

**SUBJECT: ENGLISH**

**“SHAIKH NOOR-UD-DIN WALI (RA)”**

**Q1. Why did Shaikh Noor-Ud-Din Wali (RA) enter the cave?**

Ans. Shaikh Noor-ud-Din Wali (RA) entered the cave in order to do penance and purify his self. This was the period of his spiritual training and preparation.

**Q2. What made people flock to the Shaikh?**

Ans. Shaikh Noor-ud-Din Wali (RA) was a true saint. He set an example of simplicity, truthfulness and devoted service of mankind. He preached his simple gospel of fear of God and accountability before Him after death. People from every nook and corner of Kashmir used to go to him to get spiritual guidance. He taught people that the chosen servants of God are those who worship Him sincerely and fulfill their duties in life regularly. All these qualities made people flock to him.

**Q3. What does Shaikh-Ul-Alam (RA) mean?**

Ans. Shaikh-ul-Alam (RA) means the spiritual guide of the world or the saint of the world stature.

**Q4. What kind of life did Shaikh-Ul-Alam (RA) lead?**

Ans. Shaikh-ul-Alam (RA) led a saintly life. He set an example of simplicity, truthfulness and devoted service of mankind.

**Q5. What does Shaikh-Ul-Alam (RA) teaches to the people?**

Ans. Shaikh-ul-Alam (RA) preached his simple gospel of fear of God and accountability before Him after death. He taught the people that a true saint is not one who escapes from life but one who does the duties of life with honesty and humility. He also taught them that the chosen servants of God are those who worship Him sincerely and fulfill their duties in life regularly.

**SAINT OF THE GUTTERS  
-PROF NEERJA MATTOO.**

**Q1. What activities made Mother Theresa so exceptional?**

Ans. Mother Theresa was one of the greatest figures of the twentieth century. She did not hold any powerful position in politics or government, yet she ruled over the hearts and minds of countless number of people in every country. She was awarded the highest honours of the world for her humanitarian work, including the Nobel Peace Prize. Her activities like cleaning the sores on the body of a half dead man without the slightest trace of disgust at the stench were unparalleled. She left all the worldly comfort and spent her life in slums so that she could be of some help to the wretched people of the earth. These were the activities which made Mother Theresa an outstanding personality.

**Q2. Why did Mother Theresa leave St. Mary high school?**

Ans. One day in 1946, when Mother Theresa was travelling in a train from Kolkata to Darjeeling, she heard a voice telling her that she must leave the convent (St. Mary's) and help the poor by living with them. Mother Theresa took the voice as an order from God. So, she left the convent and started a new order of nuns called the 'missionaries of charity'.

**Q3. What did Mother Theresa mean by 'to fail would be to break faith'?**

Ans. The voice that Mother Theresa heard while travelling in a train from Kolkata to Darjeeling, commanded her to leave the convent and become a full time servant of the downtrodden. Mother Theresa took it as an order from God. She thought that if she doesn't carry out the order, it would mean breaking the faith God had put in her.

**Q4. What kind of life did Mother Theresa lead?**

Ans. Mother Theresa lived a life of poverty and chastity. She lived among the poorest of the poor and dressed herself in a cotton blue-bordered sari which reflected her simplicity. She lived a life of total submission to God.

**Q5. Why do you think Mother Theresa learnt Bengali?**

Ans. Mother Theresa learnt Bengali so that she could speak to the people whom she had come to serve.

**Q6. What did Malcolm Muggeridge see on the streets of Kolkata?**

Ans. On the streets of Kolkata, Malcolm Muggeridge saw Mother Theresa cleaning the sores on the body of a half-dead man, without the slightest trace of disgust at the stench. He could not believe that a human being could look so happy while doing such a repelling task.

**SHORT STORY**  
**THE LAST LEAF**  
**O'HENRY**

**Q1. What was the cause of Johnsy's illness? How could the illness be treated?**

Ans. Johnsy was suffering from Pneumonia. But her illness was more psychological than physical. She had made up her mind that she was not going to get well. No medicine could help her. Her illness could only be treated by bringing back hope in her life.

**Q2. Do you think the feeling of depression Johnsy has is common among the teenagers?**

Ans. Yes, the feeling of depression Johnsy had is common among the teenagers. Teenagers are generally too imaginative. They fantasise the basic reality of life. They want to see the life through coloured glasses but as soon as reality strikes on it, they lose their hope and desire to live.

**Q3. What was Behrman's dream? Did it come true?**

Ans. Behrman's dream was to create a masterpiece in painting that could move heart and soul. His dream came true but only with his death. He painted an ivy leaf on the wall that looked exactly like a real one. His painting was surely an artist's masterpiece.

**Q4. How is the 'last leaf' the artist's masterpiece? What makes you say so?**

Ans. 'The last leaf' is surely the artist's masterpiece as it looked so realistic that Johnsy and Sue thought it to be nature's creation.

It is a masterpiece because it had the potential to save someone's life by inducting faith, hope and zeal in a person who had lost the desire to live.

**PLAY**  
**IF I WERE YOU**  
**-DOUGLAS JAMES.**

**Q1. "At last a sympathetic audience".**

(a) Who says this?

Ans. Gerrard says these words.

(b) Why does he say it?

Ans. Gerrard says these words to calm down the volatile situation and win the confidence of the intruder.

(c) IS he sarcastic or serious?

Ans. Gerrard is sarcastic.

**Q2. Why does the intruder choose Gerrard as the man whose identity he wants to take on?**

Ans. The intruder is a crook. He has killed a cop and the police is after him. His physical features have a close resemblance with those of Gerrard. He decides to kill him so that he may then live comfortably as Gerrard and never be caught.

**Q3. "I said it with bullets".**

(a) Who says these words?

Ans. Gerrard says these words.

(b) What does it mean?

Ans. It means that Gerrard has killed someone.

(c) Is it the truth? What is the speaker's reason for saying this?

Ans. The statement is not the truth. Gerrard says these words only to befool the intruder. He wants him to convince that he, too, is a criminal like him.

**Q4. What is Gerrard's profession? Quote the parts of the play to support your answer?**

Ans. Gerrard works for theatre. The words from the play that supports the answer are: 'I can't let you have the props in time for rehearsal... I think I'll put it in my next play'.

**Q5. You will soon stop being smart.**

(a) Who says this?

Ans. The intruder says these words.

(b) Why does the speaker say it?

Ans. The intruder says these words because Gerrard doesn't fear him and he turns the difficult situation into a comedy.

**'OR'**

The intruder says these words because Gerrard seems to have no fear of the intruder.

(c) What according to the speaker will stop Gerrard from being smart?

Ans. The intruder's revolver will stop Gerrard from being smart. The intruder threatens Gerrard to hit him with his gun.

**Q6. "They can't hang me twice".**

(a) Who says this?

Ans. The intruder says these words.

(b) Why does the speaker say it?

Ans. The intruder had killed a policeman. Now he plans to kill Gerrard. If he is caught, he will be hanged either for killing one person or two. Thus, the intruder says that he cannot be hanged twice.

**'OR'**

THE intruder tells Gerrard that he has already killed a cop and can be hanged for it. Now he has planned to kill Gerrard also, and thus he can't be hanged twice if caught.

**Q7. "A mystery I propose to explain". What is the mystery the speaker proposes to explain?**

Ans. Here Gerrard wants to tell the intruder that he, too, has killed a man and the police is after him.

**Q8. "This is your big surprise".**

(a) Where has this been said in the play?

Ans. It has been said when the intruder prepares to shoot Gerrard.

**"OR"**

Gerrard says these words when the intruder prepares to shoot him.

(b) What is the surprise?

Ans. Gerrard surprises the intruder by telling him that he is himself a murderer and the police is after him.

Gerrard explains that he has to change places frequently as the police may spot him any time and nab him.

**SOME ADDITIONAL QUESTIONS**

**SIGNIFICANCE OF THE TITLE**

**'OR'**

**THEME OF THE PLAY**

The play might have been given many titles like 'A Wise Escape' or 'A Snatched Identity' but the title 'If I Were You' has a great significance and appropriation.

An intruder broke into Gerrard's cottage with a criminal intent. Gerrard welcomed him with open arms and they started their conversation. Each reply of Gerrard was humorous. The intruder warned him not to be over smart. He actually had come to kill Gerrard and take his identity. The intruder told him that he enjoyed his life the way intruder wanted to. Moreover, he had killed a cop and police was in search of him. So, he was unable to fulfill his wishes. Gerrard looked almost like intruder. Intruder told him that after wearing all his accessories, the police will not be able to arrest him. In the entire play, he talked about being Gerrard and the lifestyle he would have after killing Gerrard. So the play is given the title 'If I were You'.

The play 'If I were You' teaches a very important lesson of life. The play conveys a message that we should try to resist and solve every problem in a calm manner. At times, we may be in some trouble

but panicking will not help us at all, rather using our mind and remaining cool will probably help us to tackle any adverse situation.

#### ~ CHARACTER SKETCH OF GERRARD.

Gerrard is one of the characters from the play, ‘If I Were You’. The whole play revolves around this significant person – laden with smartness and invigorated with humour.

Gerrard is a witty playwright and knows how to handle any adverse situation. One day, an intruder breaks into his cottage with intent to kill him and snatch his identity but Gerrard does not panic at all. Rather, he escapes from the clutches of intruder by befooling him. He manages to convince the intruder that he is a criminal too. At last, he shows his bravery by pushing the criminal into the cupboard, locking him there and calling the police. The way Gerrard evades this issue reflects his brilliant mindfulness and cleverness.

#### ~ CHARACTER SKETCH OF THE INTRUDER

The intruder was a foolish, flashy and coward type of person. He used to indulge in vandalism, havoc, rigidity and violence. Using his inefficacious and irreverent wit, he tried his level best to make Gerrard as his scapegoat, but fell prey of his poppy cock (nonsense) and giggle nature.

The intruder was of the notion that he was much smarter than Gerrard but in reality he was a true fool. He was a criminal and had the same physical appearance like Gerrard. So one day, he entered Gerrard’s house with intent to kill him and then take on his identity. But the way Gerrard locked him in the cupboard and convinced him that he too was a criminal and the police was after him proved that the intruder was a fool. He tried to frighten Gerrard, but seeing Gerrard’s calm response he was confused. His stupidity proved unhealthy for him, and was brilliantly taken to task by Gerrard – the cool, confident and dandy fellow.

### POETRY

#### ‘TO THE CUCKOO’ (WILLIAM WORDSWORTH)

**CENTRAL IDEA:** The beauties bestowed to us by nature are the main reasons of survival of mankind on this globe. Humans keep on harming this beautiful earth to fulfill their selfish needs but it is because of the generous and beautiful creatures of nature that this earth becomes a beautiful place to live in.

**SUMMARY:** The poem “To The Cuckoo” has been authored by William Wordsworth- a great nature lover, rightly known as ‘Nature Poet’. The poet is thrilled by the voice of the cuckoo. He personifies the cuckoo and expresses his feelings to the bird as if it seems to understand him. The poet addresses the cuckoo as Blithe Newcomer because this bird seems to be very cheerful and is a newcomer in the season of spring. The poet says that he has been hearing the cuckoo since his childhood; still continues to hear it and becomes mesmerized after listening to its beautiful tune. He wonders whether he should call it a bird or a wandering voice because he is never able to locate it and only hears its sound. The poet hears its loud sound while resting on the grass and this sound seems to pass from hill to hill, sometimes appearing to be near and at other times, far away. He addresses to the bird that although he does not understand its language but its beautiful tune fills him with great moments of imagination. He welcomes the cuckoo with great admiration and seems to be in a fix whether to call it a bird, a voice or a mystery.

In the next stanza, the poet recapitulates the beautiful days of his childhood. He remembers that it is the same tune of the cuckoo which he used to hear in his childhood and this tune made him look towards different places like bushes, trees and sky in order to locate the bird. He remembers that he would wander in the woods and fields in order to search cuckoo but it remained a hope for which he craved for a long time. The poet further says that he still listens to the same beautiful tune of cuckoo and thus recalls the beautiful days of his childhood, when he used to be innocent and generous. Lastly, he calls the bird as Blessed bird because it is made to beautify this earth without any selfish needs. The poet says that this earth in which humans live and die seems to be fairyland, beautiful and attractive because it is a residential place of nature’s beautiful wonders like cuckoo, which does not harm anyone unlike humans who do trivial things to disrupt the peace and harmony of the globe.

#### Q1. How does the cuckoo’s voice charm the poet?

Ans. The cuckoo’s voice charms the poet because its voice fills his heart with delight. He wanders in the woods and fields to locate the bird which seems to him a mystery or an invisible thing.

**Q2. Why does the poet call the cuckoo ‘a wandering voice’ and the ‘darling of spring’?**

Ans. The poet calls the cuckoo ‘a wandering voice’ because he is unable to locate the bird but only hears its bewitching voice which seems to pass from hill to hill, sometimes far and sometimes near. As the sweet voice of the cuckoo reaches his ears only in spring season, so he calls it the ‘darling of the spring’.

**Q3. Which childhood experiences does the poet describe in stanza five and six?**

Ans. The poet describes his childhood experiences when he used to listen to the enchanting voice of the cuckoo and would look around to find the bird. He remembers how he used to wander in the woods and fields to find the bird which always remained a hope; he had craved for a long time.

**Q4. What does ‘golden time’ refer to?**

Ans. The ‘golden time’ refers to the poet’s childhood when he was happy and carefree.

**OR**

The ‘golden time’ refers to the poet’s childhood when he craved for the cuckoo and used to be happy, carefree and full of imagination.

**~ LEARNING ABOUT LITERARY DEVICES**

**Q1. Who is personified in the poem?**

Ans. The cuckoo is personified in the poem.

**Q2. What is the rhyme scheme of the poem?**

Ans. The rhyme scheme of the poem is abab.

**Q3. What imagery does Wordsworth use to portray the beauty of nature in the poem?**

Ans. The poet makes us visualize the beautiful scenes of the spring season. The image of a cuckoo with its sweet voice, the images of trees, bushes and green meadows enriches our imagination.

### ‘CART DRIVER’ - PADMA SACHDEVA

**CENTRAL IDEA:** The love a mother has for her children is far more than the love she has for her own self. A mother cannot bear to see her children in trouble and she even stakes her life for her young ones. This nature of mother is found in almost all the creatures of universe.

**SUMMARY:** The poem entitled ‘‘Cart Driver’’ has been pen locked by ‘Padma Sachdeva’. In this poem, the poet describes the love a mother has for children. The poem is presented in an eerie atmosphere in which a mother bird looks for the food for her young babies and all the time seems to be worried about them. The poet says that a bulbul is out on a dreadful night to search food for her young ones which are hungry in the nest. She is very careful, cautious and vigilant. She is afraid as well and keeps her ears alert in case of any sound of predator. After getting food for her babies, she hurries back to her nest. Her young ones are chirping and twittering all the time, unknown of the fact that the forest is in the clutches of mystery and fear. Suddenly, she hears crackling sound of dry leaves made by the wheels of the bullock cart. The cart driver is fast asleep and the bullocks are moving on their own. She becomes terrified as she imagines the forest on fire due to the overturning of the cart driver’s hookah as a result of stumbling. The atmosphere of the forest makes her imagination to be true and she gets so panicked that she tries to run back to her nest to save her babies but out of dread, fear and worry about her young ones, she is unable to lift her legs.

**Q1. Why is the Bulbul afraid? Why does the bulbul want to hasten to its nest?**

Ans. The bulbul is afraid because the forest it lives in is full of terror and danger. It hastens to its nest in order to take care of its four fledglings which are helpless and alone in the nest.

**Q2. Why does the bulbul hide itself in the bushes?**

Ans. The bulbul hides behind the bushes because it gets terrified on hearing the crackling sound of dry leaves made by the wheels of a bullock cart.

**Q3. What does the bulbul imagine?**

Ans. The bulbul imagines the forest on fire.



**Q4. What feelings does bulbul's imagination arouse in the readers?**

Ans. It arouses feelings of pity in the readers.

**Q5. Why is the poem named 'Cart Driver'?**

Ans. The poem could be given many titles like 'A Mother's Love', 'A Tussle' but the name 'Cart Driver' is more appropriate because it is only at the arrival of the Cart Driver, we come to know the extent of love, a mother bird has for her young babies. The bulbul imagines the forest on fire and tries hard to save her young ones without considering her own safety. These imaginations are aroused in the bird only when she hears the crackling sound of dry leaves made by the wheels of a bullock cart in the forest.

#### **LEARNING ABOUT LITERARY DEVICES**

**Q1. What images does the poet use to create an atmosphere of fear and silence in the poem?**

Ans. The images that create an atmosphere of fear and silence in the poem are as follows:

1. Fearful silence of the forest.
2. Ears picked to pick some sound.
3. Throes of fear.
4. Hooka overturns
5. The forest on fire
6. Can't lift its leg.

OASIS Hr. Sec. Educational Institute

## SUBJECT: SCIENCE

### ATOMS AND MOLECULES

#### Laws of chemical combination

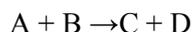
Whenever reactants react together to form the products or the elements combine together to form a compound, they do so according to certain laws. These laws are called "the laws of chemical combination".

There are three laws of chemical combination:-

**1. Law of conservation of Mass:** - This law was put forward by Antoine Lavoisier in 1774. It states, "Mass can neither be created nor destroyed in a chemical reaction. In other words, in any chemical reaction, the total mass of the reactants is equal to the total mass of the products".

Suppose a chemical reaction is carried between A and B. the products formed are C and D.

Thus,



**Example:** Calcium carbonate on heating decomposes to form calcium oxide and carbon dioxide. It is found that if 100g of calcium carbonate is heated, it gives 56g of calcium oxide and 44g of carbon dioxide. Thus for this reaction the total mass of reactants is equal to the total mass of products.



**2. Law of Constant Proportion:** - This law was put forward by J.L. Proust in 1799. It states, "a chemical compound is always made up of the same elements combined together in the same fixed proportion by mass". This means that whatever be the source from which it is obtained, a pure chemical compound is always made up of the same elements in the same mass percentage.

**Example:** Water is a compound of hydrogen and oxygen. It can be obtained from various sources. But from whatever source we may get it, 9 parts by weight of water is always found to contain 1 part by weight of hydrogen and 8 parts by weight of oxygen. Thus, in water, this proportion of hydrogen and oxygen by weight always remains constant i.e. 1:8.

**3. The Law of Multiple Proportions:** - When one element combines with a second element to form two or more different compounds, the weights of one of the elements, which combine with a constant weight of the other, bear a simple ratio to one another.

**Example:** Hydrogen and oxygen combine in two different ways to produce two compounds, water (H<sub>2</sub>O) and hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>).

In water, 2g of hydrogen combines with 16g of oxygen.

In hydrogen peroxide, 2g of hydrogen combines with 2x16=32g of oxygen.

Thus, the weights of oxygen which combine with a constant weight of hydrogen (2g) bear a simple ratio of 16: 32 or 1: 2.

### DALTON'S ATOMIC THEORY

Based on the laws of chemical combination, Dalton put forward a theory in 1808 that all matter is composed of small particles called atoms. This theory later came to be known as Dalton's Atomic Theory. This theory has certain postulates called postulates of Dalton's Atomic Theory.

#### Postulates of Dalton's Atomic Theory:-

The main Postulates of Dalton's Atomic Theory are as follows:

- i. All matter is made up of very small particles called atoms which cannot be divided further.
- ii. Atoms cannot be created or destroyed by any chemical process, i.e., atoms are indestructible.
- iii. Atoms of a same element are identical in all respects i.e. shape, size, mass and properties.
- iv. Atoms of different elements have different sizes and masses and also possess different properties.
- v. Atoms combine in the ratio of small whole numbers to form compounds.
- vi. The relative number and the kinds of atoms are constant in a given compound.

### Drawbacks of Dalton's Atomic Theory

Even though Dalton's atomic theory was able to explain the law of conservation of mass and law of constant proportion, however it suffered from the following drawbacks:

1. With the discovery of sub atomic particles like electron, proton, neutron etc, Atom is no longer considered as the smallest indivisible particle.
2. Atoms of the same element may have different masses (isotopes).
3. Atoms of different elements may have same masses (isobars)
4. Substances made up of the same kind of atoms may have different properties.
5. The ratio in which the different atoms combine to form compound may be fixed and integral but may not be simple.

### ATOM

*An atom is defined as the smallest particle of an element that takes part in a chemical reaction. It is the smallest particle which may or may not be capable of free existence. Atoms of the most elements are very reactive and do not exist in the Free State.*

How big are atoms? Atoms are very small in size. They are so small that they cannot be seen under a microscope. The size of an atom is indicated by its radius called atomic radius. Their radii are of the order of  $10^{-10}$ m. Hydrogen atom is the smallest atom of all.

### Modern Symbols of Elements:-

Different elements have been named either after the name of the place where they were first discovered or after the name of the scientist who discovered it or on the basis of some important property of the element. For example, the name copper came from Cyprus, Rutherfordium after Rutherford etc. Similarly, gold was so named after the English word which means yellow colour and actinium was so named due to its high radioactivity. However, as more and more elements were discovered, an international committee was setup, called international Union of Pure and Applied Chemistry (IUPAC), which approved the names of the different elements.

Some guidelines for writing the symbols of different elements are given below:

(a) The symbol of an element is the "first letter" or "first letter and another letter" of the English name or Latin name of the element. However, in all cases, the first letter is always capital and another letter (if added) is always a small letter.

For example, hydrogen is represented by 'H', oxygen by 'O', carbon by 'C', cobalt by Co, aluminium by Al etc.

### Atomic Mass

Atomic mass of an element may be defined as the average relative mass of an atom of the element as compared with mass of an atom of carbon (C-12 isotope) taken as 12 amu.

### MOLECULE

*A molecule is the smallest particle of a substance (element or compound) which has the property of that substance and can exist in the free state. It is electrically neutral group of two (or more) atoms chemically bonded together.*

There are two types of molecules depending upon the atoms combined in a molecule.

- 1) **Molecule of element:** The molecule of element contains two (or more) similar atoms chemically combined together. e.g. a molecule of hydrogen contains 2 hydrogen atoms and is written as  $H_2$ .
- 2) **Molecule of compound:** The molecule of compound contains two (or more) different atoms chemically combined together. e.g. water is compound. The molecules of water contain 2 hydrogen atoms and one oxygen atom is written as  $H_2O$ .

**Atomicity:** - The number of atoms present in one molecule of the substance is called its atomicity.

Types of molecules: - based upon the number of atoms they contain, we can classify molecules as follows.

**I. Monoatomic molecules** Noble gases exist in atomic form, i.e., they are monoatomic. For example, helium (He), neon (Ne) and argon (Ar).

- 2. Diatomic molecules** these molecules consist of two atoms, for example, hydrogen (H<sub>2</sub>), oxygen (O<sub>2</sub>), nitrogen (N<sub>2</sub>) and chlorine (Cl<sub>2</sub>).
- 3. Triatomic molecules** these molecules consist of three atoms. For example, ozone (O<sub>3</sub>) is a triatomic molecule. Similarly, CO<sub>2</sub>, H<sub>2</sub>O, and H<sub>2</sub>S are examples of triatomic molecules.
- 4. Tetraatomic molecules** these consist of four atoms .for example, P<sub>4</sub> is a tetraatomic molecule of phosphorus.
- 5. Polyatomic molecules** any molecule containing more than four atoms is called polyatomic. For example, S<sub>8</sub>, CH<sub>4</sub>, and H<sub>2</sub>SO<sub>4</sub> are polyatomic molecules.

### IONS:-

An ion is a charged particle having negative or positive charge. A negatively charged ion is called an 'anion' and the positively charged ion is called as 'cation'. For Example, Sodium Chloride (NaCl). Its constituent particles are positively charged sodium ions (Na<sup>+</sup>) and negatively charged chloride ions (Cl<sup>-</sup>).

A cation is formed by the loss of one or more electrons by an atom. Thus Cation contains less electrons than a normal atom. The ions of all the metal elements are cation. The positively charge on cation depends upon the number of electrons lost by its atom.

An Anion is formed by the gain of one or more electrons by an atom. Thus Anion contains more electrons than a normal atom. The ions of the nonmetal elements are anion. The negatively charge on anion depends upon the number of electrons gained by its atom.

### Molecular mass and formula Mass:

The molecular mass of a substance (an element or a compound) may be defined as the average relative mass of a molecule of the substance as compared with mass of an atom of carbon (C-12 isotope) taken as 12 amu.

The molecular mass of a compound can be obtained by adding atomic masses of all the atoms present in the molecule of the compound. For example, molecular mass of CO is -  
 $12 \times 1 + 16 \times 2 = 44 \text{ u}$

### Gram Molecular Mass:

Gram molecular mass of a substance is defined as that much quantity of the substance whose mass expressed in grams is numerically equal to its molecular mass.

For example: The molecular mass of CO is 44 u, its gram molecular mass is 44g. Gram molecule mass of a substance is also known as gram-molecular mass of the substance.

### Formula Mass:

Formula mass of an ionic compound is obtained by adding atomic masses of all the atoms in a formula unit of the compound.

For example: Formula mass of potassium chloride (KCl) = Atomic mass of potassium atomic mass of chlorine  $39 + 35.5 = 74.5\text{u}$

### Chemical formula:

The chemical formula of a compound describes the composition of a molecule of the compound in terms of the symbols of elements and the number of atoms of each element present in one molecule of the compound. Example: Water is a compound whose one molecule is made up of two atoms of hydrogen and one atom of oxygen and hence its chemical formula is H<sub>2</sub>O.

**Rules for writing the chemical formulae:-** the following steps are followed for writing the formulae of molecular or ionic compounds :

- In case if simple molecular compounds, i.e., Those compounds which are made up of only two elements (and hence also called binary compounds), the symbols of the two elements are written side by side and their respective valencies are written below their symbols.
- In case of simple ionic compounds, i.e., compounds made up of monoatomic ions, the symbol of the metal atom (forming the cation) us written first followed by the symbol of the non-metal atom (forming the anion) and their respective valencies are written below their symbols.
- In case of ionic compounds containing polyatomic ions, the formula of the polyatomic ion is written in brackets and the valencies are written below as in the above cases.
- In any of the above case, if there is a common factor between the valencies of the cation and the anion, the valencies are divided by the common factor.



(v) Finally, we apply criss-cross, i.e., cross-over of the valencies or the charges so that they appear on the lower right hand side of the symbols. However, '1' appearing on the lower right hand side of the symbol is omitted. Similarly, + and - signs of the charges of the ions are omitted.

(vi) For '1' appearing on the lower right hand side of a polyatomic ion, the brackets of the polyatomic ion are also omitted.

**Question1. Write down the formulae of**

- (i) Sodium oxide
- (ii) Aluminium chloride
- (iii) Sodium Sulphide
- (iv) Magnesium hydroxide

**(i) Formula of Sodium Oxide**

Symbol → Na      O  
 Charge → +1      -2  
 Formula → Na<sub>2</sub>O

**(iii) Formula of Sodium Sulphide**

Symbol → Na      S  
 Charge → +1      -2  
 Formula → Na<sub>2</sub>S

**(ii) Formula of aluminium chloride**

Symbol → Al      Cl  
 Charge → +3      -1  
 Formula → AlCl<sub>3</sub>

**(iv) Formula of magnesium hydroxide**

Symbol → Mg      OH  
 Charge → +2      1  
 Formula → Mg(OH)<sub>2</sub>

**Mole Concept:**

Mole: Mole is a link between the mass of atoms (or molecules) and the number of atoms (or molecules). A mole (mol) is defined as the amount of a substance that contains as many atoms, molecules, ions, electrons or other elementary particles as there are atoms in exactly 12g of carbon-12(12C).the mass of 1 mol of atoms of an element is its relative atomic mass taken in grams. A mole represents a definite number of particles, viz., atoms, molecules, ions or electrons. This definite number is called the Avogadro number (now called the Avogadro constant) which is equal to  $6.022 \times 10^{23}$ .

Thus, 1 mole of atoms =  $6.022 \times 10^{23}$  atoms.

1 mole of molecules =  $6.022 \times 10^{23}$  molecules.

The mass of one mole of substance is called as its molar mass. The number of moles and molar mass of substance are related by this formula:

$$\text{number of moles (n)} = \frac{\text{mass of substance of substance (g)}}{\text{molar mass of substance}}$$

$$n = \frac{m}{M}$$

**Some numericals on mole concept.**

**Q. What is the mass of?**

- (a) 1 mole of nitrogen atoms?
- (b) 4 moles of aluminium atoms (Atomic mass of aluminium = 27)?
- (c) 10 moles of sodium sulphite (Na<sub>2</sub>SO<sub>3</sub>)?

Answer

- (a) The mass of 1 mole of nitrogen atoms is 14 g.
- (b) The mass of 4 moles of aluminium atoms is  $(4 \times 27) \text{ g} = 108 \text{ g}$
- (c) The mass of 10 moles of sodium sulphite (Na<sub>2</sub>SO<sub>3</sub>) is  $10 \times [2 \times 23 + 32 + 3 \times 16] \text{ g} = 10 \times 126 \text{ g} = 1260 \text{ g}$

**Q. Convert into mole.**

- (a) 12 g of oxygen gas
- (b) 20 g of water
- (c) 22 g of carbon dioxide

Answer

- (a) 32 g of oxygen gas = 1 mole



Then, 12 g of oxygen gas =  $12 / 32$  mole = 0.375 mole

(b) 18 g of water = 1 mole

Then, 20 g of water =  $20 / 18$  mole = 1.111 mole

(c) 44 g of carbon dioxide = 1 mole

Then, 22 g of carbon dioxide =  $22 / 44$  mole = 0.5 mole

**Q. What is the mass of?**

(a) 0.2 mole of oxygen atoms?

(b) 0.5 mole of water molecules?

Answer

(a) Mass of one mole of oxygen atoms = 16 g

Then, mass of 0.2 mole of oxygen atoms =  $0.2 \times 16$  g = 3.2 g

(b) Mass of one mole of water molecule = 18 g

Then, mass of 0.5 mole of water molecules =  $0.5 \times 18$  g = 9 g

**Q. Calculate the number of molecules of sulphur ( $S_8$ ) present in 16 g of solid sulphur.**

Answer

1 mole of solid sulphur ( $S_8$ ) =  $8 \times 32$  g = 256 g

i.e., 256 g of solid sulphur contains =  $6.022 \times 10^{23}$  molecules

Then, 16 g of solid sulphur contains =  $6.022 \times 10^{23} / 256 = 16$  molecules

=  $3.76375 \times 10^{22}$  molecules

**Q. Calculate the number of aluminium ions present in 0.051 g of aluminium oxide.**

(Hint: The mass of an ion is the same as that of an atom of the same element. Atomic mass of Al = 27 u)

Answer

Mole of aluminium oxide ( $Al_2O_3$ ) =  $2 \times 27 + 3 \times 16 = 102$  g

i.e., 102 g of  $Al_2O_3$  =  $6.022 \times 10^{23}$  molecules of  $Al_2O_3$

Then, 0.051 g of  $Al_2O_3$  contains =  $6.022 \times 10^{23} / 102 \times 0.051$  molecules

=  $3.011 \times 10^{20}$  molecules of  $Al_2O_3$

The number of aluminium ions ( $Al^{3+}$ ) present in one molecule of aluminium oxide is 2.

Therefore, the number of aluminium ions ( $Al^{3+}$ ) present in  $3.011 \times 10^{20}$  molecules (0.051 g)

of aluminium oxide ( $Al_2O_3$ ) =  $2 \times 3.011 \times 10^{20}$

=  $6.022 \times 10^{20}$

**Extra questions**

**Q. Calculate the molar mass of the following substances:**

(a) Ethyne,  $C_2H_2$

▶ Molar mass of ethyne,  $C_2H_2 = 2 \times 12 + 2 \times 1 = 26$  g

(b) Sulphur molecule,  $S_8$

▶ Molar mass of sulphur molecule,  $S_8 = 8 \times 32 = 256$  g

(c) Phosphorus molecule,  $P_4$  (atomic mass of phosphorus = 31)

▶ Molar mass of phosphorus molecule,  $P_4 = 4 \times 31 = 124$  g

(d) Hydrochloric acid, HCl

▶ Molar mass of hydrochloric acid,  $HCl = 1 + 35.5 = 36.5$  g

(e) Nitric acid,  $HNO_3$

▶ Molar mass of nitric acid,  $HNO_3 = 1 + 14 + 3 \times 16 = 63$  g

**Q. What are polyatomic ions? Give examples?**

Answer

A polyatomic ion is a group of atoms carrying a charge (positive or negative). For example, Nitrate ( $NO_3^-$ ), hydroxide ion ( $OH^-$ ).

## GRAVITATION

### INTRODUCTION:

#### Historical background

Observation of stars, planets and their motion has been the subject of attention since earlier times. The earliest recorded model for planetary motion proposed by *Ptolemy* about 2000 years ago was '*geocentric*' model in which all celestial objects i.e stars, the sun and the planets, all revolved around the earth in circular orbits.

However more elegant model 'heliocentric' model was already mentioned by *Aryabhata*, according to which sun was at the centre around which planets revolved.

A thousand years later, *Nicolas Copernicus* proposed a definitive model in which planets moved around sun in circular orbits. Galileo supported his theory.

It was around the same time, a nobleman from Denmark *Tycho Brahe* spent his entire life time recording observations of planets with naked eye. He compiled data and this data was analysed later by *Johannes Kepler* and he extracted three laws form. This data, called *Kepler's laws of planetary motion*. These laws were known to *Newton* and he came up with a *universal law of Gravitation*.

#### Universal law of Gravitation

"Every object in the universe attracts every other object with a force which is directly proportional to the product of two masses and inversely proportional to the square of the distance between them".

The direction of the force is along the line joining the two masses.

If  $m_1$  and  $m_2$  are the masses of two bodies separated by a distance  $d$  and  $F$  is the force of attraction between them, then

$$F \propto m_1 m_2 / d^2$$

$$F = G m_1 m_2 / d^2$$

Where  $G$  is a constant of proportionality and known as the constant of universal gravitation and equal to  $6.67 \times 10^{-11} \text{ Nm}^2 / \text{kg}^2$

If  $m_1 = m_2 = 1\text{kg}$  and  $d = 1\text{m}$ , then  $G = F$

I.e. Universal gravitational constant is the force of attraction (in Newton) between two bodies of mass 1(kg) each lying 1(m) distance apart.

#### Characteristics of Gravitational force:-

1. Gravitational force between two bodies or object does not need any contact between them. It means, gravitational force is action at a distance.
2. Gravitational force between two bodies varies inversely proportional to the square of the distance between them. Hence, gravitational force is an inverse square force.
3. The gravitational forces between two bodies or objects form an action-reaction pair. If object A attract object B with a force  $F_1$  and the object B attracts object A with a force  $F_2$ , then

$$F_1 = F_2$$

#### Do you know?

1. The value of  $G = 6.67 \times 10 \text{ N m}^2 \text{ kg}^{-2}$
2. The value of  $G$  is same throughout the universe and hence  $G$  is known as universal gravitational constant.
3. Value of  $G$  was determined in laboratory by Sir Henry Cavendish.
4. Since the value of  $G$  is very small, so the gravitational force is a very weak force.
5. Gravity: The gravitational force between a body and the earth is called gravity.it is the special case of gravitation.

## IMPORTANCE OF THE UNIVERSAL LAW OF GRAVITATION

The Universal law of gravitation given by Newton has explained successfully several phenomena. For example:

1. The gravitational force of attraction of the Earth is responsible for binding all terrestrial objects on the Earth.
2. The gravitational force of the Earth is responsible for holding the atmosphere around the Earth.
3. The gravitational force of the Earth is also responsible for the rainfall and snowfall on the Earth.
4. The flow of water in rivers is also due to gravitational force of the Earth on water.
5. The moon revolves around the Earth on account of gravitational 'pull' of the Earth on the Moon. Even all artificial satellites revolve around the Earth on account of gravitational pull of the Earth on the satellites.
6. Tides in oceans are formed due to the gravitational force between the moon and the water in oceans.

## KEPLER'S LAWS OF PLANETARY MOTION

Johannes Kepler was a 16<sup>th</sup> century astronomer who established three laws which govern the motion of planets (around the sun). These are known as Kepler's laws of planetary motion. The same laws also describe the motion of satellites (like the moon) around the planets (like the earth). The Kepler's laws of planetary motion are given below.

1. Kepler's First Law: The planets move in elliptical orbits around the sun, with the sun at one of the two foci of the elliptical orbit. This law is called **law of orbits**.
2. Kepler's Second Law: Each planet revolves around the sun in such a way that the line joining the planet to the sun sweeps over equal areas in equal intervals of time. This is called **law of areas**.
3. Kepler's Third Law: The cube of the mean distance of a planet from the sun is directly proportional to the square of time it takes to move around the sun. This is also called **law of periods**. The law can be expressed as:

$$T^2 \propto R^3$$

Or,  $T^2 / R^3 = \text{constant}$

## Newton's third law of motion and gravitation

The Newton's third law of motion also holds good for the force of gravitation. This means that when earth exerts a force of attraction on an object, then the object also exerts an equal force on the earth, in the opposite direction.

According to Newton's second law,

Force = Mass × Acceleration

$F = ma$

or  $a = F/m$

The mass of earth is very very large and acceleration produced in the earth very very small and cannot be detected with even the most accurate instrument available to us.

## Free fall:

Any object dropped from some height always falls towards the earth. If a feather and a stone are dropped from the top of a tower, it is observed that feather falls onto the ground much later than the stone. So, it was thought that object of different masses dropped from same height take different times to reach the ground.

However, Galileo dropped three iron balls of different masses simultaneously from the top of the tower of Pisa and found that all the three balls reached the earth's surface at the same time.

Galileo explained that the feather suffered much air resistance during fall because of its large surface area. Due to this opposing force, feather takes longer time to reach the ground than the stone. He further explained that if air resistance is eliminated, both feather and the stone will reach the ground simultaneously.

*Conclusion: - Galileo concluded that the bodies of different masses dropped simultaneously from the same height hit the ground at the same time, if air resistance is neglected.*

### **Definition of free fall:**

The falling body on which only force of gravitation of the earth acts is known as freely falling body and such fall of a body is known as free fall. A freely falling body has acceleration equal to acceleration due to gravity.

### **Acceleration due to gravity:-**

The acceleration with which a body falls towards the earth due to earth's gravitational pull is known as acceleration due to gravity. It is denoted by 'g'.

Thus, all bodies irrespective of their masses fall down with constant acceleration.

Determination of value of g

When a body of mass m is dropped from a certain distance R from the centre of earth of mass M, then the force exerted by the earth on the body is

$$F = GMm / R^2 \quad \dots\dots\dots (i)$$

Let this force produces an acceleration a in mass m.

$$F = ma \text{ or } F = mg \dots (ii)$$

From (i) and (ii),

$$g = GM / R^2$$

For bodies falling near the surface of earth, this acceleration is called acceleration due to gravity and is represented by g with value 9.8

### **Do you know?**

1. The acceleration due to gravity of a planet depends on its mass and its radius. Its value is high if mass is large and radius is small.
2. The value of g at the surface of earth is  $9.8 \text{ m/s}^2$  on an average.
3. The value of g decreases with height.
4. The value of g decreases with depth.
5. The value of g is more at poles and less at equator.
6. The value of g is zero at the centre of the earth.
7. The value of acceleration due to gravity is minimum at planet mercury and maximum at planet Jupiter.
8. Acceleration due to gravity is independent of mass shape size etc of falling body i.e. there will be equal acceleration in a light and heavy falling body.

### **MASS**

The amount of matter contained in a body is called its mass

Or the measure of the quantity of matter in a body is called its mass.

The mass of a body is a scalar quantity. It is independent of surroundings and the position of the body.

It is a constant quantity for a given body.

Mass is measured in kilograms (kg) in SI system.

### **Characteristics of mass of a body:-**

1. Mass of a body is proportional to the quantity of matter contained in it.
2. Mass of a body does not depend on the shape, size and the state of the body.
3. Mass of a body remains the same at all place. This means, the mass of a body will be same throughout the universe. This is because the quantity of matter contained in the body does not change throughout the universe.
4. Mass of a body does not change in the presence of other bodies near it.
5. Mass of a body is a scalar quantity.
6. Mass of a body can be measured with the help of a beam balance.

### Weight

The force with which a body is attracted by the earth is known as the weight of the body. When the earth attracts a body with a gravitational force, the body accelerates towards the earth with acceleration due to gravity ( $g$ ).

Thus, the force with which body of mass  $m$  is attracted by the earth is given by

$$F = ma = m \times g = mg$$

This force is known as the weight of the body. Weight of a body is denoted by  $W$ .

Weight,  $W = mg$

Weight has both magnitude and direction. Hence weight is a vector quantity.

### Unit of Weight:-

SI unit of weight is same as that of the force i.e., newton (N).

### Variation in the weight of a body

Weight of the body is given by

$$W = mg$$

So the weight of a body depends upon (i) the mass of the body and (ii) value of acceleration due to gravity.

The mass of a body remains the same throughout the universe, but the value of ' $g$ ' is different places. Hence the weight of a body is different at different place.

1. The value of ' $g$ ' is more at poles and less at the equator. Therefore, weight of a body is more at the poles and less at the equator. In other words, a body weighs more at the poles and less at the equator.
2. The value of ' $g$ ' on the surfaces of different planets of the solar system is different; therefore, the weight of a body is different on the different planets.
3. The value of ' $g$ ' decreases with height from the surface of the earth. Therefore, the weight of a body also decreases with height from the surface of the earth. That is why; the weight of a man is less on the peak of Mount Everest than the weight of the man at Delhi.
4. The value of ' $g$ ' decreases with depth from the surface of the earth. Therefore, the weight of a body decreases with depth from the surface of the earth.
5. The value of ' $g$ ' at the centre of the earth is zero, hence weight ( $= mg$ ) of the body is zero at the centre of the earth.

## TEXTUAL QUESTIONS

### **Q1. State the universal law of Gravitation?**

Ans. "Every object in the universe attracts every other object with a force which is directly proportional to the product of two masses and inversely proportional to the square of the distance between them".

### **Q2. What do you mean by free fall?**

Ans. An object is said to be in free fall if it falls towards earth only under the action of gravitation.

### **Q3. what are the differences between mass and weight?**

Ans.

Mass	Weight
1. It is a scalar quantity.	1. It is a vector quantity
2. Mass of an object is the quantity of Matter contained in it.	2. It is the force with which object gets attracted towards earth.
3. Mass of an object cannot be zero	3. Weight of an object is zero at the centre of the earth.
4. SI unit is kilogram	4. SI unit is newton

**Q4. Gravitational force on the surface of the Moon is only 1/6 as strong as gravitational force on the earth. What is the weight in newton's of a 10 kg object on the moon and on the earth?**



Ans. Mass of the object =  $m = 10 \text{ kg}$  given.

We know weight of an object =  $m \times g$

$$\begin{aligned} \text{Now, Weight on earth} &= m \times g_e \\ &= 10 \times 9.8 = 98 \text{ N} \end{aligned}$$

$$\begin{aligned} \text{Weight on moon} &= m \times g_m \\ &= 10 \times \frac{1}{6} \times 9.8 = \frac{98}{6} = 16.3 \text{ N} \end{aligned}$$

**Q5. A stone is released from the top of a tower of height 19.6 m. calculate its final velocity just before touching the ground.**

Ans. Initial velocity  $u = 0 \text{ m/s}$

Final velocity  $v = ?$

Height of tower  $h = 19.6 \text{ m}$

Using,  $v^2 - u^2 = 2gh$

$$V^2 - 0 = 2 \times 9.8 \times 19.6$$

$$v = (19.6 \times 19.6)^{1/2}$$

$$v = 19.6 \text{ m/s}$$

**Q6. Calculate the force of gravitation between earth and the sun, given that the mass of earth =  $6 \times 10^{24} \text{ kg}$  and mass of sun =  $2 \times 10^{30} \text{ kg}$ . The average distance between the two is  $1.5 \times 10^{11} \text{ m}$ .**

Ans. Mass of earth,  $m = 6 \times 10^{24} \text{ kg}$

Mass of sun,  $M = 2 \times 10^{30} \text{ kg}$

$r = 1.5 \times 10^{11} \text{ m}$

We know,  $F = \frac{GmM}{r^2}$

$$\begin{aligned} &= \frac{6.67 \times 10^{-11} \times (6 \times 10^{24}) \times (2 \times 10^{30})}{(1.5 \times 10^{11})^2} \\ &= 3.57 \times 10^{22} \text{ N} \end{aligned}$$

## WHY DO WE FALL ILL

### HEALTH:

Health is the level of functional and metabolic efficiency of a living organism. In humans it is the ability of individuals or communities to adapt and self-manage while facing physical, mental, psychological and social changes with the environment.

The world health organization in 1948, defined health as “a state of complete physical, mental, and social well-being, and not merely an absence of disease or infirmity”

### DIMENSION OF HEALTH:

World health organization has identified three dimensions of health which are discussed briefly as under:

- Physical dimension: It implies perfect functioning of all body parts i.e. coordination between different organ systems.
- Mental dimension: It implies harmony between the individual and its environment. Unlike physical health, it is difficult to assess the mental health.
- Social dimension: It implies that every person lives in highly organized society and possess basic requirement of life i.e. good earning, happy family, nutritious diet, cooperative interactions with friends and neighbours and a clean place of living.

### DISEASE AND ITS CAUSES:

A disease is a particular abnormal condition, a disorder of a structure or function that affects parts or all of an organism.

OR

Any physical or functional change from the normal state that causes discomfort or disability or impairs the health of a living organism is called a disease.

The study of disease is called Pathology. Disease may be caused by external factors such as pathogens or by internal factors (dys-function), particularly of immune system.

- Intrinsic factors: The disease causing factors that exist within the human body and are non-infectious are called internal/intrinsic factors. The important intrinsic factors which affect human health are as follows:
  1. Malfunctioning or improper functioning of various organs such as heart, kidney, liver etc.
  2. Genetic disorder due to mutations in genes.
  3. Hypo or hyper secretion of hormones.
  4. Malfunctioning of body's immune system.

Some of the diseases caused by intrinsic factors are Cardiac failure, kidney failure, myopia, haemophilia, dwarfism etc.

- Extrinsic factors: The disease causing factors which enter the body from outside are called extrinsic/external factors. Extrinsic factors can be differentiated into following groups:
  - Pathogens: These are disease causing micro-organisms which are transferred to human body through air, contaminated water, food, soil, sexual and physical contact and animals. For example: Viruses, Bacteria, Fungi, Worms etc.
  - Inadequate diet: Deficiency of nutrients in the diet results in number of diseases in human beings. For example: Night-blindness, rickets, scurvy etc.
  - Environmental pollutants: The environmental pollutants such as gases, heavy metals, pesticides, industrial chemicals etc are also contributing causes of infections.

In addition, consistent intake of tobacco, alcohol and narcotic drugs lead to emergence of chronic diseases.

## TYPES OF DISEASES:

Human diseases have been classified on the basis of different dimensions which are listed as under:

➤ **DURATION:** On the basis of duration human diseases is of following two types:

1. *Acute diseases:* A disease or disorder that lasts for short period of time, without causing major effects on human health is called an acute disease. Acute conditions are severe and sudden in onset. Acute diseases include cold, cough, cholera, typhoid etc. Some acute disease can be resolved without any treatment e.g, Influenza while few require medications e.g, pneumonia.
2. *Chronic diseases:* Chronic diseases are long-term medical conditions that generally last for months or years. Chronic illness have serious impact on individuals and on society in general.

A number of risk factors related to an individual's life style can contribute to the emergence of chronic diseases. For example: cardio-vascular diseases, diabetes etc. Risk factors such as unhealthy diet, physical inactivity and smoking are mostly modifiable. Adopting healthy life style practices such as intake of balanced diet, regular physical activity can somehow prevent the development of chronic diseases.

Examples of chronic diseases include: Haemophilia, Glaucoma, Hypertension etc.

➤ **OCCURRENCE:** On the basis whether the disease occur since birth or after birth, they have been grouped into two categories:

1. *Congenital diseases:* A disease or physiological abnormalities existing at or before birth. They are permanent, generally not easily curable and may be inherited to the next generation. The various causes that lead to congenital diseases are:

1. Chromosomal mutations e.g, sickle-cell anaemia, haemophilia etc.
2. Involvement of environmental factors e.g, cleft palate, harelip etc.

2. *Acquired diseases:* These diseases develop after birth and can be broadly classified into two distinct categories:

a) Infectious or communicable diseases:

These diseases are spread from infected person to others in various ways i.e. through air, food, physical contact, sexual act etc. The causative agents of these diseases are called pathogens which can be:

- Viruses causing disease like: common cold, measles, chicken pox, AIDS etc.
- Bacteria causing disease like: cholera, typhoid fever, anthrax etc.
- Protozoans causing disease like malaria, amoebic dysentery sleeping sickness etc.

b) Non-infectious or non-communicable diseases:

These diseases remain confined to the person who develops them and do not spread to others. The following dimensions can act as causes of non-infectious diseases:

- Malfunctioning of different organs. For example heart diseases, epilepsy etc.
- Deficiency of important nutrients in the diet leading to diseases like beri-beri, scurvy etc.
- Hypo or hyper secretion of hormones.
- Malfunctioning of immune system showing thereby allergic responses.

## WAYS OF SPREAD OF INFECTIOUS DISEASES:

Infectious diseases can be transmitted from one person (unhealthy) to other (healthy) either directly or indirectly.

➤ **Direct transmission:** The pathogens are transmitted through the following routes:

- By developing physical contact with the infected person or through articles of use. For example: ring worm, small pox, chicken pox etc. such diseases are also called as contagious diseases.

- By developing sexual contact with the infected person. For example: syphilis and gonorrhoea caused by bacteria spread due to sexual contact with infected person.
  - Infectious diseases can also be transmitted through animal bites for example rabies. However many pathogens enter human body from soil through injuries. For example Tetanus.
- Indirect transmission: It involves spread of diseases through intermediate agents which are briefly discussed as under:
- Microbes that cause disease like pneumonia, common cold, T.B etc. are spread through air from the infected person. The infected person throws out little droplets on coughing, sneezing or spitting which are inhaled by an individual standing nearby.
  - Infectious disease also spread through intake of contaminated food or water. Water-borne disease like amoebic dysentery occurs when faecal matter of a person suffering from infectious gut disease, gets mixed with the drinking water used by people living nearby.

### BODY'S DEFENCE AGAINST DISEASES:

The ability of human body to protect itself against foreign antigens is termed as Immunity.

- *(Antigen: foreign abnormal cells that triggers immune response in the body.*
- *Antibody: a protein produced by white blood cells that can neutralize a specific antigen).*

The immune system can be broken down into two categories:

- Non-specific immunity: The human body's ability to protect itself against a wide range of antigens. It comprises of:
  - *First line of defense:* They form physical and chemical barriers. Skin, mucous membranes and chemicals such as HCL (secreted in stomach) and urine flow act as the first line of defense to defend the body from infection.
  - *Second line of defense:* It constitutes body's internal defense mechanism. It includes:
    - 1: *Phagocytes:* Cells that protect the body from ingesting harmful foreign particles. For example: macrophage, neutrophil-found in blood stream enter the lymphatic system to reach the site of infection. They move around in interstitial fluid as needed, forming projections called Pseudopods. Once they reach near antigen, they surround and destroy the pseudopods, known as phagocytosis.
    - 2: *Natural killer cells:* Symptoms such as inflammation and increase in temperature around affected area results as our body attempts to increase the rate of metabolism internally to stop the infection.
- Specific immunity: It is involved in providing protection against specific antigen, comprising body's *third line of defense*.

Third line of defense is provided by lymphocytes by eliminating antigen with production of antibodies and enzymes. Antibodies bind to antigens on the surface of pathogens to prevent them from entering the host cell. This is followed by engulfing and bursting of the pathogen as a body's response. This type of immunity is also called as active or natural immunity.

### WAYS OF PREVENTION OF INFECTIOUS DISEASES:

- Public hygiene is one basic key to prevention of communicable diseases. Garbage heaps, polluted water, food exposed to dust and flies are chief sources of disease causing organisms. Sanitary surroundings can prevent spread of air or water borne diseases.
- Vector borne infections can be prevented by providing clean environments. The breeding places of vectors should be destroyed and adult vectors killed by suitable methods.
- Infected person's surrounding and articles of use should be sterilized. Soap, phenyl, Dettol and antiseptic lotion may be used wherever necessary.

- A person suffering from infectious disease should be kept in isolation so that others do not catch infection from him.
- Proper immunization against specific diseases must be provided.

### VACCINATION:

It is the phenomenon of preventive immunization. It involves the administration (oral or injection) of an antigen to elicit an antibody response that will protect the organism against future infections.

Vaccines are mainly of three types:

- Dead bacteria or inactivated viruses.
- Live non-virulent or weakened (attenuated) bacteria or viruses.
- Viral fragments or bacterial molecules.

### PROCEDURE:

A vaccine triggers the body's immune system to produce antibodies against a specific disease-causing organism (virus, bacteria, or other parasite). This provides surveillance against future exposure to such an organism and thus protects the body. The pathogens given in a vaccine are unable to cause a disease but are sufficient to generate the primary immune response.

Vaccines now days are available for preventing whole range of infectious diseases. For example: tetanus, whooping cough, polio, hepatitis, plague etc.

**Antibiotics:** These are chemicals secreted by micro-organisms (fungi or bacteria) that kill or hinder the growth of certain other kinds of micro-organisms (e.g. bacteria). Sir Alexander Fleming, in 1928 first discovered Penicillin (from tiny fungus-Penicillium). Other known antibiotics include: streptomycin, tetracycline etc.

### DISEASES CAUSED BY MICRO-ORGANISMS:

**1. Influenza:** It is commonly known as "Flu". Influenza is an infectious disease caused by Influenza virus differentiated as Virus-A, Virus-B, rare Virus-C, belonging to family of Orthomyxoviridae- having slightly different genome.

It can cause mild to severe illness and at times can lead to death. Usually the virus is spread through the air from coughs and sneezes. It can also be spread by touching surfaces contaminated by virus and then touching mouth or eyes. The infection can be confirmed by testing throat, sputum or nose for virus.

Influenza is a mixture of symptoms of common cold and pneumonia, body ache, headache and fatigue. The symptoms of influenza include:

1. Symptoms of influenza can start suddenly, one to two days after infection with body temperature ranging from 38 to 39°C followed by chills.
2. Other symptoms include:
  - Fatigue
  - Headache
  - Nasal congestion with runny and reddened nose.
  - Muscle ache
  - Red or purple spot from broken capillary vessels
  - Ear ache, sneezing and sore throat
  - Irritated watery eyes.

In children gastro-intestinal symptoms such as diarrhoea, vomiting and abdominal pain are observed. However complications of influenza may include viral pneumonia, sinus infections and worsening conditions like Asthma or heart failure.

Emergency warning signs include: chest pain, shortness of breath, dizziness, extreme vomiting and in infants no tears while crying.

- Prevention:
  - 1: Intake of anti-viral drugs like neuraminidase inhibitors like Zanamivir.
  - 2: Frequent hand washing.
  - 3: Use of surgical masks.
  - 4: Influenza vaccines.

## 2: Hepatitis:

It is a widespread disease in man, caused by Hepatitis virus which primarily affects liver causing chronic hepatitis, cirrhosis and liver cancer.

Hepatitis results in jaundice (yellowness of white parts of eyes and skin). Jaundice occurs due to release of bile pigments from damaged liver cells which get excessively deposited in sclera (white parts of eyes) and skin. The different types of hepatitis are: hepatitis A,B,C,D and E. Of these hepatitis-A also known as short-incubation hepatitis and hepatitis-B also known as long-incubation hepatitis are more prevalent in human populations affecting both children and adults.

The common symptoms of hepatitis are enlisted as under:

- Fever and loss of appetite.
- Nausea and vomiting
- Jaundice
- Dark yellow coloured urine and light coloured stools after 3-10 days of infection.
- Itching of skin, headache and joint pains.

Hepatitis-B is transmitted by contact with infected persons secretions such as saliva, sweat, tears etc and also blood while as hepatitis-A spreads through contaminated food and water.

**PREVENTION:**

- Using disposable syringes
- Getting immunized with hepatitis-B and hepatitis-A vaccines
- Eating hygienic food and drinking disinfected water.
- Proper cleaning of hands by using disinfectant after handling bed, clothes and articles of use of the infected persons.

## 3: Malaria:

Malaria is a very serious disease caused by Plasmodium falciparum and P. vivax. Malarial parasite is carried from the infected to the healthy persons by the female Anopheles mosquito. When the female Anopheles mosquito bites an infected person to suck blood, it picks up the parasites with the blood. These parasites migrate to the salivary glands of mosquito. When this mosquito bites a healthy person, it introduces its saliva containing malarial parasites into the blood before sucking it up.

The attack of malaria is preceded by yawning, tiredness, headache, muscular pain, nausea and even vomiting. Malarial infection is characterized by chills, fever, sweating and by anemia, enlargement of liver and spleen.

The preventive measures for malaria include:

- Use of insect repellants to prevent mosquito bite.
- Wire-guazing of doors, windows and ventilators to check the entry of mosquitoes into the houses.
- Introducing larvivorous fishes in water bodies. These fishes feed on mosquito larvae.

Malaria can be controlled by taking anti-malarial drugs. Most common anti-malarial drug is Quinine.



## SUBJECT: SOCIAL SCIENCE

### HISTORY

#### Topic: Forest society and colonialism

#### Questions

**Q1: Discuss how the changes in forest management in the colonial period affected the following groups of people:**

- a) Shifting cultivators
- b) Nomadic and pastoral communities
- c) Firms trading in timber/forest produce
- d) Plantation owners
- e) Kings/British officials engaged in Shikar (hunting)

**Ans: Shifting cultivators:** shifting cultivation was regarded as a harmful practice by the European foresters as such cultivated land could not grow trees for railway timber. Also shifting cultivation made it harder for the government to calculate taxes hence it was banned. As a result of this many communities were forcibly displaced from their homes in the forest, some had to change occupations, while some resisted through large rebellions.

**Nomadic and pastoral communities:** The British government had given many large European companies the sole right to trade in the forest areas of some particular areas and hence the grazing and hunting by local people was restricted. In this process many pastoralists and nomadic tribes lost their livelihood. Some of them began to be called 'criminal tribes', and were forced to work instead in factories, mines, and plantations, under government supervision.

**Firms trading in timber and forest produce:** with the coming of British, trade was completely regulated by the British. They gave the trading firms the sole right to trade in timber and forest produce in particular areas. As a result the whole trade passed to them making them much powerful leading to indiscriminate cutting of trees under them.

**Plantation owners:** Large areas were to be cleared under the system of 'scientific forestry' and converted into plantations. Hence large tracts of land were given to European planters who made huge fortunes through them. The workers who worked on these plantations were given very low wages while the plantation owners made huge profits.

**Kings/British officials engaged in Shikar (hunting):** while the forest dwellers were deprived of their right to hunt, the scale of hunting increased under colonial rule. This was because the kings and British officials were allowed to hunt freely in the reserved forests. As a result a number of animals like tigers, leopards, wolves were killed. Rewards were given for hunting and hence hunting became a sport.

**Q2: What are the similarities between the colonial management of forests of Bastar and in Java?**

**Ans:** The various similarities between the colonial management of forests of Bastar and Java are as follows:

- a) Forest laws were enacted for both Bastar and Java.
- b) These forest laws restricted the villagers' access to the forests.
- c) Timber could be obtained from some specified areas only and that too under strict supervision.
- d) Villagers were punished for entering into forests and for collecting forest produce without permission.
- e) In both Bastar and Java the villagers had been issued permits for entry into forests and for collecting forest produce.
- f) The system of scientific forestry was followed in both areas.
- g) The forest service was available in both places.
- h) The dwellers of both Bastar and Java witnessed severe hardships due to forest laws as their everyday practices like cutting wood, grazing of cattle, collecting fruits etc., became illegal.
- i) At both Bastar and Java, the constables and guards harassed the local people.

**Q3: Between 1880 and 1920, forest cover in the Indian subcontinent declined by 9.7 million hectares from 108.6 million hectares to 98.9 million hectares. Discuss the role of the following factors in this decline**

- 1) Railways
- 2) Shipbuilding
- 3) Agricultural expansion
- 4) Tea/coffee plantations
- 5) Adivasis and other peasant users

**Ans:**

1. Railways played a vital role in the decline of forest cover in India. In order to lay railway tracks forest land had to be cleared. Apart from clearing area for tracks, railway locomotives required timber for fuel and sleepers. For all these needs forests had to be cut down. The British government gave contracts to individuals to supply the required quantity of timber. These individuals cut trees indiscriminately.

2. The oak forests in Europe had almost disappeared by the sixteenth century. This created a shortage of timber for the Royal Navy. The building of ships was the first priority to maintain and protect the imperial power. Hence, search parties were sent to explore the forest resources of India. A large number of sleepers began to be exported to England annually. This further led to the indiscriminate cutting of trees year after year which caused deforestation on a massive scale.

3. The population was on the rise which increased the demand for food. Peasants extended the boundaries of cultivation by clearing forests. This increased the land available for cultivation. In addition, there was great demand for cash crops such as tea, cotton, jute, sugar, etc., which were needed to feed the industries of England. So, agricultural expansion had a drastic impact on forest cover.

4. The British directly encouraged the production of commercial crops like jute, sugar, wheat, and cotton. The demand for these crops increased in the 19th century in Europe, where food grains were needed to feed the growing urban population and raw materials were required for industrial production. Hence, large tracts of forest land were cleared to make land available for commercial farming.

5. The colonial state thought that forest land was unproductive. It did not yield agricultural produce or revenue. Large areas of natural forests were hence cleared to make way for tea, coffee, and rubber plantations to meet Europe's growing need for these commodities. The colonial government took over the forests and gave vast areas to European planters at cheap rates. The areas were enclosed and cleared of forests and planted with tea or coffee.

6. Adivasis and other peasant communities practiced shifting cultivation. It involved cutting down parts of forest area and burning the tree roots. Seeds were then sown into the burnt patch and on the onset of the monsoon season they were harvested. When fertility declined in that particular area, the same practice was repeated in a different location. So along with losing some of the forest tracts, there were fewer chances of the trees growing back due to loss in soil fertility.

**Q4. Why are forests affected by wars?**

**Ans:** Forests are affected by wars as they are valuable strategic resources. Battlefield assets like towers, guard posts, army camps are made of wood as they can be easily maintained and can be easily pulled down whenever the need to shift these assets arises. Also, the scorched earth policy which involves the clearing of forest areas is followed by nations during the wars so that their resources don't fall in the hands of their enemies which have an adverse effect on the forests. Also countries recklessly cut down the forests in order to meet the increased demand of timber and other forest related products during the war

This is done with regards to area and resource denial. Such was the case with the Dutch when the Japanese invaded their colony in Indonesia during World War II. The Dutch burned huge acres of forests so that the forests don't fall into Japanese hands.

The Japanese on the other hand set about recklessly exploiting the timber forests to fulfill their own

war demands. This practice severely disturbed the local ecology.

## **ECONOMICS**

### **Man Made Disasters**

#### **I: Fill in the blanks:**

- \_\_\_\_\_ gas is mainly released during the occurrence of fire disaster.
- Urbanization, overpopulation and industrialization cause \_\_\_\_\_.
- A major chemical disaster involving leakage of methyl iso-cyanate gas occurred at \_\_\_\_\_.
- The frequently occurring disaster in the dry forests of j and k is \_\_\_\_\_.
- Development without compromising the needs of future generations is known as \_\_\_\_\_.

#### **Answers:**

- Carbon dioxide
- Environmental degradation
- Bhopal
- Forest fire
- Sustainable development

#### **II. True/ False**

- Forest fires are mainly caused by floods
- Chemical disasters are highly prone in industrial areas
- Solid waste is mainly responsible for environmental degradation
- Fire extinguishers are used to lit the fire
- Construction of walls or paths in forests can reduce the risk of forest fires

#### **Answers:**

- False
- True
- True
- False
- False

#### **III. Short Answers**

##### **1. Write a short note on chemical disasters.**

A chemical disaster is the unintentional release of one or more hazardous substances which could harm human health and the environment. The increased industrial growth and chemical utilization has resulted in a whole new series of man-made chemical disasters. The practice of using chemicals so as to increase crop yield, or in water purification, painting houses etc. has augmented in such a way that one often fails to realize its harmful consequences. Some of these hazardous chemicals are commonly found in daily use items be it hair sprays, deodorants, detergents, paints etc. Chemical hazards often result in chemical accidents. Such events include fires, explosions, leakages or release of toxic or hazardous materials that can cause people illness, injury, or disability.

##### **2. Illustrate some events of natural fire in J and K.**

As per the report of the Forest department, nearly 781 forest fire incidents were reported in the state. Of the 781 incidents, 289 fire incidents were reported in Kashmir and 492 in Jammu.

Natural fire events:

In the year 2018, massive forest fire occurred in Bandipore, Kupwara, Ganderbal and Anantnag districts of Jammu and Kashmir.

In the year 2017, 50 hectares of Tanpal forest was demolished due to forest fire.

In the year 2016, there was a wildfire in Trikuta Hills near the Mata Vaishno Devi shrine.

##### **3. Enlist some of the causes of road accidents.**

Some common causes of road accidents are

Over Speeding

Drunken Driving  
Distractions to Driver  
Red Light Jumping  
Avoiding Safety Gears like Seat belts and Helmets.  
Non-adherence to lane driving and overtaking in a wrong manner

#### IV. Long answers

##### 1. What is a forest fire? How can it be controlled?

Forest fire also called bush or vegetation fire, can be described as any uncontrolled burning of plants in a natural setting such as a forest, grassland, brush land etc. which consumes the natural fuels and spreads based on environmental conditions. Wildfire can be incited by human actions, such as land clearing, extreme drought or by lightning.

There are three conditions that need to be present in order for a wildfire to burn: fuel, oxygen, and a heat source. Fuel is any flammable material surrounding a fire, including trees, grasses, brush, even homes. Air supplies the oxygen a fire needs to burn. Heat sources help spark the wildfire and bring fuel to temperatures hot enough to ignite. Lightning, burning campfires or cigarettes, hot winds, and even the sun can all provide sufficient heat to spark a forest fire.

Measures to control forest fires:

- Obey local laws regarding open fires, including campfires;
- Keep all flammable objects away from fire;
- Have firefighting tools nearby and handy;
- Carefully dispose of hot charcoal;
- Drown all fires;
- Carefully extinguish smoking materials.

##### 2. What do you understand by environmental degradation? What are the factors responsible for it?

**Answer:**

Environmental degradation refers to the process by which the environment i.e., air, water, and land is progressively contaminated, overexploited and destroyed. In other words environmental degradation is the deterioration of the environment through depletion of resources such as air, water, soil and forest; the destruction of ecosystems and the extinction of wildlife. So whenever habitats are destroyed biodiversity is lost or natural resources are depleted the environment is said to be degraded.

Some factors responsible for environmental degradation are:

1. **Growing population:** Rapid pace of population growth has led to excessive utilization of natural resources. The result of this is loss of biodiversity and increased pressure on land. Also increased population results in huge production of wastes which causes pollution of air water and soil. So growing population puts great stress on the environment.
2. **Urbanization:** The rapid and unplanned expansion of cities creates enormous pressure on the infrastructural facilities. Urban slums are the major sources of pollution. The fast pace of urbanization has also been responsible for the depletion of forests and irrational use of other resources.
3. **Changing life style:** the changing lifestyle of people living in cities, towns, and villages has led to increase in the usage of modern amenities like motor cars, refrigerators, and air conditioners etc. which release harmful gases into the atmosphere causing global warming.
4. **Agricultural development:** Various kinds of farming activities which are directed to increase the agricultural production have an adverse effect on environment. Extensive use of pesticides and fertilizers has been a major source of contamination of water bodies and land degradation.
5. **Industrialization:** rapid industrialization is causing immense damage to ecosystems and leading to health hazards.

Besides these, untreated sewage, solid waste, pollution and depletion of resources are also some important factors responsible for environmental degradation.

### 3. How a chemical disaster can be prevented?

**Answer:**

Chemical disasters can be prevented by these ways:

1. Keep the contact numbers of nearest hazardous industry, fire station, police station, control room, health services and district control room, for emergency use.
2. Avoid housing near the industries producing or processing the hazardous chemicals, if possible.
3. The communities living near the industrial areas should be made more aware and vigilant about the nature of industrial units and the associated risks.
4. One shouldn't smoke, lit fire or spark in the unidentified hazardous area.
5. Adequate number of personal protective equipments should be made available to deal with emergency situation.

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## **GEOGRAPHY**

### **Climate**

**Textual questions:**

**1. Choose the correct answer from the four alternatives given below.**

**(i) Which one of the following places receives the highest rainfall in the world?**

- (a) Silchar**
- (b) Mawsynram**
- (c) Cherrapunji**
- (d) Guwahati**

**Answer:**

Mawsynram

**(ii) The wind blowing in the northern plains in summers is known as:**

- (a) Kaal Baisakhi**
- (b) Loo**
- (c) Trade Winds**
- (d) None of the above**

**Answer:**

Loo

**(iii) Which one of the following causes rainfall during winters in the north-western part of India?**

- (a) Cyclonic depression**
- (b) Retreating monsoon**
- (c) Western disturbances**
- (d) Southwest monsoon**

**Answer:**

Cyclonic Depression

**(iv) Monsoon arrives in India approximately in:**

- (a) Early May**
- (b) Early July**
- (c) Early June**
- (d) Early August**

**Answer:**

Early June

**(v) Which one of the following characterizes the cold-weather season in India?**

- (a) Warm days and warm nights**
- (b) Warm days and cold nights**
- (c) Cool days and cold nights**
- (d) Cold days and warm nights**

**Answer:**

Cool days and cold nights.

**2. Answer the following questions briefly.**

**(i) What are the controls affecting the climate of India?**

**Answer:**

The factors controlling the climate of India are

1. Humidity
2. Wind
3. Temperature
4. Atmospheric Pressure
5. Precipitation

**(ii) Why does India have a monsoon type of climate?**

**Answer:**

India witnesses a monsoon type of climate due to the following factors:

1. Inter Tropical Convergence Zone
2. El Nino
3. Jet Stream
4. Coriolis force

**(iii) Which part of India does experience the highest diurnal range of temperature and why?**

**Answer:**

The part of India that experiences the highest diurnal range of temperature is the Thar Desert, present towards western side of India in the state of Rajasthan. The reason for this variation is that the desert is filled with sand which gets heated up quickly during day and cools up very quickly during nights.

**(iv) Which winds account for rainfall along the Malabar Coast?**

**Answer:**

Southwest monsoon winds are responsible for rainfall along the Malabar Coast.

**(v) What are Jet streams and how do they affect the climate of India?**

**Answer:**

Jet Streams are a narrow belt of high altitude (above 12,000 m) westerly winds in the troposphere. Their speed varies from about 110 km/h in summer to about 184 km/h in winter. A number of separate jet streams have been identified. The most constant is the mid-latitude and subtropical jet stream. They cause depressions during the monsoon season.

**(vi) Define monsoons. What do you understand by “break” in monsoon?**

**Answer:**

The seasonal reversal in wind direction during a year is called monsoon. During the Monsoon season, there are periods when the Monsoon trough shifts closer to the foothills of Himalayas, which leads to sharp decrease in rainfall over most parts of the country. Such a synoptic situation is known as the 'break' Monsoon period

**(vii) Why is the monsoon considered a unifying bond?**

**Answer:**

The unifying influence of the monsoon on the Indian subcontinent is quite perceptible. The seasonal alteration of the wind systems and the associated weather conditions provide a rhythmic cycle of seasons. Even the uncertainties of rain and uneven distribution are very much typical of the monsoons. The Indian landscape, its flora, fauna and the entire agricultural calendar and the life of the people (including their festivities) revolves around this phenomenon. Every year people of India eagerly await the arrival of the monsoon. These monsoon winds bind the whole country by providing water to set the agricultural activities in motion. The river valleys which carry this water also unite as a single river valley unit.

**3. Why does the rainfall decrease from the east to the west in Northern India?**

**Answer:**

Rainfall decreases from east to west in northern India because of the progressive decrease in humidity of the winds. As the moisture bearing winds of the Bay of Bengal move further and further towards west, they exhaust most of the moisture they carry along with them. This consequently leads to a gradual decrease in rainfall.

**4. Give reasons as to why.**

**(i) Seasonal reversal of wind direction takes place over the Indian subcontinent?**

**Answer:** Seasonal reversal of wind direction over the Indian subcontinent takes place due to pressure differential. El Nino has major role to play in the seasonal reversal of wind direction over the Indian subcontinent.

(ii) The bulk of rainfall in India is concentrated over a few months.

**Answer:**

The rainfall received by India is largely due to the south-west monsoon winds. The duration of the monsoon is between 100 to 120 days. Hence, the bulk of rainfall received by the country is concentrated over a few months.

(iii) The Tamil Nadu coast receives winter rainfall.

**Answer:**

Tamil Nadu receives rainfall in the winter season due to the northeast trade winds.

(iv) The delta region of the eastern coast is frequently struck by cyclones.

**Answer:**

The Bay of Bengal is the centre of various pressure changes and hence there is always a chance of development of cyclones. Due to this the region of the eastern coast is frequently struck by cyclones.

(v) Parts of Rajasthan, Gujarat and the leeward side of the Western Ghats are drought-prone.

**Answer:**

These parts fall in the rain shadow area of the Aravalli. Hence, they are drought prone.

**5. Describe the regional variations in the climatic conditions of India with the help of suitable examples**

**Answer:**

1. The cold weather season begins from mid-November in northern India and stays till February. December and January are the coldest months in the northern part of India. The temperature decreases from south to north. The average temperature of Chennai, on the eastern coast, is between 24° – 25° Celsius, while in the northern plains, it ranges between 10°C and 15° Celsius. Days are warm and nights are cold. Frost is common in the north and the higher slopes of the Himalayas experience snowfall
2. In March, the highest temperature is about 38° Celsius, recorded on the Deccan plateau. In April, temperatures in Gujarat and Madhya Pradesh are around 42° Celsius. In May, the temperature of 45° Celsius is common in the northwestern parts of the country. In peninsular India, temperatures remain lower due to the moderating influence of the oceans.

**6. Discuss the mechanisms of the monsoon.**

**Answer:**

The low pressure condition over the northern plains intensifies by the beginning of June. It attracts the trade winds from the southern hemisphere. These south east trade winds cross the equator and blow in a south westerly direction to enter the Indian peninsula as the south west monsoon. These winds bring abundant moisture to the subcontinent.

**7. Give an account of weather conditions and characteristics of the cold season.**

**Answer:**

The cold weather season begins from mid-November in northern India and stays till February. December and January are the coldest months in the northern part of India. The temperature decreases as we go from the south to the north. The average temperature in Chennai, on the eastern coast, is between 24° – 25° Celsius. In the northern plains, it ranges between 10°C and 15° Celsius. Here, the days are warm and nights are cold. Frost is common in the north. Higher slopes of the Himalayas experience snowfall. During this season, the northeast trade winds prevail over the country. They blow from land to sea and hence, for the most part of the country, it is a dry season. Some amount of rainfall occurs on the Tamil Nadu coast due to these winds as here they blow from sea to land. In the northern part of the country, a feeble high-pressure region develops, with light winds moving outwards from this area. Influenced by the relief, these winds blow through the Ganga valley from the west and the northwest. The weather is normally marked by clear sky, low temperatures and low humidity and feeble,

variable winds. A characteristic feature of the cold weather season over the northern plains is the inflow of cyclonic disturbances from the west and the northwest. These low-pressure systems originate over the Mediterranean Sea and western Asia and move into India, along with the westerly flow. They cause the much-needed winter rains over the plains and snowfall in the mountains. Although the total amount of winter rainfall (locally known as ‘Mahawat’) is small, they are of immense importance for the cultivation of ‘rabi’ crops. The peninsular region does not have a well-defined cold season. There is hardly any noticeable seasonal change in temperature pattern during winters due to the moderating influence of the sea.

#### **8. Give the characteristics and effects of the monsoon rainfall in India.**

**Answer:**

The Monsoon winds are not steady winds but are pulsating in nature, affected by different atmospheric conditions encountered on its way over the warm tropical seas. The duration of the monsoon is between 100-120 days from early June to mid-September. Around the time of its arrival, the normal rainfall increases suddenly and continues for several days. This is known as the ‘burst’ of the monsoon and can be distinguished from the pre-monsoon showers. The monsoon arrives at the southern tip of the Indian peninsula, generally by the first week of June. Subsequently, it proceeds into two – the Arabian Sea branch and the Bay of Bengal branch. The Arabian Sea branch reaches Mumbai about ten days later, approximately the 10th of June. This is a fairly rapid advance. The Bay of Bengal branch also advances rapidly and arrives in Assam in the first week of June. The lofty mountains cause the monsoon winds to deflect towards the west i.e., over the Ganga plains. By mid-June, the Arabian Sea branch of the monsoon arrives over Saurashtra-Kachchh and the central part of the country. The Arabian Sea and the Bay of Bengal branches of the monsoon merge over the northwestern part of the Ganga plains. Delhi generally receives the monsoon showers from the Bay of Bengal branch by the end of June (tentative date is 29th of June). By the first week of July, western Uttar Pradesh, Punjab, Haryana and eastern Rajasthan experience the monsoon. By mid-July, the monsoon reaches Himachal Pradesh and the rest of the country.

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## POLITICAL SCIENCE WORKING OF INSTITUTIONS

Questions with answers:

**Qno1: If you are elected as the president of India which of the following decision can you take on your own?**

- Select the person you like as prime minister.
- Dismiss a Prime Minister who has a majority in the Lok Sabha.
- Ask for reconsideration of a bill passed by both the Houses.
- Nominate the leaders of your choice to the Council of Ministers.

Answer: c

**Qno2: Who among the following is a part of the political executive?**

- District Collector
- Secretary of the Ministry of Home Affairs
- Home Minister
- Director General of Police

Answer: c

**Qno3: Which of the following statements about the judiciary is false?**

- Every law passed by the parliament needs approval of the Supreme Court.
- Judiciary can strike down a law if it goes against the spirit of the Constitution.
- Judiciary is independent of the Executive
- Any citizen can approach the courts if her rights are violated.

Answer: d

**Qno4: which of the following institutions can make changes to an existing law of the country?**

Answer: d

**Qno5: match the ministry with the news that the ministry may have released:**

- |  |  |
|--|--|
| a) a new policy is being made to increase the jute exports from the country. | i. Ministry of Defense                                   |
| b) Telephone services will be made more accessible to rural areas            | ii Ministry of Agriculture, Food and Public distribution |
| c) The price of the rice and Wheat sold under the Public Distribution System | iii Ministry of Health                                   |
| d) A pulse polio campaign will be launched.                                  | iv Ministry of Commerce and Industry                     |
| e) The allowance of the Soldiers posted on high altitudes will be increased. | v Ministry of communication and information technology   |

Answer:

- iv
- v
- ii
- iii
- i

**Qno6: Of all the institutions that we have studied in this chapter, name the one that exercises the powers on each of the following matters.**

- Decision on the allocation of money for developing infrastructure like roads, irrigation etc. and different welfare activities for the citizens
- Considers the recommendation of a Committee on law to regulate the stock exchange



- c) Decides on a legal dispute between two state governments
- d) Implements the decision to provide relief for the victims of an earthquake

Answer:

- a) Cabinet
- b) Parliament
- c) Supreme court
- d) Permanent Executive

**Qno7: why is the prime minister in India not directly elected by the people? Choose the appropriate answer and give reasons for your choice.**

- a) In a parliamentary democracy only the leader of the majority party in the Lok Sabha can become the Prime Minister.
- b) Lok sabha can remove the prime minister and the council of ministers even before their expiry of their term.
- c) Since the prime minister is appointed by the President there is no need for it.
- d) Direct election of the Prime Minister will involve lot of expenditure on election.

Answer: a

**Qno8: Three friends went to watch the film that showed the hero becoming the Chief Minister for a day and making big changes in the state. Imran said this is what the country needs. Rizwan said this kind of a personal rule without institutions is dangerous. Shankar said all this is a fantasy. No minister can do anything in one day. What would be your reaction to such film?**

Answer:

The movie would look quite appealing to me but at the end all such things are fictional and such things can't take place in real life. The practical life is totally different. Governance in a democracy is all about taking everyone along with you. Moreover, in a large and diverse country like India, it is not possible to take decision on the whims of an individual. Implementation of a decision needs to coordinate the various organs of the government and a minister is just a part of it. A teacher was making preparations for a mock parliament. She called two students to act as leaders of two political parties. She gave them an option: each one could choose to have a majority either in the mock Lok Sabha or in the mock Rajya sabha. If this choice was given to you which one would you choose and why?

Answer:

I would choose a majority in the Lok Sabha. The leader of the Lok Sabha is directly answerable to the public and hence it can be quite challenging for him.

**Qno10: After reading the example of the reservation order three students had different reactions about the judiciary. Which view according to you is correct reading of the role of judiciary?**

- a) Srinivas argues that since the Supreme court agreed with the government it is not independent.
- b) Anjaiah says that judiciary is independent because it could have given a verdict against the government order. The Supreme Court did direct the government to modify it.
- c) Vijaya thinks that the judiciary is neither independent nor conformist but acts as a mediator between opposing parties. The court struck a good balance between those who supported and those who opposed the order.

Answer: c

**Extra questions**

**Question 1:**

**Why is there a need for political institutions?**

Answer:

- Countries need political institutions to take decisions regarding the welfare of the people. Institutions formulate various policies and programmes.
- The decisions which have been taken are to be implemented. So countries need institutions to implement the decisions.
- Institutions are also needed to solve the disputes between various institutions.

**Question 2:**

**Distinguish between political executive and permanent executive.**

Answer:

Political Executive	Permanent Executive
(i) They are elected by the people.	(i) They are appointed by the government.
(ii) They are makers of law and policies.	(ii) They are in charge of execution of the policies of the government.
(iii) They are elected by the people and can be changed in the next elections.	(iii) They are permanent and remain in office even when the ruling party changes.

**Question 3:**

**Compare the power, tenure and working of both the Houses of the Indian Parliament**

	Lok Sabha	Rajya Sabha
<b>Tenure:</b>	Five years but it can be dissolved before the expiry of its term.	It is a permanent House. A member stays for 6 years.
<b>Elections:</b>	Members are directly elected.	Members are indirectly elected.
<b>Powers:</b>	<p>(i) <b>Money bill:</b> Money bill can originate only in the Lok Sabha</p> <p>(ii) <b>Changes in the money bill:</b> It has the powers to bring changes in the money bill.</p> <p>(iii) <b>Council of Ministers:</b> Council of Ministers is controlled by the Lok Sabha.</p>	<p>(i) Money bill cannot originate in the Rajya Sabha.</p> <p>(ii) It has no power to bring any change in the money bill. It can provide suggestions or can delay the bill by 14 days.</p> <p>(iii) The Rajya Sabha has no powers to control the Council of Ministers.</p>

#### Question 4:

**Explain the major powers and functions of the Prime Minister.**

Answer:

- The Prime Minister is the link between the Cabinet and the President. The decisions of the Cabinet are conveyed to the President through the Prime Minister. It is he who keeps him informed on all matters of government.
- The Prime Minister prepares the list of his Council of Ministers and sends it to the President. He can reshuffle the Council of Ministers whenever he likes. He can also ask any minister to resign if he is not satisfied with his working.
- The Prime Minister presides over the meetings of the Cabinet. He maintains co-ordination between different departments of the government.
- The Prime Minister plays an important role in the management of foreign affairs. He formulates the internal and external policies of the country.
- The Prime Minister has the main say in framing the policy of his party.
- The Prime Minister is the most important leader of the nation. People always eagerly hear his views. His views related to any internal or external policy are heard more carefully.

#### Question 5:

**Explain the major powers and functions of the Parliament.**

Answer:

- **Legislative Powers:** The Parliament can make laws on all those subjects that have been given in the Union List and the Concurrent List. Under certain cases, it can also make laws on those subjects which have been given in the State List.
- **Control over Finance:** The annual budget of the Central Government is passed by Parliament. Without Parliament's approval, the government cannot impose any tax or incur any expenditure.
- **Control over the Executive:** The Parliament can seek information regarding administration. It can pass a resolution of no confidence against the ministry and ask it to resign. Question hours are also quite effective in keeping the government and its ministers under control.
- **Amendment or New Law:** No amendment can be made in the Constitution without the approval of the Parliament.
- **Functions related to Elections:** The Parliament elects the President, the Vice-President, and Speaker of the Lok Sabha and the Deputy Speaker. Members of the Rajya Sabha elect the Vice-Chairman.

#### Question 6:

**Explain briefly the powers and functions of the Supreme Court.**

Answer:

- **Original Jurisdiction:** The original jurisdiction extends to those cases which the Supreme Court has the authority to hear and decide in the first instance.
  - Between citizens of the country;
  - Between citizens and government;
  - Between two or more state governments; and
  - Between governments at the union and state level.

**Appellate Jurisdiction:** It is the highest court of appeal in civil and criminal cases. It can hear appeals against the decisions of the High Courts.

**Advisory Jurisdiction:** As the highest court in the country, the Supreme Court gives legal advice to the President of India on any legal or constitutional matter referred to it. However, the advice is not binding on the Supreme Court.

**Guardian of the Constitution:** The Supreme Court acts as the guardian and final interpreter of the Constitution. If the government passes any law or issues any order which is in violation of the Constitution, the Supreme Court has the power to declare the law or order unconstitutional.

**Guardian of Fundamental Rights:** The Supreme Court also acts as a guardian of the

fundamental rights of the citizens. When a fundamental right of any citizen is violated by the government or any individual he can seek the protection of the Supreme Court.

**Question 7:**

**What is meant by council of Ministers? Explain the different categories of ministers.**

Answer:

The Council of Ministers is a large body, it consists all the three ranks of ministers. The Council of Ministers comprises of the three categories of ministers. These are:

- Cabinet Ministers: Constitute the inner ring of the council of ministers. These are the top-level leaders of the ruling party / parties who are in charge of the important ministries. They usually meet to take decisions in the name of the council of ministers.
- Ministers of State with Independent Charge: They are usually in charge of smaller ministries. They participate in the cabinet meetings only when they are invited.
- Ministers of State: They are attached to and are required to assist the Cabinet ministers.

**Question 8:**

**List some functions (or responsibilities) of the government.**

Answer:

- Government collects taxes and uses it for administration, Defence and development programmes.
- Government ensures security to the citizens and provides facilities for education and health.
- It formulates and implements several welfare schemes.

**Question 9:**

**What is public interest litigation? What is its importance?**

Answer:

Any one can approach the courts if public interest is hurt by the actions of government. This is called the public interest litigation. The courts intervene to prevent the misuse of the government's power to make decisions. They check the malpractices on the part of public officials.

**Question 10:**

**What is job reservation? What is its importance?**

Answer:

Under job reservation policy some percentage of total government job vacancies are reserved for people and communities who are economically or socially backward. Job reservation policy gives a fair opportunity to those communities who so far had not adequately been represented in government employment.

**Question 11:**

**Mention the ethical values which are reflected by the coalition government?**

Answer:

- Accommodating different groups and factions
- Alliance
- Interdependence
- Cooperation

**Question 12:**

**Explain the discretionary powers of the President:**

Answer:

With no single party getting a clear majority, a coalition of parties stake their claim to form the government. The President has to use his individual judgment and invite such a leader to head the government as Prime Minister, who can provide a stable government to the country.

یونٹ: سوم جمات: نویں

## ڈراما

ڈراما یونانی زبان کے لفظ ”ڈراو“ سے نکلا ہے جس کے معنی ہیں عمل، ایکش یا حرکت جبکہ لفظ ڈراما کے لغوی معنی ہیں ”کر کے دیکھنا“۔ ہر زبان اور ہر ملک کی مطابق ڈراما انسانی زندگی کی عملی تصویر ہے۔ ڈرامے کی یہ بھی تعریف کی گئی ہے کہ ڈراما انسانی اعمال کی ہو بہو نقل ہے جو کہ اداکاروں کے ذریعے اسٹیج پر لوگوں کے سامنے پیش کی جاتی ہے۔ اور جو بالکل سچی اور حقیقی معلوم ہوتی ہے۔

ڈرامے نے سب سے پہلے یونان اور ہندوستان میں آنکھیں کھولی اور انہی ممالک میں اس کے اصول بھی وضع کیے گئے۔ بھرت منی نے اپنی کتاب ناطیہ شاستر میں آواز، لباس، موسیقی رقص اور جسمانی اعضاء کی حرکت کو ڈرامے کے لئے لازمی اجزاء بتائے ہیں۔ جب کہ ارسطو نے اپنی کتاب بوٹیکا میں قصہ، کردار، مکالمہ، موسیقی اور مرکزی خیال کو ڈرامے کے پانچ اجزائے ترکیبی بتائے ہیں۔ ڈرامے کی بہت سی قسمیں ہیں مثلاً المیہ، طربیہ، الم طربیہ، تاریخی، معجزاتی، فارسی، میلو، ڈریم، اوپیرا وغیرہ۔

ڈراما کا آغاز اودھ میں نواب واجد علی شاہ نے رادھا کنھیا (۱۸۲۳) لکھ کر کیا۔ علاوہ ازیں امانت لکھنوی (اندرسبھا) امتیاز علی تاج (انارکلی) آغا حشر کاشمیر (اسیر حرس) محمد مجیب (خانہ جنگی) شوکت تھانوی (لاٹری کا ٹکٹ) وغیرہ نے عمدہ ڈرامے لکھے ہیں۔

## شوکت تھانوی

شوکت تھانوی کا اصلی نام محمد عمر تھا۔ وہ اردو کے مشہور مزاح نگار تھے۔ مزاحیہ تحریروں اور ناولوں کے علاوہ انہوں نے ریڈیو کے لئے ڈرامے بھی لکھے ہیں۔ اُن کے قلم میں بلا کی روانی تھی۔ روزمرہ کی باتوں اور آئے دن پیش آنے والے واقعات کو اس مزے سے بیان کیا ہے کہ پڑھنے والا بے اختیار ہنس پڑتا ہے۔ وہ شوخی اور ظرافت کے ساتھ اس بات کا بھی خیال رکھتے تھے کہ تحریر میں تہذیب سے گری ہوئی بات یا فقرہ نہ آنے پائے۔ سودیشی ریل، موج تبسم، طوفان تبسم، شیش محل، جوڑ توڑ، قاضی جی اور کارٹون وغیرہ اُن کی مشہور کتابیں ہیں۔ ڈراما لاٹری کا ٹکٹ ان کی کتاب سنی سنائی سے لیا گیا ہے۔ شوکت تھانوی نے شاعری بھی کی ہے لیکن وہ مزاحیہ شاعری نہیں بلکہ سنجیدہ غزل گوئی ہے۔

## سوالات

سوال: منشی جی کو کس کا انتظار تھا؟

جواب: منشی جی کو تار کا انتظار تھا۔

سوال: منشی جی کیا منصوبے باندھ رہے تھے؟

جواب: منشی جی ایک کوٹھی اور موٹر خریدنے کے منصوبے بنا رہے تھے اور اپنے لڑکے کو انگریزی اسکول میں داخل کرنا چاہتے تھے اور اپنے گھر میں ایک باورچی رکھنے کا منصوبہ بنا رہے تھے۔

سوال: ڈاکیہ کیا پیغام لایا؟

جواب: ڈاکیہ رضوی کی موت کا پیغام لایا تھا۔

سوال: ڈراما ”لاٹری کا ٹکٹ“ کی پوری کہانی اپنے الفاظ میں لکھیے۔

جواب: ڈراما ”لاٹری کا ٹکٹ“ شوکت تھانوی کی کتاب سنی سنائی سے لیا گیا ہے۔ اس مختصر ڈرامے میں چار کردار منشی جی، منشی جی کی بیوی، سلیم اور ڈاکیہ ہیں۔ منشی جی نے ایک لاٹری کا ٹکٹ خریدا تھا اور اس اُمید پر کہ اب کی بار اس کو انعام ملے گا۔ وہ خیالی پلاؤ پکانے لگتا ہے جیسے وہ کوٹھی اور موٹر خریدنے کا منصوبہ باندھ رہا ہے اپنے لڑکے کو انگریزی اسکول میں تعلیم دینے کے خواب دیکھتا ہے۔ گھر میں نوکر چاکر رکھنے کا منصوبہ بنا رہا ہے شروع سے آخر تک اس کو تار والے کا انتظار رہتا ہے۔ جس سے متعلق وہ اپنی بیوی، اپنے دوست سلیم سے بار بار دریافت کرتا ہے۔ وہ دونوں تار کو لے کر منشی جی کا مزاح بھی اُڑاتے ہیں۔ آخر پر جب تار آتا ہے تو اس میں انعام کے بجائے محمود بھائی کی بیوی کی موت کا پیغام ہوتا ہے۔ پیغام سن کر منشی جی بے ہوش ہو کر گر پڑتے ہیں۔

سوال: ان کرداروں پر مختصر نوٹ لکھیے۔ (منشی جی، سلیم، ڈاکیہ)

جواب: منشی جی: منشی جی ڈراما لاٹری کا ٹکٹ کا مرکزی کردار ہے اور ساری کہانی اس کردار کے ارد گرد گھومتی ہے اور منشی جی بھی سارے ڈرامے میں مزاح پیدا کرتے ہیں۔ یہ ایک ایسا کردار ہے جو اپنی محنت پر بھروسہ نہ کر کے انعام مل جائے گا اس پر اُمید رکھتا ہے اور خیالی منصوبے باندھتا ہے یہ مزاحیہ کردار آخر پر المناک صورتحال سے دوچار ہو کر گر پڑتا ہے۔

سلیم: سلیم اس ڈرامے کا ثانوی درجے کا کردار ہے جو کہ منشی جی کے منصوبے سن کر تذبذب میں پڑ جاتا ہے لیکن جب اس کے کردار کو منشی جی کے منصوبے باندھنے کی وجہ معلوم پڑتی ہے۔ تو وہ بے اختیار ہنس پڑتا ہے اور منشی جی ہر بات کا پھر مزاح اُڑاتا ہے اور آخر پر منشی جی کو محمود بھائی کی بیوی کی موت کی خبر بھی پڑ کر سناتا ہے۔

ڈاکیہ: ڈاکیہ کا کردار اگرچہ اس ڈرامے میں اہم حیثیت نہیں رکھتا ہے اور صرف آخر پر وہ عمل میں دیکھا دیتا ہے تاہم شروع سے آخر تک ساری توجہ کا مرکز بنا رہتا ہے۔ سبھی لوگوں کو اس کا انتظار رہتا ہے کہ کب ڈاکیہ پیغام لے کر آئے گا اور جب وہ آتا ہے تو اُمید سے

## گرامر

صفت: وہ کلمہ جو کسی چیز، جگہ یا شخص کی خوبی یا خامی یا اصل کیفیت ظاہر کرے صفت کہلاتا ہے۔ مثلاً اچھا آدمی، اونچا درخت، سُرخ پھول وغیرہ۔

موصوف: جس چیز جگہ یا شخص کی خوبی یا خامی یا اصل کیفیت ظاہر کی جائے موصوف کہلاتا ہے۔ مثلاً نیک لڑکا، بڑا آدمی، شریف عورت۔

## صفت ذاتی کے تین درجے:

- ۱- تفصیل : وہ درجہ صفت ہے جس میں کسی چیز کی ذاتی فضیلت بلا مقابلہ ظاہر ہوتی ہو مثلاً احمد نیک ہے۔
- ۲- تفصیلِ بعض : وہ درجہ ہے جس میں ایک چیز کو دوسری چیز پر ترجیح دی جائے مثلاً میرا قلم تمہارے قلم سے بہتر ہے۔
- ۳- تفصیلِ کل : وہ درجہ صفت ہے جس میں کسی چیز کو اُس جیسی تمام چیزوں پر ترجیح دی جائے مثلاً ہمالیہ سب پہاڑوں سے اونچا ہے۔

سوال: مندرجہ ذیل الفاظ کو اس طرح جملوں میں استعمال کیجیے کہ تذکیر و تانیث واضح ہو جائے۔

- ۱- بات : منشی جی جب بھی بات کرتے تھے تو اس کی بیوی اس کی بات کاٹی تھی۔ (مونث)
- ۲- تار : منشی جی کو تار آنے والا تھا۔ (مذکر)
- ۳- دوڑ : احمد نے اچھی دوڑ لگائی۔ (مونث)
- ۴- دولت : جسکو علم آ گیا اسکو بڑی دولت مل گئی۔ (مونث)
- ۵- چاند : رمضان کا چاند نظر آیا۔ (مذکر)
- ۶- انعام : منشی جی کو انعام نہیں ملا۔ (مذکر)

## افسانہ

افسانہ کے لغوی معنی ہیں قصہ، کہانی، حکایت۔ انگریزی میں اسے شارٹ سٹوری (Short Story) کہتے ہیں اور مغربی ادب کے زیر اثر اردو میں اس کا آغاز ہوا۔ بحیثیت صنف افسانہ سے مراد ایک ایسی نثری کہانی ہے جس میں زندگی کے ایک پہلو کو اس طرح پیش کیا جائے کہ قاری کی اس میں دلچسپی پیدا ہو اور جو زندگی کی بصیرت میں اضافہ کرے۔ ایڈگر ایلن پو کے مطابق افسانہ ایک ایسی کہانی ہے جس کے پڑھنے میں آدھ گھنٹہ تک کا وقت لگے۔ افسانہ کے اجزائے ترکیب میں پلاٹ کردار وحدت

تاثر اور نقطہ نظر شامل ہیں۔ علاوہ ازیں ایجاز و اختصار افسانہ کے لئے لازمی ہے۔

اُردو میں افسانہ کا آغاز منشی پریم چند نے کیا۔ پریم چند کے علاوہ سعادت حسین منٹو، عصمت چغتائی، راجندر سنگھ بیدی، کرشن چندر، قرۃ العین حیدر اور انتظار حسین وغیرہ نے قابل ذکر افسانے لکھے ہیں۔

## پشکر ناتھ

پشکر ناتھ سرینگر کے محلہ بٹہ یار میں ۳۱ مئی ۱۹۲۲ء کو پیدا ہوئے۔ بی اے کرنے کے بعد سرکاری ملازمت اختیار کی اور ایک مدت تک اکاؤنٹنٹ جنرل کے دفتر سے منسلک رہے۔ عمر کا زیادہ حصہ جموں میں گزارا۔ پشکر ناتھ ہماری ریاست اور بیرون ریاست کے ادبی حلقوں میں اچھی طرح متعارف ہیں۔ ان کی ادبی زندگی کا آغاز ۱۹۵۳ء میں ملک کے نامور جریدے بیسویں صدی میں ان کے پہلے افسانے کہانی پھر ادھوری رہی کی اشاعت سے ہوا۔

پشکر ناتھ کے افسانوں کے جو مجموعے شائع ہو کر مشہور ہو چکے ہیں ان میں اندھرے اُجالے، ڈل کے پاس، عشق کا چاند، اندھیرا اور کانچ کی دنیا، شامل ہیں۔ پہلے دو مجموعوں پر انہیں ریاستی کلچرل اکادمی کی طرف سے انعامات ملے۔ افسانوں کے علاوہ انہوں نے بہت سے ریڈیائی اور اسٹیج ڈرامے بھی لکھے ہیں۔ ان ڈراموں کو بھی وقتاً فوقتاً اعزازت سے نوازا گیا ہے۔ پشکر ناتھ جموں میں انتقال کر گئے۔

## سوالات:

سوال ۱: صمد جو نے جانوروں کی کھالوں میں نیا جسم فٹ کرنے کا فن کس سے سیکھا تھا؟

جواب: صمد جو نے جانوروں کی کھالوں میں نیا جسم فٹ کرنے کا فن اپنے باپ رمضان جو سے سیکھا تھا۔

سوال: صمد جو تھوڑے عرصے میں صاحب حیثیت تاجروں میں کیوں شمار ہونے لگا؟

جواب: صمد جو کے ہاتھوں میں اللہ پاک نے ایسا جادو بھردیا تھا کہ لوگ اس کے فن اور ہنر کو دیکھ کر دانتوں تلے انگلیاں دبانے پر مجبور ہو جاتے ہیں اور چونکہ صمد جو خود بھی بڑا مخنتی تھا لہذا اس کے فن اور محنت کی بدولت تھوڑے ہی عرصے میں اس کا شمار صاحب حیثیت تاجروں میں ہونے لگا۔

سوال: صمد جو نے چیتے کے بچے کی قیمت کیوں کم کر دی؟

جواب: صمد جو کو لڑکی کی بے بسی اور مجبوری دیکھ کر اپنا وہ زمانہ یاد آ گیا جب اس کی حالت اس لڑکی سے بھی گئی گزری تھی اور جب کسی اچھی چیز کو دیکھ کر اس لڑکی کی طرح صمد جو کے ہونٹ تھرتھراتے تھے یہی سوچ کر صمد جو نے چیتے کے بچے کی قیمت کم کر دی۔

سوال: انگریز لڑکی نے چیتے کے بچے کی پہلے سے کم قیمت سُن کر صمد جو سے کیا کہا؟

جواب: انگریز لڑکی نے چیتے کے بچے کی پہلے سے کم قیمت سُن کر صمد جو سے کہا کہ مجھے دلیس میں بتایا گیا تھا کہ وہاں سب چیٹ ہیں پہلے زیادہ قیمت بولتے ہیں اور پھر کمتی میں بیچتے ہیں پانچ سو روپیہ لینا ہے تو بات کرو۔

سوال: کشمیر میں پائے جانے والے اُن جانوروں، پرندوں اور جھیلوں کے نام لکھیے جن کا ذکر اس افسانے میں آیا ہے۔

جواب: کشمیر میں پائے جانے والے جانوروں میں چیتے، بارہ سنگھے، مارخور وغیرہ۔

پرندوں میں مرغابیاں، راج ہنس، رام چڑیاں، بطخیں وغیرہ اور جھیلوں میں ہوکرسر، ولر، ڈل جھیل، مانسل وغیرہ کا ذکر اس افسانے میں آیا ہے۔

سوال: سیاق و سباق اور مصنف کا حوالہ دے کر درج ذیل پیرا گراف کا ما حاصل لکھیے۔

سوچتے سوچتے اچانک صدمہ جو کو یہ خیال آیا کہ شاید اس لڑکی کے پاس اتنے پیسے ہی نہ ہوں کہ وہ اپنے خیالوں کے اس چاند کو خرید سکے۔ کتنا عجیب سا لگتا ہے جب دل ایک طرف کھینچتا ہو مگر جیب دوسری جانب گھسیٹ کر لے جاتی ہو۔ محرومی، لاچاری، مجبوری، آدمی کا اپنے آپ پر سے اعتبار ہی اٹھ جاتا ہے۔ یہ بہت بڑا گناہ ہے۔

جواب: مذکورہ اقتباس پشکرناتھ کے افسانے درد کا مارا سے ماخوذ ہے۔ زیر حوالہ اقتباس میں پشکرناتھ لکھتے ہیں کہ مجبوری اور لاچاری انسان کے خوابوں پر بھاری پڑتی ہے۔

سوال: وضاحت کیجئے۔

انگریز جو الیانس سلطنت تھے اوسات سمندر پار سے تعلیم علاج، چاندی کے سکے اور مکارانہ نظام حکومت لائے تھے۔

جواب: انگریز جو ہندوستان میں حکمران تھے اور میلوں دور سے اپنے ساتھ یہاں اپنے ملک کا نظام تعلیم، علاج و معالجہ کے طریقے، چاندی کے پیسے اور حکومت کرنے کا ایک مکارانہ نظام اپنے ساتھ اپنے ملک سے یہاں لائے تھے اور اُن سب چیزوں کو عمل میں لایا۔

سوال: گیلی لکڑی کے کڑوے کیلئے دھوئیں سے اُن کی ماں کو شاہی بیماری لگ گئی تھی؟

جواب: صدمہ جو کا آبائی مکان جب آگ میں جل کر راکھ ہو گیا تھا تو وہاں سے گیلی لکڑیاں سے اٹھے ہوئے کڑوے دھوئیں سے اُن کی ماں کو تپ دق کی بیماری لگ گئی تھی جس کا علاج وہ نہیں کر پائے تھے۔

## شہریار

کنورا اخلاق محمد خان نام، شہریار کے قلمی نام سے جانے جاتے ہیں۔ ۱۹۳۶ء میں قصبہ آنولہ ضلع بریلی میں پیدا

ہوئے۔ ہردوئی میں ابتدائی تعلیم حاصل کرنے کے بعد علی گڑھ چلے گئے۔ جہاں انہوں نے دسویں درجے سے لے کر ایم۔ اے

تک کے تمام امتحانات امتیاز کے ساتھ پاس کیے۔

زمانہ طالب علمی میں کھیلوں سے بہت دلچسپی تھی۔ ۱۹۵۵ء سے شوقِ سخن ہوا اور اس دنیا میں قدم کھتے ہی ادبی حلقوں

میں شہرت حاصل کر لی۔ انجمن اُردو کے معلق کے سکریٹری اور علی گڑھ میگزین کے ایڈیٹر مقرر ہوئے۔ ایم۔ اے کرنے کے بعد

کچھ دنوں انجمن ترقی اُردو (ہند) میں بحیثیت لٹریٹری اسٹنٹ کام کرتے رہے پھر شعبہ اُردو میں لیکچرار ہو گئے۔

شہریار کے کلام کے مجموعے ”اسمِ اعظم“ سا تو اس در ”نیند کی کرچیاں“ ”خواب کا در بند ہے“ کے نام سے شائع ہو چکے ہیں۔ شہریار میں شاعری کی فطری خصوصیات کوٹ کوٹ کر بھری ہیں۔ نظم اور غزل دونوں میں اُن کا انداز سخن منفرد ہے۔ اگرچہ وہ جدیدیت سے تعلق رکھتے ہیں لیکن کلاسیکی روایات کا بھی احترام کرتے ہیں۔

## شہریار (تشریح غزل نمبر ۱)

۱۔ غزل کے مطلع میں شاعر زخموں پر مرہم لگا کر دل کو خوش رکھنے کی خواہش کرتا ہے اور چاہتا ہے کہ پھر سے خوابوں کی دنیا بسالیں جہاں انسان کو کوئی غم نہیں ہوتا ہے بلکہ انسان جس طرح سے چاہتا ہے خوابوں میں اپنی مُرادیں پوری کر لیتا ہے۔

۲۔ شاعر لکھتا ہے کہ ایک مدت سے میں اس طرح زندگی گزارتا ہوں جیسے میں زندہ ہی نہیں ہوں۔ میرے اندر زندہ ہونے کا کوئی احساس ہی نہیں ہے۔ کیونکہ تڑپنا میری زندگی کا مقصد ہے لیکن عرصے سے میرے دل میں کوئی تڑپ ہی نہیں ہے۔ اب شاعر محبوب سے ظلم و ستم کا طلب گار ہے تاکہ محبوب کے ظلم و ستم سے عاشق تڑپ اُٹھے اور اُسے جینے کا احساس ہو جائے۔

۳۔ شاعر کہتا ہے کہ میں عشق کز مجرم ہوں لیکن میری فریاد میرے محبوب تک نہیں پہنچتی اب میں چاہتا ہوں کہ پُرانے طریقے کے مطابق مجھے عشق کے کٹھرے میں مجرم کی طرح پیش کیا جائے اور میں اپنی فریاد اپنے محبوب کے سامنے بیاں کر سکوں۔

۴۔ اس شعر میں شاعر لکھتا ہے کہ دیوانوں پر اس قدر سخت پہرا بٹھایا گیا ہے کہ اب ہر طرف زنجیریں ہی زنجیریں نظر آتی ہیں ایسے حال میں دیوانوں کو آزاد کرنا ناممکن ہے۔ یعنی عشق کے جو دیوانے ہیں وہ اس قدر عشق میں مبتلا ہو چکے ہیں کہ اُن کا اب اس حالت سے نکلنا ناممکن ہے۔

۵۔ غزل کے مقطع میں شاعر لکھتا ہے کہ اب دل کے بہلانے کی صرف ایک ہی صورت نظر آتی ہے اور وہ صورت یہ ہے کہ پُرانی باتوں کو یاد کر کے ہی گزارا کر لوں یعنی میں اپنے ماضی کی خوشیوں کو یاد کر کے ہی دل کو بہلا سکتا ہوں اس کے بغیر اور کوئی راستہ نظر نہیں آتا۔

## (تشریح غزل نمبر ۲)

۱۔ غزل کے مطلع میں شاعر زندگی کے بارے میں کہتا ہے کہ زندگی انسان کی توقع کے مطابق نہیں ہے۔ یعنی انسان جیسا

سوچتا ہے زندگی میں ویسا نہیں ہوتا۔ یہاں پر ہر لمحہ کسی نہ کسی کمی کا احساس ہوتا ہے۔

۲۔ شاعر کہتا ہے کہ جو زندگی انسان بسر کرنا چاہتا ہے وہ زندگی صرف خوابوں ہی میں ممکن ہے۔ کیونکہ انسان کی خواہشیں اتنی ہیں کہ ہر خواہش کا حقیقت میں پورا ہونا ناممکن ہے۔

۳۔ شاعر لکھتا ہے کہ زندگی میں جو لوگ انسان سے بچھڑ جاتے ہیں ان کے دوبارہ ملنے کی اُمید تو ہوتی ہے لیکن یقین نہیں ہوتا۔ یعنی بچھڑے لوگوں سے ملاقات ہونا تقریباً ناممکن ہے۔

۴۔ شاعر لکھتا ہے کہ یہ دُنیا بہت انوکھی ہے جدھر بھی ہم دیکھتے ہیں مختلف چیزیں مختلف تعداد میں ہمارے سامنے آ جاتی ہیں اور ایسا لگتا ہے کہ رب نے کسی کو ضرورت سے زیادہ دیا ہے اور کسی کو بہت ہی کم عطا کیا ہے۔

۵۔ غزل کے مقطع میں شاعر محبوب سے مخاطب ہو کر کہتا ہے کہ اے میرے محبوب پہلے بھی میری اُداسی کی وجہ تمہاری دوری تھی اور آج بھی میری اُداسی کی وجہ تمہاری دوری ہی ہے۔ لیکن اتنا ضرور ہے کہ میری اُداسی میں اتنی شدت نہیں ہے جتنی کہ پہلے تھی وہ اس لئے کہ شاید مجھے تمہاری دوری کی اب عادت پڑ گئی ہے۔

#### سوالات:

سوال: خوابوں کی دنیا آباد کرنے کے لئے کیا کرنا ہوگا؟

جواب: خوابوں کی دنیا آباد کرنے کے لئے ہمیں پُرانے زخم بھرنے ہونگے اس کے بعد ہی خوابوں کو حقیقت کا روپ دیا جا سکتا ہے۔

سوال: دل بہلانے کی کیا صورت ہے؟

جواب: دل بہلانے کی ایک ہی صورت ہے کہ ہم گزری ہوئی باتوں کو پھر سے یاد کر لیں۔

سوال: غزل نمبر دو کے آخری شعر کو پڑھ کر بتائے کی شاعر کی اُداسی کا سبب کیا ہے؟

جواب: شاعر کی اُداسی کا سبب محبوب کی جدائی اور دوری ہے۔

سوال: درج ذیل لفظوں کو جملوں میں استعمال کیجئے؟

(۱) احساس : مجھے آپ کی بے بسی کا احساس ہے۔

(۲) تصور : ہمیں تصور نہیں تھا کہ وہ پاس ہوگا۔

(۳) یقین : ہمیں یقین ہے کہ ہم آخرت میں ملے گے۔

(۴) تقاضا : حامد مجھ سے قرض کا تقاضا کر رہا تھا۔

(۵) مجرم : جرم کرنے والے کو مجرم کہتے ہیں۔

## چکبست

نام پنڈت برج نرائن چکبست اور تخلص بھی چکبست تھا۔ والد کا نام پنڈت اودت نرائن چکبست تھا۔ وہ بھی شاعر تھے اور یقیناً تخلص تھا۔ یہ اصلاً کشمیری برہمن تھے۔ ان کے اجداد کشمیر سے ہجرت کر کے چلے گئے تھے۔ چکبست ۱۸۸۲ء کو فیض آباد میں پیدا ہوئے۔ وکالت کی تعلیم حاصل کرنے کے بعد وکیل ہو گئے۔ وکالت اور دوسرے سلسلوں میں لکھنؤ آنا جانا گارہتا تھا، مگر ۱۹۲۶ء میں وہیں سکونت اختیار کر لی اور وہاں کے ممتاز وکلاء میں شمار کئے جاتے تھے۔ ۱۹۴۶ء میں رائے بریلی کے اسٹیشن پرفانج کا شکار ہو گئے اور چند ہی گھنٹوں میں انتقال کر گئے۔

ان کی غزلوں میں غالب کا سا فلسفیانہ انداز اگرچہ کم ہے لیکن بہت خوب ہے۔ زبان اور بیان پر آتش کا اثر ہے۔ ان دنوں کے امتزاج سے ان کی ذہانت اور فکر رسا نے اپنا ایک انفرادی رنگ پیدا کر لیا تھا۔ ان کا مجموعہ کلام ”صبح وطن“ چھپ چکا ہے۔

## کشمیر

سوالات:

سوال: شاعر نے اس نظم میں کشمیر کی صبح کا منظر کس طرح پیش کیا ہے؟

جواب: شاعر نے اس نظم میں صبح کا منظر نہایت ہی خوبصورتی سے بیان کیا ہے شاعر لکھتے ہیں کہ کشمیر میں صبح پہاڑوں پر پھول اپنی خوشبو بکھیرتے ہیں۔ چڑیاں جھاڑیوں میں بیٹھے گیت گاتی ہیں۔ آسمان پر ایسی لالی چھا جاتی ہے جیسے کسی پہاڑ پر گل لالہ چمکتا ہو اور پھول ایسے دیکھائی دیتے ہیں جیسے پریاں ناچ رہی ہوں۔ اور صبح کے وقت ہلکی ہلکی سہانی ہوا چلتی ہے جو انسانی دل و دماغ کو تازہ کر دیتی ہے۔

سوال: شاعر کو کس چھوٹے ہوئے باغ کی یاد آتی ہے؟

جواب: شاعر کو چھوٹے ہوئے کشمیر کی یاد آتی ہے۔

سوال: کشمیر کی خاک نے کون کون سے عالم و دانا اٹھے ہیں استاد سے پوچھ کر ایسے پانچ نام لکھیے۔

جواب: کشمیر کی خاک سے بہت سے عالم و دانا پیدا ہوئے ہے علامہ انور شاہ کا شمیری، شیخ حمزہ مخدوم، حبیبہ خاتون،

شیخ نور الدین ولی، غلام احمد مہجور۔

سوال: درج ذیل اشعار کو نثر میں لکھیے؟

وہ طائر کہسار لب چشمہ کہسار

وہ سرد ہو اور کرم ابر گہر بار

وہ میوہ خوش رنگ وہ سرسبز چمن زار

اک آن میں محنت ہو جو برسوں کا ہو بیمار

جواب: شاعر فرماتے ہے کہ کشمیر کے پرندے پہاڑوں سے اونچی پرواز رکھتے ہیں اور زمین کی حدوں کو پار کر جاتے ہے یہاں کی ہوانہ صرف سرد ہوتی ہے بلکہ یہاں کے بادل بھی موتیوں کی طرح برستے ہیں۔ یہاں کے میووں اور سبز ارکارنگ ہی نرالا ہے برسوں کا بیمار انسان چند لمحوں میں صحت یاب ہو سکتا ہے۔

امن کی برکتیں

اس میں کوئی شک نہیں کہ جنگ ایک لعنت ہے، خدا کا سب سے بڑا قہر ہے، میدان جنگ کا منظر کتنا خوف ناک ہوتا ہے۔ کہیں سرکٹے پڑے ہیں، کہیں بے سر کے دھڑخون میں پڑے سڑ رہے ہیں، گدھ اور چیلیں منڈلاتی ہیں، مردار خور جانور لاشوں کو نوچنے کے لئے چکر لگاتے ہیں، خون سے لت پت دم توڑتے سپاہیوں کو دیکھ کر دل بیٹھنے لگتا ہے، لاکھوں عورتیں بیوہ ہو جاتی ہیں، لاکھوں بچے یتیم ہو جاتے ہیں، لاکھوں بوڑھے ماں باپ جگر کے ٹکڑوں کی یاد میں تڑپتے ہیں، اور خون کے آنسوں روتے ہیں اور گلی گلی میں جنگ کے بھوت کا ننگا ناچ ہے، بمباری سے کیا مدرسے اور کیا ہسپتال سبھی تباہ ہوتے ہیں، وبائیں پھیلتی ہیں۔ شاندار بلند عمارتیں کھنڈرات میں بدل جاتی ہیں، بازاروں میں ہو کا عالم طاری ہو جاتا ہے، ضروریات زندگی کی چیزیں ناپید ہو جاتی ہیں۔ الغرض جنگ کی ہولناکیاں اور تباہ کاریاں بیان سے باہر ہیں۔

اس کے برعکس امن یقیناً ایک برکت ہے، خدا کی نعمت ہے، اس کے بغیر تعمیری کام ممکن نہیں، تاریخ گواہ ہے کہ قوموں نے امن کے زمانے میں ہی ترقی کی، علوم فنون کا مطالعہ سکون خاطر کے بغیر نہیں ہو سکتا اور جنگ کے دوران سکون خاطر کسے نصیب ہوتا ہے دل و دماغ پر جنگ کا خوف طاری ہو تو انسان کسی کام کا نہیں رہتا، اس کی قوت متخلیہ مفلوج ہو جاتی ہے۔ اطمینان دل جاتا رہتا ہے، ملک میں امن کا دور دور ہو تو ہر قسم کے کام انجام پاتے ہیں، ذرائع آمد و رفت میں توسیع ہوتی ہے، تعلیم و تربیت کی اشاعت آسان ہوتی ہے۔ نئی سڑکیں تعمیر ہوتی ہیں۔ نئی ریلیں بچھائی جاتی ہیں، تجارت و حرفت و صنعت کو فروغ ہوتا ہے، جنگ کے دوران سوائے سامان حرب کے اور کسی چیز پر توجہ نہیں ہوتی، سامان جنگ تیار کرنے کے لئے ہر ممکن وسیلہ ڈھونڈا جاتا ہے، کارخانوں میں بھی جنگ کے لئے ضروری اشیاء تیار کی جاتی ہیں، عام ضروریات زندگی میسر نہیں ہوتیں۔

انگلستان میں جو ترقی اور تعمیر ملکہ و کٹوریہ کے عہد میں ہوئی کبھی نہ ہوئی تھی، اس زمانے میں پورا پورا امن تھا۔ لوگ بہت خوش حال اور آسودہ تھے، برطانوی سلطنت پہ کبھی سورج غروب نہ ہوتا تھا۔ یہ انگلستان کے کمال عروج کا دور تھا۔ جوں ہی ہٹلر کے ساتھ جنگ چھڑی، برطانوی سلطنت کو ناقابل تلافی نقصان پہنچا، دراصل برطانیہ بالکل کھوکھلا ہو گیا اور اپنی کمزوری اور مجبوری کے سبب وسیع سلطنت سے ہاتھ دھو بیٹھا، یکے بعد دیگرے برطانوی مقبوضات اور آبادیاں انگریز کے چنگل سے آزاد ہو گئیں، اور برطانیہ کی عظمت

خاک میں مل گئی، یہ تھا جنگ کا نتیجہ۔

امریکہ کی تاریخ بھی اس حقیقت کو ثابت کرتی ہے کہ ملک امن زمانے میں ہی ترقی کر سکتے ہیں، امریکہ کی ترقی کی دوڑ بھی اس وقت شروع ہوئی جب وہ ۸۹ء کی خانہ جنگی سے فارغ ہوا اور جنگ آزادی میں فتح پانے کے بعد امن و سکون کے دور میں داخل ہوا۔ امریکی ترقی کا راز یہ ہے کہ ۲۰ ویں صدی میں اُسے اپنے ملک میں کوئی جنگ نہیں لڑنا پڑی۔ اس وقت دنیا جن مسائل سے دوچار ہے وہ صرف امن و سکون کی فضا ہی میں حاصل ہو سکتے ہیں، مثلاً بھوک کا مسئلہ، بیماری کا مسئلہ، جہالت عامہ کا مسئلہ، بے کاری کا مسئلہ وغیرہ۔

## (گرامر)

مرکب : دو یا دو سے زیادہ کلموں کی ترکیب کو مرکب کہتے ہیں۔

مرکب کی دو قسمیں ہیں: (۱) مرکب ناقص (۲) مرکب تام

مرکب ناقص : مرکب ناقص وہ مرکب ہے جس سے سننے والے کو پورا مطلب معلوم نہ ہو اور وہ مزید سننے کا منتظر رہے۔ مثلاً کالی بلی، زید کی ٹوپی، چھ آم وغیرہ۔

مرکب تام: مرکب تام کلموں کی ایسی ترکیب جس سے کسی بات کا پورا پتہ چل جائے اور سننے والے کو پورا فائدہ مل جائے اُسے مرکب مفید بھی کہتے ہیں۔ مثلاً کالی بلی آتی تھی، چھ آم کھائے، زید کی ٹوپی کالی ہے وغیرہ۔

مرکب کی ناقص کی مختلف اقسام ہیں

۱۔ مرکب اضافی: وہ مرکب ہے جس میں مضاف اور مضاف الیہ ہوں۔ مثلاً زید کی قمیض۔ آب زم زم

۲۔ مرکب توصیفی: مرکب توصیفی وہ مرکب ہے جو موصوف اور صفت سے مل کر بنے۔ مثلاً لال قلم، چھوٹا لڑکا وغیرہ۔

جملہ: الفاظ کا وہ مجموعہ جس سے کہنے والے کا مطلب سننے والے کو سمجھ میں آجائے۔

مسند کے لحاظ سے جملے کی قسمیں

مسند کے لحاظ سے جملے کی دو قسمیں ہیں: (۱) جملہ اسمیہ (۲) جملہ فعلیہ

۱۔ جملہ اسمیہ: وہ جملہ ہے جس میں مسند اور مسند الیہ دونوں اسم ہوں مثلاً احمد نیک ہے

۲۔ جملہ فعلیہ: وہ جملہ ہے جس میں مسند الیہ اسم اور مسند فعل ہو۔ مثلاً احمد نے کھانا کھایا۔

معنوں کے لحاظ سے جملے کی قسمیں

۱۔ جملہ خبریہ ۲۔ جملہ انشائیہ

جملہ خبریہ: وہ جملہ جس میں کوئی خبر مآذی جائے مثلاً: احمد آیا۔ زند نک سے۔

جملہ انشائیہ:- وہ جملہ جس کوئی حکم یا استفہام، تعجب، انبساط وغیرہ ظاہر ہو۔ مثلاً: تم کہاں جا رہے ہو؟، یہ کام مت کرو، کاش وہ زندہ ہوتے، وغیرہ۔

## بہن کی شادی پر اپنی سہیلی / دوست کو دعوتی خط

احمد نگر، سرینگر

یکم اکتوبر ۲۰۲۰ء

پیارے دوست!

السلام علیکم

اُمید ہے کہ آپ بخیر ہونگے۔ آپ کو جان کر خوشی ہوگی کہ میرے بھائی جان / بہن کی شادی ۳۰ ستمبر کو ہونے والی ہے۔ ہم نے بہت حد تک تیاری کر لی ہے ابھی مزید کچھ تیاریاں باقی ہیں جو انہی کچھ دنوں میں کرنی ہیں۔ آپ کے ساتھ کچھ مشورہ کرنا ہے لہذا آپ دو تین دن پہلے ہی یہاں تشریف لائیں تاکہ ہمیں مل بیٹھ کر باتیں کرنے کا موقع مل سکے اور اپنی امی ابو کو میری طرف سے سلام عرض کرنا اور اس بات کی تاکید کرنا کہ وہ شادی کی تقریب میں ضرور شرکت کریں۔

والسلام

آپ کا دوست

عابد

## ڈائریکٹر محکمہ تعلیمات کے نام درخواست برائے ملازمت

بمضور عالی جناب ناظم تعلیمات صاحب اسکول ایجوکیشن کشمیر

جناب عالی!

میں نے آج ایک روز نامہ اخبار میں اشتہار پڑھا جس میں آپ نے ضلع سرینگر کے لئے اعلیٰ تعلیم یافتہ نوجوانوں کے لئے ملازمت کی چند خالی اسامیاں پر کرنے کے لئے درخواستیں طلب کی ہیں۔ میں ریاست کا پشتینی باشندہ ہوں اور ریاضی کے مضمون میں ماسٹر ڈگری کے ساتھ اول جماعت سے دسویں تک پڑھانے کا تجربہ بھی رکھتا ہوں اسکے علاوہ بھی سارے مضمون پڑھا سکتا ہوں۔ مجھے اُمید ہے کہ آپ میری قابلیت کی بنا پر مجھے خالی اسامی پر تعینات کر کے میری حوصلہ افزائی فرمائیں گے۔ میری تمام تعلیمی اسناد اور تجربے کی ٹھیکرٹ ڈکٹیشن درخواست کے ہمراہ منسلک ہیں۔

نیازمند : محمد اکرم

ولدیت : محمد اسماعیل  
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