|------------|-------------------|------------|---------|----------|
| ۱۔ پڑاران | ۲۔ چھوئی تھے پیار | ۳۔ شرکر | ۴۔ وگنہ | ۵۔ کانہہ |
| ۶۔ ریش وار | ۷۔ مسلمان | ۸۔ ریش وار | | |

سوال نمبر ۴۔ تمدن چیز نہند اکھ فہرست بناؤ و یم یتھ تظمیہ مژناؤ تو صفت شا عرن ورتاوڑی چھ؟
ج۔ سونے پسندی سگر۔ پوشہ باغ۔ کولہ۔ بال۔ و بتنا۔ جنگل۔ مرگہ۔ رفلہ۔ تر۔ خانقاہ۔ شخ شزر ک۔ للہ
واکھ بیقر چھ تم چیز یم و بتنا تظمیہ مژن شا عرن ورتاوڑی مکپ چھ۔

سوال نمبر ۵۔ صحی ترتیب ن مژن پکھمٹ گر و تظمیہ هند خلاصہ تیار؟
ج۔ ون مژن چھ یار ہو پنڈ پنڈ بنه رہی مئتر بالہ تھوگیں چھ زنہ سونے کھڑک رتھ کوہ مالن پیٹھ چھ شین چاہد
ہندی پاٹھک پڑ زلان۔ کولہ رادن مژن چھ امر رتھ بر تھ۔ سورگہ ہوا چھ وار پارا ان۔ و بتھ بٹھن بٹھ چھے
زنانہ خانقاہ تھ پر تھ درشن دار گن پکان۔ ہیندی تھ مسلمان چھ یکہ وطہ روزان۔ و بتھ آپہ لتا دش تھ
بد شاہس تھ پسند۔ و بتنا چھ یتھ ریش وار اچھ روڑ تھ۔

سوال نمبر ۶۔ نشاط باغ

نشاط باغ چھ شہر ینگر پیٹھ لگ بھگ۔ اکلو میٹر دو رز بروں بالہ دامن س تل واقع۔ یہ باغ چھ شا بھیاں
پسندی وزیر اعظم آصف خان ۱۶۳۴ء مژن بنو و موت۔ اتحہ باغس مژن چھ آبشار، فوارتے مژن باغ چھس آب
وسان۔ اور چھ وار یا ہس تعداد مژن ریاستکو تھ ریاست نیبر م سالانہ سائل کرنے یوان۔ سکوں شری،
زنانہ کیو مرچ چھ اتھ گندان دروکان تھ باتھ گو ان۔

شامن پُجھ باغس مژن آبشار ن تھ فوارن اندی گو مختلف رنگن هنر لانگنہ آمڑ بھلی بیتہ و پھن والین اکھ حسین
منظرا پیش کران۔ یہ باغ چھ تھر رس پیٹھ بناونہ آمٹ تھ اتھ پیٹھ چھ جھیل ڈلک نظارا اصل پاٹھو بوز نہ
یوان تھ ڈلس مژن شکار ہن ہندیں گر پھن چھ و پھن والین فرحت بخشان۔

نشاط باغ چھ کشیر ہنر خوبصورتی مژن اکھا ہم روں ادا کران۔ باغس مژن چھے شہجرا باتھ قدا وار بونے۔
پدی وتن ستر ستر چھ سر ڈلکو تھ پوشہ چمن۔ باغس پتھے بال تھ باتھ ڈل چھ سبھا رت منظر پیش کران۔

موضوع: ہوائی جہاز

سوال نمبر ۲: جواب لیکھو:

س۔ وڈنگ شوق پور کرنے باپتھ کس سامانے بنو انسان گوڈنچھ؟

ج۔ وڈنگ شوق پور کرنے باپتھ بناؤ انسان گوڈنچھ اکھ بڈ پھوکہ بال یوسہ بانسو کاں ہزار۔ اتحہ اوں نیپر کاغذ لگتھ تے اند کنی کپر۔ اتحہ کپرس اوں تیل یوان چھکنے۔ امہ ستر اوں غبارک اندرم ہوا وشنان سینہ کنی پہ غبار لو تان لو تانے ہو ہس مژروڈان اوں۔

س۔ غبار س مژر بھتھ وڈنگ گوڈنیک تحریر پہ کموکور؟

ج۔ غبار س مژر بھتھ وڈنگ گوڈنیک تحریر پہ کو رفرانس کو اک غبار بازن تیمس ماونٹ گول فارینا و اوں۔

س۔ گوڈنیک ہوائی جہاز گمو بنو؟

ج۔ گوڈنیک ہوائی جہاز بنو امریکہ کبودو یوبایو 1853ء مژر۔ اکس اوں ناول بر رایٹ تے بیس اوں ناوارول رایٹ۔ یمن اسکر ایٹ برادراتی ونان۔

س۔ ہوائی جہاز س مژر سفر کرنے ستر کیا فائید پھ؟

ج۔ ہوائی جہاز س مژر سفر کرنے کو چھ داریا ہ فالیڈ۔ اتحہ مژر چھ ہب کان رپن ہند سفر گانٹن مژرتے گانٹن ہند سفر منٹن مژر کر تھ۔ پیچھے چھ اتحہ مژر سفر کرن والیں آرام میلان۔

سوال نمبر ۳: یہ محاور گروپ نین جملن مژرا استعمال:

محاور	معنی	جملہ
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سائیکل ہاتھاون تکیوی حمید ووٹھے	تتبلاون:	۱۔ ووٹھے ان:
ہاپٹ و چھٹھ پھیرتکی بیس طرف سکن روخ۔	طرف بدلاون:	۲۔ رو خ پھرعن:
تمس چھ وون جہاز مژ کھسنے خاطر دل	ہمیتھ گڑھنی:	۳۔ دل درون:
	دریمٹ۔	

م اوں دل راوان توئے گوس ڈاکٹرس نش۔	کھوڑن:	۴۔ دل راون:
وقصان گھنس پٹھ پشتاؤن: تمن اوں مچ ہارنس پٹھ دل دزان۔	نوقصان گھنس پٹھ پشتاؤن:	۵۔ دل دزون:
دل پھٹھن دعا کردن چھ قبول گزھان۔	نرمی پاد گڑھنی:	۶۔ دل پھٹن:
تمس چھ سالس گزھنے خاطر دل نیو رمٹ۔	تیار گڑھن:	۷۔ دل نیرن:

سوال نمبر ۳: یمن عنوانن تخت لپکھو دا جملہ:
ہوائی جہاڑ ک فایدے:

18 دسمبر 1853ء مژ تراً وامریکہ کپو دیو بایوا کھ تھکنی لا یق ڈاکی تیمیک ناو ہوائی جہاز چھ۔ ہوائی جہاز چھ پزی پاٹھرا کھ حاران کروں اتھاد۔ اکس جاناوار پندی پاٹھر ڈو گرتھ چھ پی تیوت تھو دکھسان ز امہ کس و پھوارس چھنے کانہہ ٹھورہ بکان گرتھ۔ ہوائی جہازن پکھو انسان سند وق۔ از کس یتھ وقت مژ چھ ہوائی جہازس واریاہ اہمیت۔ انسان چھ آتھ مژ ریتن ہند سفر گانٹن مژ تھے گانٹن ہند سفر منٹن مژ طے گرتھ بکان۔ آتھ مژ چھ انسانس واریاہ آرام میلان۔ آتھنے چھ سڑکہ ہمیز ضرور تھتھ نہ چھس کدر لک ضرور تھ پو ان۔ آتھ مژ بھتھ چھ انسان قو در تکین حسین نظارن ہند لطف تلان۔ ہوائی جہاز چھ جنگو کامیں مژ تھے ورتاونے پو ان۔ سہلا بستے بُن لیں مژ ہبیٹ آمتنن لوکن چھ زیاد تر ہوائی جہاز کہ ڈرک پی راحت و اتناونے پو ان۔

ریڈ یو ہک فائیڈ:

ریڈ یو چھ سائنس مژمار کونی سائز سے ایجاد ہیمہ سترا انسانس کافی فائیڈ میول۔ پہ چھ بغار گنہ تار اسے تام دو ردر از ملکن مژک تھ واتنا وان۔ ریڈ یو چھ اکھ سستے چیز یتھ اکھ عام انسان تھ پنس گرس مژ تھو تھ چھ ہبکان۔ اس کچھ ریڈ یو پڑھ مختلف باتھ بوز تھ پنی دل ترنا وان۔ امہ سترا چھ اس کر دنیا ہس مژ گندنہ یعنی والہ کنہ تھ پچ کمنٹری پنین گرن مخز بھتھ بوز ان۔

ریڈ یو چھ اکھ لوٹہ وائے چیزیں اس کنہ تھ جا پہ تھ ہبکان چھ۔ ریڈ یو چھ اس کپن کھہن مخزو ان تھ امہ سترا چھ اس کام کرنس دوران کم تھ کاوت محسوس گڑھان۔ ریڈ یو چھ چلہ ہن گاڈن مژ تھ لاجنہ پوان۔ ریڈ یو سترا چھ اس مختلف جایں ہن ز خبر گر بھتھ بوز تھ ہبکان۔

سوال نمبر ۵: گر تر باوٹی ڈراما رو:

- ۱۔ واریاہ لؤکھ آچ
- ۲۔ تموئتل سدھاہ بور۔
- ۳۔ ز پھوکہ بالہ چھنے دہن روپین۔
- ۴۔ اسہ تہ اذ کش تام نڈھو۔
- ۵۔ اکھ ہفتہ لگی تو رو اتنس۔

موضوع: گشپر ہنزہ کیشہ پرانہ عمارت

سوال نمبر ۲:

س۱۔ آثارِ قدیمہ کتھو چھو وناں؟

ج۔ پرانے زمانکیں عالیشان عمارتیں، سکن (coins) تے باقی آوسینٹین تے دو برلن آٹمنٹن چیزان ہندوں پتھر گن رؤ و متنیں نشاٹن چھو آثارِ قدیمہ وناں۔

س۲۔ ہارونہ یمِ ظالہ اتھو آمڑہ چھے تمن پیٹھ کرٹھ شکل چھے کھنچھے؟

ج۔ ہارونہ یمِ ظالہ اتھو آمڑہ چھے تمن چھو واریا ہن پوش، جاناواراں تے انسان ہنزہ شکل ہے کھنچھے۔

س۳۔ ہارونہ کیا اوس بودھ عالموترا امہ پیٹمن پیٹھ کھنہ نو و مت؟

ج۔ ہارونہ اوس بودھ عالموترا امہ پیٹمن پیٹھ بودھ مٹکو او صول کھنہ نامت۔

س۴۔ مارتند مندر چھتھ کیا زچھو انسان حاران گڑھان؟

ج۔ مارتند مندر کو پھٹپھٹ پھرات، کنه پل ڈھتھ چھو انسان حاران گڑھان ذکتھو گنڈ چھو بھن بھن شیلیں واٹھ آمت دنہ۔ یمہ شیلیہ کموداوار، زوراوارتے ووستکار انسانو چھے اکھا کس پیٹھ کھا لتھ بیہنا تو تھ مارتند مندر سہش عمارتھ تعمیر کر ہڑ۔ پڑی چھو پہ انجیز نگ تے دوستا دلہ ہند کمال۔

س۵۔ خانقاہ معلیٰ کتھ جایپ چھو واقع؟

ج۔ خانقاہ معلیٰ چھو سرپنگر مژرا نہ کد لس تے فتح کرد لس درمیان ویتھ بیٹھس پیٹھ واقع۔

س۶۔ صالح ماجہ کیا کو رخانقاہ معلیٰ نوہر تعمیر کرنا وانہ خاطر؟

ج۔ صالح ماجہ کو رپن زیورتے داش نداش کنتھ خانقاہ معلیٰ نوہر تعمیر۔

س۷۔ سرینگر چہ جامع مسجد مژرا کتو نفر چھا کہ ساتھ نماز ہبکان پر تھو؟

ج۔ سرینگر چہ جامع مسجد مژرا کی ساتھ 33,333 نفر نماز ہبکان پر تھو۔

سوال نمبر ۳: یو جملہ مژرا ریکاراؤ، کزاو تے کزو و متی:

ا۔ سہ چھڑوٹھ کھسو ان۔

ج۔ سہ = کراول کھسو ان = کراوت

۲۔ اُسی چھ پاس گزھنے خالطہ مخت کران۔

ج۔ اُسی = کراول پاس = کزوومت

۳۔ آپھے چھے شرہن ہندک پلو چھلان۔

ج۔ آپھے = کراول پلو = کزوومت

۴۔ ژپھکھ سبق پران۔

ج۔ ژ = کراول سبق = کزوومت

۵۔ سہڑ چھ سماں پلو سوان۔

ج۔ سہڑ = کراول پلو = کزوومت

۶۔ چھان چھ دلے پکن رنڈ دوان۔

ج۔ چھان = کراول دلے پکن = کزوومت

سوال نمبر ۷: یمن عنوان تھت لپھو پانٹھ جملہ:

پانڈولر:

پانڈولر راز و یم شاندار مندر تھے عمار ٹھمپیر کری تھن چھ عام پاٹھی پانڈولر دوان۔ یمن مژر چھ ووستکاری

ہندک شاندار نمونہ لبھی دوان۔ امکو نشانہ چھ انسان حاران کران۔ اتھے لر آسہ بجوب جو کنه پلوست پر بناؤ نہ

آہڑ۔ ملنے تھے پکنے چھ یمن لرہن ہندک آثار ازتہ موجود۔

خانقاہ معنی:

مشہور خانقاہ چھ سرینگر مژرا نہ کے لس تے فتح کرد لس درمیان و بتھ بٹھس پڑھ واقع۔ ایج بُنیا د آپہ حضرت امیر کبیر میر سید علی ہمدانی پسندس فرزند حضرت میر محمد ہمدانی پسند ذر تراونہ۔ سلطان سکندر بن کرناو ۱۳۹۴ء مژرا ک پور عمارت تعمیر۔ سلطان حسن شاہ پسند زمانہ ۱۴۸۰ء مژگو و یہ خانقاہ نار لگنہ ستر شہید۔ بادشاہن ہیڑا تھا اندھر پر نہ ملکو تھا خانقاہ کس احاطس و سعت د تھ بنوں پرانہ بُنیا ز پڑھ نہ و تعمیر۔

سوال نمبر ۵: واحدناویں ہندو لیکھو جمع ناوی:

واحدناوی	جمع ناوی
آفت	آفڑ
عمارت	عماءڑ
فاتارت	فتاءڑ
خصلت	خصلہ
عظمت	عظئہ

سوال نمبر ۶: خالی جالیہ پرو:

۱۔ موئیجہ گور

۲۔ ووور

۳۔ طوپچہ گور

۳۔ قالباف

۵۔ سوُر

۶۔ قلایہ کر

۷۔ ٹھاٹھر

۸۔ کزال

۹۔ پوہل

۱۰۔ رنگر

۱۱۔ روگر

۱۲۔ پائیں

۱۳۔ تبردار

۱۴۔ نمیدگور

۱۵۔ کاندر

موضوع: ڈاکہ و ول

سوال نمبر: ۲

س۔ ڈاکہ و اس کہنے خبرا ترچھے پڑھنے یو ان؟

ج۔ ڈاکہ و اس اسی پنجاب موزو رگامتنہ شرہن ہنزخبرا ترچھے پڑھنے یو ان۔

س۔ ۲۔ رمہ، اوشر، عمه تہ سجان کتہ اسی؟

ج۔ رمہ، اوشر، عمه تہ سجان اسی پنجاب موزو رکرنے خاطر گئی۔

س۔۳۔ ڈاکہ و اُس کیا آونخشا یشہ رنگو دنہ؟

ج۔ ڈاکہ و اُس آونخشا یشہ رنگو کنے سان تو ملہ چکر پیالہ دنہ۔

س۔۴۔ شرہن ہمزون کیا کیا چھے ڈاکہ و اُس پر زھان؟

ج۔ شرہن ہمزون چھے ڈاکہ و اُس پر زھان ز تھندہن شرہن کتھ پاٹھ کا آویٹ صبر ز تم رو دی
بیپس کالس پتمن نشہ دو رتہ پیسہ کیا ز سو ز کھنے شرہن ہند خاطر پلو۔ سو چھنے تمدن و نان ز گامکو باقی شرہ
تہ چھاوائے۔

سوال نمبر ۳: ڈاکخانہ کس افسوس لیکھو چھٹھی یتھ مژ پنہ علاقہ کس ڈاکہ و اُک سہز رٹ کامیہ ہند کی تعریف
کرنے آئتی آسن۔

پوسٹ ماسٹر صاحب پوسٹ آفس ----

جناب عالی!

گزارش چھم ز سانہ علاقہ ڈاکہ وول چھ سبھا فرض شناس۔ زانہ چھنے اُک کانسہ شکایت
کرناک موقعہ دیت مُت۔ پہ چھ وقت پیٹھ لو کن تام ڈاک واتناوان۔ ڈاک حوالہ گرتھ چھنے کنہ قسمک
کوڑھ منگان۔ عرض چھ پہ ز پیٹھ پنہ جاپیه واریا ہس کالس تھاونہ میں۔ شگر یہ۔
عرض کرن و اُکر

روزن و اُکر

سوال نمبر ۴۔ نظمہ ہندس ڈورمس بندس گرو ویٹھنے۔

ج۔ نظمہ ہندس ڈاؤ رمس بندس مژر چھ شر ہن ہنز مونج ڈا کے والیں شر ہن ہنز خبر اتر پڑھان تے پیشہ
چھس ونان زِنمو کیا ز پڑھنے موختہ ہنز خبر تے پیشہ کیا زِ سوز کھنے فضہ خاطر نگی گانہ۔

موج

موج چھ خدا صابری اکھ بڈی نعمت تے تھر رحمت۔ موج آسیں سرفن، ہاپٹیا پیشہ گنہ زُوذ آڑھر یہ چھ ہر
حال مژر پنہ نس بچہ سنڈ با پتھر رحمت آسان۔ پکس رچھنے با پتھر چھ پر تھ کاٹھہ موج پن آرام
تڑ اوان۔ بچہ سند دودگ چھ امس پن دودگ باسان۔ بچہ آسیں بھارا امس چھ دنیہ ک آرام تہ
رأ آڑھر ننڈری راوان۔ پانہ چھے فاقہ روزان مگر شرس چھے یڈ بر تھ کھیاوان۔ اکس ما جھ چھ اللہ تعالیٰ ہن
تیوں صبر عطا کو رمٹ زیہ چھے شر سہنر ارتھتے کھری فگو برداش کران۔ شرس چھ ما جھ ہنز کو چھ
گوڈنیک ڈاٹھ حال۔ اکثر چھ لبھ آمٹ ز بھلہ پایہ شخصیت چھ عقل مند ماجن ہنز تربیت ستر وڈو دس
آءہ، خُد ابو زین ز اسہ پٹھر روزن ہمیشہ سامنے نیک تے پاک ایمان واجتنیں ماجن ہند اتھ۔

میون گام

میانس گامس چھ ناو۔ پیہ چھ شہر ینگر پٹھ الہ پلہ شیٹھ کلومیٹر دو روائقع۔ اچ آبادی چھے
لگ بھگ ز ساس۔ پیہ گام چھ اتھ کاموں کن تے سبھاہ مشہور۔ میون گام چھ تو ارجمنی اعتبار اکھا ہمیت
تھاوان۔ میانس گامس مژر اوس اکھ بھلہ پایہ شا عربیگر سند ناو اوس رجب حامد۔ میانس گامس مژر چھ
ستھ سکول تے اندک پکو گامن ہند شری تعلیم حاصل کران۔ میانس گامس مژر چھ شے مسجد یتھ مژر اندک پکو
گامن ہندکو کھنہ نہماز پران چھ۔ میانس گامس مژر چھ تقریباً (30) تڑہ فیصد لوکھ ز میندا ری کران۔
اکثر لوکھ چھ سرکاری ملازمت کران۔ امہ علاوچھ کیشہ لوکھ اتھ کامن ستر تہ آپری روزان۔ میون گام

چُھ پتٰہ و تٰہ پٰٹھے علم وار بک اکھا هم گام رو دُمت۔ میانہ گامکو لوکھ چھ مختی، جفا کش ملنسارتے نوش
اخلاقی۔

پنچ سال میں لیکھو کتاب تٰہ وردی خاطر ز ساس روپیہ سوزنے خاطر چڑھو۔

امتحان ہال

ز اکتوبر ز ساس سداہ

۲۰۱۷ء

ٹاٹھ ابا جانہ

اسلام علیکم

ژ گوھ حکھ پہ بُوز تھ خوش ز مے کو رسمتیہ جماز ہند امتحان 95% نمبر حاصل کر تھ پاس۔ وو نی چھ من
اٹھمیہ جماز مژر دا خلہ نہ خاطر کتاب بن تٰہ وردی ہند ضرورت۔ امہ خاطر چھ مے ز ساس روپیہ
ضرورت۔ و مید چھم ژ سوز کھ مے یکھ روپیہ جلدی تاکہ بے انہ کتاب تٰہ وردی۔
چون فرمانبردار

ا۔ب۔ج

پنچ سو سس لیکھو گرمہ چھٹی یکو ٹے گزار نہ خاطر چڑھو۔

امتحان ہال

۲۰۱۷ اکتوبر

ٹاٹھ دوستہ
اسلام علیکم

اڑی کس اخبار سچھ لیکھتھ ز ساری سکول روزن ڈردار پٹھ دهان دوہن گرمہ چھٹیہ سبہ ہند۔ پہ
چھس یہھان ز اسکی گذارویم دوہ یکو ٹے گنہ خاص جاپی۔ ابا جان چھ گلمگر گہ سانہ خاطر اکھ کم رٹھن
تحومت۔ ڈوات جلدی میون گرتے پتی پٹھ نیر و یکو ٹے چھٹیہ مناونہ۔

چون دوست

ا۔ ب۔ ج

پنہنس دوستس لیکھو امتحانس مژر پاس گرچنس پٹھ مبارکبادی همز چھٹو۔

امتحان ہال

۲۰۱۷ اکتوبر

ٹاٹھ دوستہ
اسلام علیکم

پہ بؤز تھ گیہ مے سبھا خوشی کہ ڈتے کو رتھ ستر مہ جما ڈھندا امتحان سبھا نمبر حاصل کر تھ پاس۔ وو مید
چھم ڈر روز کھ آئیند تھ کئی محنت کران۔ اتھ شاندار کامیابی پٹھ چھس پہ ڈتے مبارکب بادپیش کران۔
چون روت کا چھن دوں

ا۔ ب۔ ج

کھلیں ہنزہ ہمیت

کھلبے چھاؤ کس انسان سبھاہ ضوری۔ کھیلو ستر چھ انسان تدرست روزان بلکہ چھ انسان روزگارتہ میلان۔ کھیلو ستر چھ انسان سند دہماغ کا پیو ان یہ چھ آمٹ و چھنے زیس انسان کھلیلے چھ گندان سہ چھ ٹعلیمی ماڈل انسان مذرتہ بروٹھہ بکان۔

بڑھپر چھ انسان سند صحت تقریباً واریا ہن دیدہن چھ واریاہ قسمہ ورزش بطور علاج تھاونے یوان۔ محکمہ تعلیم چھ کھلیوتہ ورزش خاطر اکھ بیوں محکمہ بارس اونٹت۔ کھیلو ستر چھ انسان پنہ ملک ناونون کڈان۔ واریاہ گنمای ملک چھ کھیلو ستر مشہور۔

موضوع: پاتھین

سوال نمبر: ۲

س۔ ا۔ پاتھین ستر کیاہ کیاہ نو قسان چھ واتاں؟
ج۔ پاتھین ستر چھ واریاہ نو قسان واتاں۔ مثمن پاتھین چھنے زمپس مژہ وہ زان تھے نہ چھ میڑ ستر شروع پان۔ یئمہ ستر زمین پا دا اورس لائیق چھنے روزان۔ پاتھین زالنے ستر چھ تیڑھ دہ پا د سپداں یئمہ ستر زوڈاً زن ہند زید روزن سبھاہ دشوار بناں چھ تھے شہہ ہیوں تھے چھ مشکل بناں۔ دریاون، کولن تھے ڈرین مژہ پاتھین دا رتھ دنے ستر چھ آبس ٹھو ریوان۔ یئمہ ستر یپ پنگ صورتحال پا د چھ سپداں۔ چارواںے چھ پاتھین کھووان تھے یہ چھنے یمن ہضم گڑھان بلکہ چھ معدس مژہ جو دے روزان۔ یئمہ ستر انفشن گڑھان چھ تھے یم چھ مرتع تھے ہر کان۔

س۔ ۲۔ پاتھین کیا زیچھ دوہ کھوتے دوہ پریشانی پا د کران؟

ج۔ پاتھینگ استعمال چھ دوہ کھوتے دوہ دُز عالمہ با پتھ پریشانی پا د کران تکیا زیپہ چھنے زمپس مژہ

ہوژان تے نہ چھ گلان تے نہ چھ میرست شروپاں میلہ زن باقی چھ ملن گرومنیرن دوں ڙھوڑھ،
هر یومت کھین چین، پلوز چه، ششتر کھنجہ بیتھ ہو ڙتھ میرش روپاں چھ۔ پاٹھین زالنے ستر چھ تیتھ ده
پاؤ گڑھان یئمہ ستر اندر پکھس مژروزن واجین ڙوڈاً ڙن سبھاہ مضردار واتان چھ۔ پاٹھین چھ
کولن تے ڈریاون مژدار تھدنے ستر آبس ڻھو رکران تے اسہ ستر چھ یپ ینگ صورتحال پاؤ سپدان۔ پاٹ
چھ سانین پاؤ داوار نہ والین کھین بے یو وته بخیر بناوان۔ تکیا ز پاٹھین ستر چھ زمپس مژرا کہ قسمک
کنپس ہیو پھالان یئمہ ستر سوزمین یتھ مژر پاٹھین دو براونہ آسہ آمٹ تباہ گڑھان۔ پاٹھین چھ
چارواں بآپتھ تھ موٹگ ساماںہ بنان۔ تکیا ز یم چھ ڙھو ڻس ستر رایومت پاٹھین کھوان یس نہ یہندن
آندر من مژشروپاں چھ تے یتھ پاٹھر چھ یمن انفلکشن گڑھان یئمہ ستر یم چارواے مر تھتھ چھ
ہرکان۔

س۳۔ جموں کشمیر کارن کتھ ایکس تھت چھ پالی ٹھپس پیٹھ پابندی عائید گر ہڑ؟
ج۔ جموں کشمیر کارن چھ Biodegradable Act 2007 عیسوی لیس تھت ۱۱-۲۰۰۹ءی
مژر پاٹھین لفافہ تھیلین پیٹھ ٹھاکھلا گنگ اکھونون پاس کو رمٹ۔ تے کیئھہ سکارڈتھ چھکھ بازرس منخر
یہ کاپڑنے بآپتھ تراؤ در مت۔

س۴۔ پاٹھین کھینے ستر کیا نو قسان چھ چارواں واتان؟
ج۔ پاٹھین چھ چارواں بآپتھ تھ موٹگ ساماںہ بنان۔ تکیا ز یم چھ ڙھو ڻس ستر رایومت پاٹھین کھوان یس نہ یہندن
آندر من مژشروپاں چھ تے یتھ پاٹھر چھ یمن انفلکشن گڑھان یئمہ ستر یم چارواے
مر تھتھ ہرکان چھ۔

س۵۔ پالی ٹھپس روٹ کرنے بآپتھ کم قدم پزن اسہ تلئن؟
ج۔ پاٹھپس روٹ کرنے بآپتھ پزن اسہ نوم قدم تلئن:

- ۱- بازِ مژسودا ملکو ہینے وزیر پذاسه پا تھیں لفافو بدله کپر، ویا کاغذ و بیگ استعمال گرن۔
- ۲- تعلیمی ادارن مژ پرن والین بچن عستہ عستہ پذاسه پا تھیں عستہ واتن والہ نقصانہ نشہ باقی لکھتے زائر یاب کرنے۔
- ۳- اسہ پذ پا تھیں بناؤں والین کارخانن امیک متبادل یعنی موڑ لفافہ تے کاغذی بیگ بناؤں کرنے کے لئے ول تے ٹھل اپناوں کو طور طریقہ پچھنا و نہ تے امیک لوٹ کر نہ باپتھ باضابطہ اکھونون پاس کرنا۔

سوال نمبر ۳۔ اونڈ پوک صاف تھاونے باپتھ پزن بسیار قدم تلنے:

مثلن: اسہ پذ نہ پا تھیں استعمال کرنا۔

- ۱- امہ بدله پزن اسہ کپر ٹھیلہ یا کاغذ لفافہ استعمال کرنے۔
- ۲- اسہ پزن لوکٹ بڈی پا تھیں کہ نقصانہ نشہ زائر یاب کرنے۔
- ۳- پا تھیں روفٹ کر نہ باپتھ پذ سرکارس قونون بناؤں۔
- ۴- اسہ پذ پا تھیں لفافہ بناؤں والین کارخانن امہ بدله کا نہہ متبادل دین۔

سوال نمبر ۴۔ کالم الف، رلاؤ کالم ب، یس عستہ:

ب

الف

- | | |
|---|---|
| <p>۱- آب</p> <p>۲- ماحول</p> <p>۳- گھوکٹ</p> <p>۴- پا تھیں چھ</p> | <p>چھ زندہ روز نہ باپتھ ضروری۔</p> <p>گرٹھ صاف تھاون۔</p> <p>لا گنہ عستہ چھ ماحول صاف روزان۔</p> <p>انسانی صحبتہ باپتھ مضر۔</p> |
|---|---|

سوال نمبر ۵۔ مثال و چھتھ لپکھو و آحدنا و تین جمع ناہی:

جمع	واحد
آور	آور
دجہ	دنج
آفڑ	آفت
خصلہ	خصلت
زنجہ	زنجڈ
کھلیو	کھیول

سوال نمبر ۶۔ ماسٹر جی یس پڑھتھ کری یو کھیم محاور جملن مژ استعمال:

- | | | |
|------------------|--------------|---|
| ۱۔ لوں بُن: | محبت کرُن: | موچھے ہمیشہ شر ہن لوں بران۔ |
| ۲۔ کنس کُشن: | توجہ نہ دُن: | منشاچھے سبق پرنے و زکنس کشان۔ |
| ۳۔ بُتھ لگن: | واپس ووھن: | رحمان پُجھ سخ کمین سہ پچھ مائس دو ہے بُتھ لگان۔ |
| ۴۔ اتھر تُلن: | واپس ووھن: | امجدن تُل نصیحت کرنس پیٹھ مائس پیٹھ اتھر۔ |
| ۵۔ آسامانے پیوں: | حاران گرھن: | تُھند رِزلٹ بُوز تھ پیوں بے اسامانے۔ |

سوال نمبر ۷۔ یمن عنوان تحت لپکھو دا دا جملہ:

ا۔ پاٹھپنکو مضر اثرات

- ۱۔ پاٹھپن چھ Lead Based Cadmium ناود کیمیا ستر بنونے یوان یُس سانہ صحیتے باپتھ سبٹھاہ مضر چھ۔
- ۲۔ پاٹھپن چھنے زمپس مژہ وزان بلکہ چھ موجو دے روزان یئمہ ستر زمپس اکہ قسمک کنسر پھالان چھ یئمہ ستر سائی زمپن بخبر بناں چھے۔
- ۳۔ پاٹھپن زالنہ ستر چھ اکھ تیتھ دہ سپدان یئمہ ستر ہوا اولو دسپدان چھتے رُڈاً ڈاً ڈاً چھ امہ ستر نقصان واتان۔
- ۴۔ پاٹھپن کھدینہ ستر چھ چارو این انفلکشن گڑھان یئمہ ستر تم مر تھہ ہبکان چھ۔
- ۵۔ پاٹھپن کولن تے دریاون مژہ دا رتح دنے ستر چھ بلس ٹھو رلگان یئمہ ستر یپ بینگ صورتحال پاڈ گڑھان چھ۔
- ۶۔ پاٹھپن چھنے میش ستر شرو پان یئمہ ستر زمین بخبر بناں چھے۔
- ۷۔ Lead Based Cadmium ناود کیمیا ستر بنیو موت پاٹھپن ستر چھ سانس صحتس زبردست نقصان واتان تے اسک چھ مختلف بہارہن مژہ بتلا سپدان۔
- ۸۔ پاٹھپن ستر چھ سون اوند پوک سبٹھاہ اولو دسپدان یُس نہ سانہ باپتھ جان چھ۔
- ۹۔ پاٹھپن نالہن تے پپن مژہ دا رتح دنے ستر چھ پیپہ تے نالہ بُلا ک گڑھان یئمہ ستر گنڈ آب سرٹکن پٹھ یوان چھ۔

گلمن ہندر فائیڈ

- ۱- گلمن ہزارہمیت تے افایتیت نشہ ہیکیہ نہ کانہہ انکار کرتھ۔
- ۲- گلر چھ سانہ زندگی خاطر پراریاہ ضروری۔
- ۳- گلی چھز مین رُڈ گرٹھنے تھے پر گرٹھنے نشہ بجاوان۔
- ۴- گلمن ہندوصول چھنے رو دس تیز تیز پکنے دواں۔ یئمہ ستّر زمینگ کٹاوٹے بھاو بچان چھ۔
- ۵- گلر چھ ما حول صاف تھاونس مژا کھا ہم رول ادا کران۔
- ۶- اکھرسبز گل چھ او سٹا آسیجن تراوان۔
- ۷- گلر چھرو دوالنس مژتھ اسہ مدد کران۔
- ۸- بتھ کنر چھ کولن، دریاون تھے سمندرن مژ آنچ سطھ ہران۔
- ۹- گلر چھ اسہ آسیجن تھے دواں یُس سانہ زپروز نہ خاطر ضروری چھ۔
- ۱۰- گلر چھز مینخ نؤ بصورتی بڈ راوان۔