## English-6

## Worksheet-1

## The Sentence

A. 1. What is your first name?
2. He always arrives late.
3. I don't drink tea.
4. What do you recommend?
B. 1. imperative, 2. imperative, 3. interrogative, 4. declarative, 5. declarative, 6. declarative, 7. exclamatory, 8. imperative, 9. declarative, 10. interrogative
C. 1. How slow you are!
2. How beautiful she is!
3. How happy they are here!
4. What a marvelous sight it was!
5. What an adventurous movie this is?
6. How fortunate I am!
7. How a difficult puzzle it was!
8. How a hot day it was!

## Worksheet-2

## Subject and Predicate

A. 1. The old man sat under a tree.

Subject : The old man Predicate: sat under a tree.
2. Alice sang a beautiful song.

Subject : Alice
Predicate : sang a beautiful song.
3. She walked around the house.

Subject: She
Predicate : walked around the house.
4. India is the largest democracy in the world.

Subject : India
Predicate : is the largest democracy in the world.
5. Loveleen can speak English.

Subject: Loveleen
Predicate: can speak English.
B. 1. rises in the east.
3. looked worried.
2. bark at the strangers.
4. plays cricket.
5. have lost their only son.
C. 1. Lata and Viresh, 2. You, 3. We, 4. Pine, 5. The dwarf

## Worksheet-3

## The Noun

A. 1. Always speak the truth.
abstract
2. We all lovehonesty. abstract
3. I have two children.
common
4. The lion is the king of the beasts. common, common, common
5. Solomon was the wisest of all king. proper, common
6. Cleanliness is next to godliness.
7. Birds of a feather flock together. common, common, collective
8. TheNile is the longest of all rivers. proper, common
B. 1. strength, 2. poverty, 3. cruelty, 4. pilgrimage, 5. pleasure, 6. childhood, 7. wastage, 8. safety, 9. darkness, 10. wickedness.

## Worksheet-4

## Nouns: Numbers

A. 1. books, 2. days, 3. tables, 4. cars, 5. watches, 6. quizzes, 7. foxes, 8. classes, 9. glasses, 10. buses, 11. babies, 12. parties, 13. bodies, 14. dictionaries, 15. monkeys, 16. cities, 17. calves, 18. dwarfs, 19. hoofs, 20. thieves, 21. elves, 22. loaves, 23. teeth, 24. persons, 25. children, 26. feet, 27. men, 28. mice, 29. potatoes, 30. deer, 31. geese, 32. oxen, 33. tomatoes, 34. mosquitoes, 35. houses, 36. sheep
B. 1. Paw is to cat as foot is to human.
2. Key is to door as password is to computer.
3. Girl is to boy as woman is to man.
4. Goose is to flock as dog is to pack.
C. 1. There isn't, 2. There aren't, 3. there isn't, 4. there aren't, 5. there isn't, 6. there aren't,
7. There isn't, 8. There isn't

## Worksheet-5

Nouns: Gender
A. 1. spinster, 2. sir, 3. niece, 4. emperor, 5. vixen, 6. heir, 7. duchess, 8. widower, 9. actress, 10. gander, 11. heroine, 12. master
B. 1. The woman knows your wife.
2. Mrs. Chew is our headmistress.
3. Our landlady is a widow.
4. The shepherdess prayed to god.
5. My father's sister is my aunt.
6. The bride is here.
7. The filly was stung by a queen.
8. This actress played the part of the heroine.
C. 1. Our parents look after us.
2. The author of this book is Dr. Ram Mohan Gupta.
3. Neil Armstrong was an astronaut who walked on the moon.
D. 1. Trees are very beneficial for the living world.
2. Trains run on rails.
3. We should go to the bed early.

## Worksheet-6

## The Verb : Kinds of Verbs

A. 1. The sun shines brightly.
2. He took shelter under a tree.
3. The dog ran after me.
4. Put away your books.
5. The fire burns dimly.
6. Tell the truth.
7. We eat three times a day.
8. The clock ticks all day long.
9. The moon rose early.
10. The cat sleeps on the rug.
B. 1. I slept all day.
2. He gave the pen to the teacher.
3. They aughed loudly.
4. Sheran five kilometres.
5. Welived in America for two years.
6. I likethat book.
7. We clean our house everyday.
possession action physical action physical action mental action physical action mental action physical action possession action possession action physical action intransitive transitive intransitive transitive intransitive transitive transitive
8. My sister moved to another country. transitive
9. My brother repairedhis car. transitive
10. These kids painted their tree-house blue.

## Worksheet-7

## Subject-Verb Agreement

A. 1. is, 2. are, 3. doesn't, 4. doesn't, 5. is, 6. costs, 7. doesn't
B. 1. gave, 2. plays, 3. were, 4. is, 5. is, 6. was, 7. Has, 8. was
C. 1. Everybody is unique.
2. Neither Jill nor Jane is good at maths.
3. The manager, or the teachers, was present at the meeting.
4. Each of the workers was given new safety equipment.

## Worksheet-8

The Tense
A.

| Infinitive | Simple Past | Past Participle |
| :--- | :--- | :--- |
| choose | chose | chosen |
| sleep | slept | slept |
| eat | ate | eaten |
| drive | drove | driven |
| pay | paid | paid |
| sell | sold | sold |
| wake | woke | waken, waked |
| drink | drank | drunk |
| lose | lost | lost |
| freeze | froze | frozen |

B. 1. simple present, 2. simple past, 3. present perfect continuous, 4. future continuous, 5. past perfect continuous tense, 6. simple future
C. was, got, rang, was, called, lost, could not, thought, left, was, could not, told, gave, arrived, finished.

## Worksheet-9

## The Continuous Tense

A. 1. He had been playing match for two hours.
2. He has read the book.
3. The leader is delivering the speech.
4. We shall go to Ujjain next week.
B. 1. They will write their essay tomorrow.
2. John and Mary are singing a song.
3. The family had booked a flight to Paris.
4. They have been doing their work sincerely.
5. Did you like the film?
6. I hadn't seen him in a long time.

## Worksheet-10

## Present, Past and Future

A. 1. is, 2. loves, 3. is, wakes up; 4. hears, 5. gets up ; goes, 6. is going on.
B. 1. was jogging, were crossing; 2. falled, was picking; 3. discovered; was taking; 4. were travelling, met; 5. was speaking, boiled; 6. left, was shining.
C. 1. will earn, 2. will travel, 3. will meet, 4. will adore, 5. will not have, 6. will serve, 7. will anticipate, 8. will not be

## Worksheet-11

## Pronouns

| A. man | : he | dog | it | girls | they |
| :---: | :---: | :---: | :---: | :---: | :---: |
| people | : they | woman | she | teachers | they |
| cat | : it | Bob and Joe | they | women | : they |
| dogs | : they | man | he | students | : they |
| parents | : they | men | they | friends | they |
| girl | : she | wife | she | uncle | he |
| you and I | : we | tree | it | restaurant | it |
| pencil | : it | Ann and you |  | socks | it |

B. 1. We learned about the Anasai people.
2. They built a civilization in the Southwest. S
3. Like many civilizations, it depended on crops. S
4. Maize and pumpkins provided the staple foods for them.
5. Little rain fell, but the Anasazi hoarded it to water crops.
6. The teacher asked Lata and me to report on cliff dwellings.
C. 1. I, 2. We, 3. me, 4. them, 5. us, 6. they

## Worksheet-12

## Noun : Case

A. 1. computers', 2. client's, 3. pages of textbook, 4. glass of window, 5. frames of window, 6. manuals of program, 7. surfaces of desks, 8. professors', 9. edges of knives, 10. batteries of cellphone, 11. parents' 12. clock's 13. sun's, 14. menus of restaurant, 15. bindings of books, 16 . solutions of problems

## Worksheet-13

The Adjective
A. 1. thirsty, 2. old, 3. young, 4. expensive, 5. angry, 6. fat, 7. big, 8. pretty.
B. 1. clean, 2. dirty, 3. happy, 4. sad, 5. tired, 6. rich, 7. quiet, 8. noisy, 9. hungry.
C. 1. Our house is yellowish
2. He often acts childish way.
3. We enjoyed a successful event.
4. We enjoyed the drum's rhythmic sound.
5. She adopted a homeless dog.
6. Look out that poisonous plant.
7. It looks like we'll have rainy weather today.
8. She always behaves in a courteous manner.
9. She has the prettiest hair.
10. We go for a daily walk.

## Worksheet-14

## Adjective : Degrees of Comparison

A. 1. adverb, 2. adverb, 3. adjective, 4. adverb, 5. adjective
B. Positive Degree

1. Little
2. Badly
3. Beautiful
4. Far
5. Dirty

## Comparative Degree

less
more badly
more beautiful
farther
dirtier

Superlative Degree
least most badly
most beautiful
farthest
dirtiest
6. Lucky
7. Pretty
8. Famous
9. Wide
11. Clever
10. Faithful
12. Popular
13. Intelligent
14. Happy
luckier
prettier
more famous
wider
Cleverer
more faithful
more popular
more intelligent
happier
luckiest
prettiest
most famous
Widest
cleverest
most faithful
most popular
most intelligent
happiest
C. 1. bigger, 2. more beautiful, 3. most interesting, 4. longer, 5. most dangerous, 6. better, 7. more expensive, 8. richest

## Worksheet-15

## Articles

A. 1. $a, ~ a, ~ 2 . ~ t h e, ~ 3 . ~ a, ~ 4 . ~ t h e, ~ 5 . ~ a n, ~ 6 . ~ t h e, ~ 7 . ~ t h e, ~ 8 . ~ t h e, ~ 9 . ~ a n, ~ 10 . ~ t h e, ~ 11 . ~ a n, ~ 12 . ~ A n, ~ 13 . ~$ The, an, 14. a
B. For this recipe you will need some cut vegetables, a round pizza bread, little bit of pepper, the sprinkling of cheese and your favourite sauce.
Instructions :
Take a pizza bread and smear some sauce on it. Then add some cut vegetables. Let the vegetables be equally placed on the bread. Add pepper. Add some more sauce if you want. After that, grate the cheese on the vegetables. Put the pizza in an oven.

## Worksheet-16

## The Adverb

A. 1. happily, 2. loudly, 3. fluently, 4. angrily, 5. carelessly, 6. awfully, 7. wonderfully, 8. quietly
B. 1. always, 2. often, 3. definitely, 4. even, 5. Only, 6. Probably, 7. quickly, 8. happily, 9. certainly, 10. upstairs, 11. completely, 12. often, 13. neatly, 14. slowly

## Worksheet-17

## The Preposition

A. The trip through the mountains was an exhilarating experience. We left just after dawn(ina van loaded with passengers and luggage. We believed that the trip would take between six and eight hours and hoped(toarrive (at)our destination beforedark.
B. 1. (c), 2. (a), 3. (c), 4. (c), 5. (b)
C. of, in, upto, about, from, in, on, for

## Worksheet-18

## The Conjunction

A. 1. John smokes but his brother doesn't.
2. Neither Alice nor Mary has come.
3. She speaks Englishand Spanish.
4. I like him because he is very sincere.
5. Though he worked hard, he did not win.
6. She is illbut she is cheerful.
7. Though it was raining, we decided to go out.
8. The piper played@the children danced.
B. 1. He went crazy when his wife burnt his breakfast. (when)
2. You can hear what I'm saying if you keep quiet. (if)
3. I won't invite my classmates to a party until I know them well. (until)
4. By the time my mother arrived home I had already cleaned the house. (by the time)
5. The first quiz was easy whereas this one is extremely difficult. (Whereas)
6. Yet she's snobbish people like her. (yet)
7. Since we're broken we can't buy anything. (since)
8. Even though he failed he won't give up his ideals. (even though)
9. He fell asleep while he was watching the film. (while)

## Worksheet-19

## Active and Passive Voice

A. 1. Passive, 2. active, 3. passive, 4. passive, 5. active, 6. passive
B. 1. Saplings were planted by the children at the edge of the garden.
2. India was ruled by the British for over a century.
3. Feroz was spoken by Renita.
4. A cup of tea will be made for you by Sally.
5. A poem has been written by me.
C. 1. Ankit has lost the keys.
2. It does not play cricket in the school.
3. A book and a pen were given to each student.
4. A few questions will be asked by me.

## Worksheet-20

## Direct and Indirect Speech

A. 1. Mr. Saleem said that he was very tired.
2. He said that he was flying to Rome the next day.
3. George said that he had lived in that village all his life.
4. Peter told me that he could not go out with me because he was not feeling well.
5. Helen told me that she hoped I had enjoyed myself.
6. She said that she had been to Paris many times.
7. Jane told his father that he wanted to study medicine.
8. Her friend told Mary that she was wrong.
B. 1. The teacher asked me to write my name on that paper.
2. He asked me to wait for him there.
3. He advised them not to go out alone.
4. He ordered me to type that letter immediately.
5. Peter forbade Tom to do it again.
6. The teacher said that they might be a little late.
7. The teacher said that they must answer that question in 5 seconds.
8. He said that he could not stay out very late.

## Worksheet-21

The Interjection
A. 1. Hurray! , 2. Wow! , 3. Bravo! , 4. What! , 5. Uh oh! , 6. Yippe! 7. Yay! , 8. Wow!, 9. Ah!, 10. Ouch!
B. Celebration Joy
Anger
Grief
Surprise
Approval
Fear
Disquiet
Making mistake
Pain Yippe!
Hurrah!
Ugh!
Alas!
What!
Wow!
Aah!
Hay!
Oops!
Ouch!

| Relief | Whew! |
| :--- | :--- |
| Admiration | Bravo! |
| Desire of silence | Shh! |

## Worksheet-22

## Punctuation and Capital Letters

A. 1. (c), 2. (b), 3. (d)
B. "Alice, will you look this way?" exclaimed Mrs Jones. "You have been fidgeting all morning." Alice reluctantly tore her eyes away from the coin she was holding in her hand and tried to concentrate on her class teacher who was talking about maths something to do with multiplication. Alice vaguely recalled. She caught Jenny's eye and they grinned excitedly at each other. This was it today was the day. The two best friends had been waiting for this day for what had seemed an eternity. Both of them had been looking at the clock. Every five minutes both willing the hands to move forward faster so that they can run home.

## Worksheet-23

## Words that Often Confuse

1. lose : She often loses her purse.
loose : My jeans are very loose.
2. there : Wait for him there.
their : Their friends are wealthy.
3. whose : Whose is this book?
who's : Who's at the door?
4. then : Then, I started to worry about my exams.
than : Gandhiji was greater than Nehruji.
5. to : Go to school daily.
too : He is too weak to walk.
6. affect : Poverty can affect anyone.
effect : The terrible accident had a performed effect on me.
7. gait : He has a small limp in his gait.
gate : The watchman opened the gate.
8. pear : The pear tastes sweet.
peer : Rohan peered into my window.
9. won : We have won the watch.
one : I have one son.
10. hear : I can hear you.
here : You were not here.

## Worksheet-24

## Synonyms and Antonyms

A. 1. The animals at the zoo are wild.
2. They need to swim at the deep end of the pool.
3. She had a big smile when she received her birthday present.
4. They were being frown by wearing their helmets while riding their bikes.
5. The colours used to paint the room were bright.
6. All the girls wore reckless costumes for their recital.
B.

1. calm
2. rise
3. skinny
4. agree
5. clear
6. repair
7. decrease
8. save

## Synonym

quiet
arise
thin
admit
fine mend
lessen
store

Antonym
noisy
set
plump
disagree
unclear
damage
increase
waste

## Worksheet-25

## Comprehension

B. 1. (d), 2. (b), 3. (d)
4. Santa is the legendary patron saint of children. He is an imaginary body who is thought to bring presents for his children.
5. Wall-small, shoe-true, run-fun.
6. John is fun when he wrestles and runs.
7. The speaker is very fond of his brother and loves to play with him.

## Worksheet-26

## Paragraph Writing

A. Computer is today's technology. It's the future of our life but with it outdoor games are also important. But due to internet, computer, TV and mobile phones the outdoor games have been locked. Nowadays children are just looking in internet devices only. They increase mental growth but affect physical development and weakens the eyesight. Lots of social networking sites are influencing the children's mind badly. No games like cricket, football they do like. But the outdoor games are also very important because they are very good for our body fitness and if we play in the morning, we also can get vitamin D. Playing in teams helps in developing the quality of leadership. It develops confidence among the children and in turn the children understand the value of teamwork.
B. Everyone gets stuck sometime whether at work, at home, or between the bars of a gate. Once I was walking to school when I suddenly heard the whining of a dog. Chasing the sound I was hearing I found a little puppy with his head stuck between the bars of a gate. It was in need of a helping hand to get out of a tight spot. It was begging anyone and everyone to stop and helped it get out. But the people were afraid of getting bitten and nobody else stopped to help it. So the poor dog waited and waited and waited.
I don't know exactly how long the little dog was stuck for, but eventually, an animal rescue team heard about it and rushed to its side.
The puppy's hind legs could barely reach the ground and its head was stuck on the other side of the gate. The team was obviously experts at helping dogs in this situation and they skillfully approached the puppy and made it feel relaxed before trying to get it loose.
But it was the puppy's reaction after it was freed that proves how amazing animals are. Fortunately for us, the rescue team brought a camera and filmed the whole thing.

## Worksheet-27

## Notice Writing <br> CHANDIGARH PUBLIC SCHOOL, CHANDIGARH NOTICE

A.

30th November 20xx
All the students are hereby informed that our school is going to celebrate World Elder's Day on 17th December. Interested students are requested to bring their grandparents on that day at 5 pm in the school hall.
Nikhil
Head Boy.
B.

## VIVEKANAND PUBLIC SCHOOL, GREATER NOIDA NOTICE

7 October 20xx
The school has decided to organise a fete in the school playground on 10th and 11th October 20xx. All the students and teachers are requested to give in their names for booking of stalls. Your co-operation is needed to make this fete a grand success. For other details, please contact the members of the cabinet.
Vijaya
Head Girl.

A.

Date: $\qquad$
Mother
There was a call from Aunt Jane for you. Her son has developed some complications and
she has admitted him in the hospital. He is in ICU. She asked you to come to the hospital as soon as possible.
Anne.
B.

Date :

## MESSAGE

$\qquad$ Time : $\qquad$
Brother
There was a call from your friend, Amit for you. He told that your art class has been postponed to Monday.
Anisha.

## Worksheet-29

## Diary Writing

A. Dear diary,

I visited the zoo last week it was fun but I also felt pity for the animals!! They shouldn't be trapped in cages or a barricaded area. Just because we want to see them! It is not fair for them after all, they can't even express their pain! If they express we shouldn't cage them! Sad! No? Even though some animals were taken care of but still it wasn't satisfying. Not such a good day!
(name)
B. Monday

September 10, 20xx
10:30 p.m.
Dear diary:
Tonight I am going to share with you a brave deed I did. I felt very good after doing it. I saved the life of a very young boy. I was going to the market to buy ice-cream. On the way I saw a child in the middle of the road. A bus was coming at full speed. I shouted at the boy, "Hey, mind the bus!" To my shock, the boy did not hear my warning.
It was too late to give him another warning. I dashed to the middle of the road, and pulled him towards me. The boy had a narrow escape. He just looked at me wonderingly. I shouted at him, 'Are you mad? You could have run over by a car!' Again the boy did not respond! He just kept staring at me!
It then struck me, the boy could be suffering from hearing and speaking disabilities. I took him to the nearby police station and reported the matter to the inspector. As I was in the middle of this, a lady came running into the room and hugged the boy with tears streaming down her eyes.
The lady was the boy's mother. She explained the inspector how the boy had got lost in the crowd; she also confirmed the boy could not hear and speak. The inspector also explained the lady how I had saved the boy from getting hurt on the road.
The lady thanked me profusely. I went home feeling proud after doing the good deed, though my ice-cream packet had been terribly destroyed.

## Worksheet-30

## Letter Writing

Dear Kulbir,
Your Principal has sent to me your result-sheet for the last home-examinations. Whereas you have, generally, done well in many subjects. I find that you are very weak in the subject of General Information. Now this is a serious weakness and it is essential that you can make up this deficiency as soon as you can.
Have you not heard of the saving 'Knowledge is Power'? I am sure you have. In the modern age of science and technology, knowledge enjoys a superior position to physical strength. The man who possesses knowledge, is able to understand the various problems of today and to solve them. Knowledge has given us power over nature and has led to the great progress that science has made.
To be able to make progress in life, it is, therefore, essential for you to know a good deal about happenings in India and abroad. The daily newspaper dribs us fresh news of events in politics, science, commerce, art, literature and thousand other fields of activity. National and international events are seen in a new perspective, and we become aware of a new relationship between races, nations and communities.
Moreover there are often very good articles in newspapers on important subjects. The magazine sections of Sunday Newspaper are quite instructive, informative and entertaining. A good newspaper is the world in miniature as it reports and very often interprets world events. It is, therefore, a powerful instrument of personal education and improvement.
I am sure you would now read some good newspapers like the Times of India or the Indian Express regularly and critically. If you do that you would fare much better in general information in your next examination.
Your affectionately

## Worksheet-31

## Story Writing

Once a boy fell into a bad company. He acquired many bad habits. He started disobeying his parents. He lost his interest in studies. It pained his father. His father tried his best to set him right but in vain. One day, the father thought a good plan to mend his son. He went to the fruit market and brought some fresh apples and a rotten one. He came home and said to his son, "Put these apples in the almirah." The boy did so.
After few days, father asked his son to bring the basket of apples. The son was surprised to find that all the apples had gone rotten. The father said, "One rotten apple has spoiled all the good ones. Bad friends are like bad apples. They will spoil you." The son listened his advice and tried hard to mend his ways. He totally transformed himself by giving up the bad company.
Moral : Better alone than in a bad company or Avoid bad company.

## Hindi-6

## कार्यपह्रक-1

## भाषा, व्याकरण तथा लिपि

(क) 1. (ii); 2. (iv); 3. (iii); 4. (i); 5. (iii); 6. (iv)
( ख) 1. भाषा मुख से उच्चरित होने वाले शब्दों और वाक्यों आदि का वह समूह है जिनके द्वारा अपने मन की बातों को व्यक्त किया जाता है तथा दूसरों की बातों को स्वयं समझा जाता है।
2. लिखित भाषा में लिखकर मन की बातों को अभिव्यक्त किया जाता है, जबकि मौखिक भाषा में विचारों को बोलकर व्यक्त किया जाता है।
3. ध्वनियों को लिखने के लिए जिन चिह्नों का प्रयोग किया जाता है, वही लिपि कहलाती है।
4. किसी भाषा के वाचिक तथा लिखित शास्त्रसमूह को साहित्य कहते हैं। साहित्य के दो रूप- गद्य और पद्य।

## कार्यपत्रक-2

## वर्ण-विचार

( क ) 1. च्यवनप्राश, पदच्युत; 2. बुद्ध, शुद्ध; 3. विद्या, गद्य; 4. वक्त, विरक्त; 5. मक्का, चक्का; 6. क्या, क्यारी; 7. सानिध्य, ध्यान
(ख) 1. विज्ञान : व् + इ + ज् + ज् + आ + न् + अ
2. प्रार्थना : प् + र् + आ + ए् + थ् + अ + न् + आ
3. पैसा : प् + ऐ + स् + आ
4. क्षमा : क् + ष् + अ + म् + आ
5. राष्ट्र : र् + आ + ष् + ट् + र् + अ
6. शृंगार : स् + ऋ + अं + ग् + आ + र् + अ
( ग ) अक्षर; इतिहास; धरती; प्रवास; मनुष्य; सूर्य
(घ) अनुस्वार ( ) चंद्रबिंदु (")
चिंतन
लंबी
इंद्रियाँ
संक्रमण

मुँह
गाँव
पाँव
ऊँट

विसर्ग (:)
दु:ख
प्रातः
पुनः
शनैः शनैः

## कार्यपत्रक-3

## संधि

( क) 1. संधि के तीन भेद होते हैं- स्वर संधि, व्यंजन संधि और विसर्ग संधि।
स्वर संधि $=$ विद्या + आलय (विद्यालय); व्यंजन संधि = सत् + जन (सज्जन);
विसर्ग संधि = अधः + गति (अधोगति)
2. जब व्यंजन को व्यंजन या स्वर के साथ मिलाने पर जो परिवर्तन उत्पन्न होता है, उसे व्यंजन संधि कहते हैं; जैसे- अभि + सेक $=$ अभिशेक
3. विसर्ग के बाद जब स्वर या व्यंजन आ जाए तब जो परिवर्तन होता है, उसे विसर्ग संधि कहते हैं। जैसे- निः + पाप $=$ निष्पाप
( ख ) 1. सदा + एव; 2. परम + ईश्वर; 3. महा + ओज; 4. बाल + इंद्र; 5. वार्ता + आलाप; 6. मुनि + इंद्र; 7. गण + ईश; 8. महा + आत्मा; 9. यदि + अपि; 10. जगत् + ईश; 11. देव + ॠषि; 12. विद्या + आलय
( ग ) 1. निस्सार; 2. निरुपाय; 3. निस्तेज; 4. तपोभूमि; 5. सरोज; 6. मनोरोग; 7. परिमाण; 8. नीरोग; 9. दुर्बल; 10. परिणाम

## कार्यपह्रकण-4

## शब्द विचार

(क) 1. (X); 2. (ل); 3. ( $)$; 4. (X); 5. (ل)
(ख) तत्सम : सूर्य, अश्रु, कार्य
तद्भव : चिड़िया, चूड़ी, चम्मचा, कुँआ
देशज : थैला, मक्खन, घर, घी
विदेशज : सूटकेस, होस्टल, स्कूल, रेल
( ग ) 1. दो; 2. रूढ़; 3. योगरूढ़; 4. विकारी
(घ) 1. योगरूढ़; 2. योगरूढ़; 3. रूढ़; 4. योगरूढ़; 5. यौगिक; 6. यौगिक; 7. रूढ़; 8. योगरूढ़; 9. यौगिक; 10. रूढ़


## वर्तनी की शुद्धता

( क) 1. आपने बड़ा अनुग्रह किया।
2. लड़के और लड़कियाँ चिल्ला रहे हैं।
3. मेरी ससुराल जयपुर में है।
4. आत्मा अमर होती है।
5. मुझे घर जाना है।
6. सीताजी वन को गईं।
7. गुणवती महिला
8. सबसे मिलकर चलो।
9. मेरी शपथ
11. उसने एक हथिनी जाती हुई देखी।
10. चंद्रमा का मंडल
12. दूध में क्या पड़ा है?
( ख ) बृटिश - ब्रिटिश; व्यवहारिक - व्यावहारिक; त्रगुण - त्रिगुण; रात्री - रात्रि; रिषी - ऋषि; प्राप्ती - प्राप्ति; बृह्मा ब्रह्मा; सामर्थ - सामर्थ्य; बन्ध - बँध; एकत्रीत - एकत्रित; पैत्रिक - पैतृक; ईर्षा - ईष्प्या; जाग्रती - जागृति; पुन्य - पुण्य; स्त्रीयाँ - स्त्रियाँ; कृतघ्री - कृतघ्न; स्रष्टि - सृष्टि; पराणी - प्राणी; अती - अति; निरिक्षण - निरीक्षण; तैय्यार - तैयार; पती - पति; आवश्यकीय - आवश्यक; आक्रष्ट - आकृष्ट; उपरोकत - उपरोक्त; सामिल शामिल; श्रोत - स्रोत; मष्तिस्क - मस्तिष्क; जाईये - जाइए; निसार - निःसार; लाईये - लाइए; सन्मान सम्मान; लीये - लिए; हिन्दु - हिंदू; अनुगृह - अनुग्रह; गूरू - गुरु; अकाश - आकाश; दान्त - दाँत; असीस आशीष; चहिए - चाहिए; देहिक - दैहिक; प्रथक - पृथक; कवियत्रि - कवयित्री; द्रष्टि - दृष्टि; घनिष्ट - घनिष्ठ

## कार्यप्रक-6

## उपसर्ग

( क ) 1. (i) अतिशय, अतिसार, अत्याचार; (ii) आजीवन, आकार, आजन्म; (iii) परिमाप, परिचय, परिमाण; (iv) निडर, निपूती, निबंध ; (v) उपवाक्य, उपचार, उपभेद
2. (i) अचेत, अमर, अशांत; (ii) अनमोल, अनजान, अनाचार; (iii) भरसक, भरमार, भरपेट; (iv) दुबला, दुगुना, दुकान; (v) उनासी, उनतीस, उनचास
3. (i) अलबत्ता, अलबेला, अलमस्त; (ii) बदतमीज, बदबू, बदजुबान; (iii) कमसिन; कमबख्त, कमजोर; (iv) बनाम, बदौलत, बरकत; (v) हमसफर, हमराज, हमजोली
4. (i) हाफपेंट, हाफबॉडी, हाफप्लेट; (ii) सबपोस्टमास्टर, सबइंस्पेक्टर सब-वे; (iii) चीफ कॉर्डिनेटर, चीफ मिनिस्टर; चीफ जस्टिस; (iv) जनरल मैनेजर, जनरल ग्रामर, जनरल वार्ड; (v) हैड मुंशी, हैड क्लर्क, हैड कांस्टेबिल

## कार्यपत्रक-7

## प्रत्यय

( क) 1. मनन, चलन; 2. लिखा, भूखा; 3. बहाव, कटाव; 4. मरियल, अड़ियल; 5. बोली, हँसी; 6. इच्छुक, भिक्षुक; 7. जाकर, नौकर; 8. मनौती, फिरौती; 9. डरावना, सुहावना; 10. सुनवाई, कटवाई
( ख ) ग्रामीण - ईन; कुलीन - ईन; गरीबी - ई; बंगाली - ई; पंडिताई - आई; ठकुराइन - आइन; चमकीला - ईला; धार्मिक - इक; रूपवती - वती; जटिलता - ता; दुकानदार - दार; मिलावट - आवट; बहुतेरा - ऐरा; साँवलापन - पन; धनवान - वान; गुणवान - वान; शीतल - ल; श्यामा - आ; कमाऊ - आऊ; शरारती - ई

(क)


## कार्यपत्रक-9

## लिंग

( क) 1. मैं धोबिन हूँ। मैं कपड़े धोती हूँ।
3. मैं नौकरानी हूँ। मैं घर के काम करती हूँ।
5. मैं गाय हूँ। मैं दूध देती हूँ।
7. मैं शेरनी हूँ। मैं जंगल की रानी हूँ।
( ख) 1. संन्यासिन; 2. श्रीमान; 3. विद्वान; 4. धनवती;
( ग ) 1. पुल्लिंग; 2. स्त्रीलिंग; 3. पुल्लिंग; 4. पुल्लिंग;
2. मैं मालिन हूँ। मैं बगीचे की देखभाल करती हूँ।
4. मैं शिक्षिका हूँ। मैं बच्चों को पढ़ाती हूँ।
6. मैं हथिनी हूँ। मैं गन्ने खाती हूँ।
8. मैं अध्यापिका हूँ। मैं छात्रों को पढ़ाती हूँ।
5. कवयित्री; 6. देवर
5. स्त्रीलिंग

## कार्यपह्रक-10

## वचन

(क) 1. हमें संज्ञा की संख्या का पता चलता है। 2 . संज्ञा के एक होने का बोध होता है, उसे एकवचन कहते हैं।
3. संज्ञा का एक से अधिक होने का बोध होता है, उसे बहुवचन कहते हैं।
(ख ) 1. घड़ियाँ; 2. बच्चे; 3. गधे; 4. साड़ियाँ; 5. मुरगे; 6. रातें; 7. झाड़ियाँ; 8. रोटियाँ
( ग ) 1. पत्ता; 2. पतंग; 3. गुड़िया; 4. लता; 5. अंडा; 6. कुत्ता; 7. लड़का; 8. सड़क
( घ ) 1. संतरे; 2. साड़ी; 3. झाड़ियाँ; 4. खिलौने; 5. चूहा; 6. मुरगा; 7. कपड़े; 8. पौधे

## कार्यपह्रक-11

## कारक

2. 3. के, की; 2. ने, से; 3. की, की; 4. को, के, से; 5. से, को, में; 6. ने, का; 7. से, में; 8. पर, का; 9. ने, से; 10. की, से; 11. को, से; 12. में, की; 13. का, से, में; 14. को, ने; 15. को, से; 16. ने, में; 17. की, से, में; 18. हे; 19. अरे!, से; 20. वाह!

## कार्यप्रक-12

## सर्वनाम

( क) अरे, योतो बिल्लौर के ही हैं, भला-सा नाम है। क्यों महाशय, मुझे पहचानते हो? चोखेलाल जी, खूब पहचानता हूँ। जब (ैं) तहसील में लगान भरने जाता हूँ तो आप) डाँटकर अपना हक वसूल कर लेते हैं। न दूँ तो शाम तक खड़े रहना पड़े। अब मेरी फीस के दस रुपए निकालिए।
( ख ) 1. (iii); 2. (iv); 3. (i); 4. (ii)
( ग ) 1. ये; 2. कुछ; 3. कोई; 4. मैंने; 5. वैसा
( घ ) 1. सत्य; 2. असत्य; 3. असत्य; 4. सत्य


## विशेषण

( क) 1. संख्यावाचक; 2. संख्यावाचक; 3. परिमाणवाचक; 4. संख्यावाचक; 5. परिमाणवाचक; 6. संख्यावाचक;
7. परिमाणवाचक; 8. संख्यावाचक
(ख) 1. भारतीय; 2. रूसी; 3. चीनी; 4. रसीला; 5. दैनिक; 6. सच्चा; 7. ज्ञानी; 8. प्यासा
( ग ) 1. लड़का, ईमानदार; 2. लड़की, सुंदर; 3. किसान, बूढ़ा; 4. गाय, सफेद
(घ) 1. अच्छा, बुरा, सच्चा, झूठा, दुष्ट, उदार आदि।
2. सफेद, हरा, नीला, पीला, लाल, गुलाबी, मटमैला आदि।
3. ऊँचा, नीचा, गहरा, बाहर, भीतर, शहरी, चीनी, हिंदुस्तान आदि।
4. कोमल, मुलायम, कठोर, सूखी, गीली आदि।
5. पूजनीय, मान्य, स्मरणीय, सत्यनिष्ठ आदि।
6. खट्टा, मीठा, तीखा, नमकीन, स्वादिष्ट आदि।

## 7. सुगंधित, बदबूदार आदि।

8. प्राचीन, नवीन, आधुनिक, सायंकाल, सुबह आदि।
$\begin{array}{ll}\text { 9. तिकोण, चौकोर, लंबा, पतला, मोटा, गोलाकार आदि। } & \text { 10. गरीब, भूखा, प्यासा, बीमार, अमीर आदि। }\end{array}$

## कार्यपत्रक-14

## क्रिया

( क) 1. हँस — अकर्मक क्रिया; 2. लिखती — सकर्मक क्रिया; 3. है - अकर्मक क्रिया; 4. चलाई — सकर्मक क्रिया; 5. बुला — सकर्मक क्रिया; 6. तैर — अकर्मक क्रिया; 7. जाता है — अकर्मक क्रिया; 8. पढ़ाते — सकर्मक क्रिया; 9. है — अकर्मक क्रिया; 10. खरीदा — सकर्मक क्रिया; 11. बैठे — अकर्मक क्रिया; 12. चला — सकर्मक क्रिया; 13. रोती है — अकर्मक क्रिया; 14. बोलता है — सकर्मक क्रिया
( ख) सुबह स्नान करने के बाद बाबा भारती के पाँव रोज़ की तरह अस्तबल की ओर बढ़ गए। फाटक पर पहुँचकर उन्हें अपनी भूल का पता चला। वे रुक गए। सुलतान ने बाबा के पैरों की आवाज़ पहचान ली और वह हिनहिनाया। वे खुशी से दौड़ते हुए अंदर घुसे और घोड़े के गले से लिपट गए। फिर वे संतोष से बोले, अब कोई गरीबों से मुँह न मोड़ेगा।
(ग) बुलाकर, बैठो। करेंगे, पढ़ेंगे।


## काल

(क) 1. मैं पौधा लगा रहा हूँ।
3. बालक पढ़ रहा था।
2. माली बाजार गया था।
5. मैं कल एक कहानी सुनाऊँगा।
4. मैं कह चुका हूँ कि आप चले जाइए।
6. पिताजी के मिलने पर मैं उन्हें सब सच-सच बता दूँगा।
( ख ) पृथ्वी पर मानव के बिना अन्य न जाने कितने सारे जीव-जंतु रहते थे। हमें उनके बारे में भी सोचना था। इसीलिए हमें अपने मन से स्वार्थ को निकाल धरती पर रहने वाली सभी प्रजातियों के बारे में भी सोचना था। प्रदूषण पैदा करने वाली और ग्लोबल वॉर्मिंग को बढ़ाने वाली गतिविधियों को हमें रोकना था और प्लास्टिक, लकड़ी और ईंधन आदि के इस्तेमाल की मात्रा को कम करना था क्योंकि धरती को साफ़-सुथरा और प्रदूषण रहित बनाने की जिम्मेदारी मानव की थी।


## अव्यय ( अविकारी )

(क) 1. और - समुच्चयबोधक, से-संबंधबोधक; 2. शाबाश! - विस्मयादिबोधक, तो - निपात; 3. के आगे संबंधबोधक; 4. क्योंकि - समुच्चयबोधक ; 5. वाह! - विस्मयादिबोधक ; 6. अरे वाह! - विस्मयादिबोधक; 7. या - समुच्चयबोधक ; 8. के भीतर - संबंधबोधक ; 9. एवं - समुच्चयबोधक।
( ख ) 1. पर, 2. और, 3. ठीक है, 4. तो, 5. में, 6. छि!!, 7. अन्यथा, 8. और


## कार्यपत्रक-17

## वाक्य-विचार

( क) 1. मैंने बहुत खा लिया।
3. हुसैन मधुर गाता है।
5. मुकेश परसों दिल्ली जाएगा।
2. रात को कम खाना चाहिए।
4. आज मामाजी आएँगे।
(ख) उद्देश्य

1. हनुमान ने
2. राम ने
3. लक्ष्मण का स्वभाव
4. अयोध्या

विधेय
राम की सुग्रीव से मैन्री कराई।
रावण को मार गिराया।
तेज था।
रघुकुल की राजधानी थी।
( ग ) 1. सरल वाक्य; 2. संयुक्त वाक्य; 3. मिश्रित वाक्य; 4. मिश्रित वाक्य
(घ) 1. निषेधात्मक वाक्य; 2. प्रश्नवाचक वाक्य; 3. आज्ञावाचक वाक्य; 4. संकेतवाचक वाक्य

## कार्यपह्रक-18

समानदर्शी/भिन्न अर्थ वाले शब्द
( क) 1. शरीर, चेहरा; 2. बराबर, आदर; 3. कंधा, भाग; 4. सूर्य, नाव; 5. बाण, तालाब; 6. दिवस, गरीब।
(ख) 1. अनाज - किसान अन्न उगाता है।
दूसरा - मुझे अन्य व्यक्ति से बात नहीं करनी है।
2. पीछे - बच्चा माँ का अनुकरण कर रहा है।

किसी पदार्थ का सबसे छोटा भाग - हमारे देश ने कई अणु बम बना लिए हैं।
3. तरफ - शेर जंगल की ओर चला गया।

तथा - राम और श्याम पढ़ रहे हैं।
4. वस्त्र - धोबी ने सारे वसन धो दिए।

बुराई - आदतें कुछ दिन बाद व्यसन बन जाती हैं।
5. सारे - मेरे पास कुल सौ रुपये हैं।

किनारा - यमुना के कूल पर एक कदंब का पेड़ था।
6. लाख - अमन के पास एक लक्ष रुपये हैं।

उद्देश्य - डॉक्टर बनना मेरा प्रमुख लक्ष्य्य है।
7. कार्य - हमें अच्छे कर्म करने चाहिए।

बारंबारता - सभी पुस्तकों को उनके क्रम से रखना चाहिए।
8. केवल - मुझे मात्र दस रुपये चाहिए।

माता - मातृ देवो भव।

## कार्यपच्रकण-19

विलोम शब्द
5. अशांति
(क) 1. उधर; 2. हानि;
(ख) शब्द
नकद
लिखित
बंधन
जीवन
शांति

| विलोम | शब्द |
| :--- | :--- |
| उधार | परलोक |
| मौखिक | पाप |
| मुक्ति | जय |
| मृत्यु | सगुण |
| अशांति | उचित |

( ग ) 1. (ii); 2. (i); 3. (i); 4. (iii); 5. (i)
( ग ) 1. (ii); 2. (i); 3. (i); 4. (iii); 5. (i)

| विलोम शब्द विलोम <br> इहलोक स्वतंत्र परतंत्र <br> पुण्य स्वर्ग नरक <br> पराजय वादी प्रतिवादी <br> निर्गुण <br> अनुचित सौभाग्य दुर्भाग्य |  |  |
| :--- | :--- | :--- |
|  |  |  |

## कार्यपह्रक-20

## पर्यायवाची शब्द

(क) पेड़ : विटप, वृक्ष, तरु
पर्वत : पहाड़, अचल, भूधर
किनारा : तीर, कगार, कूल
( ख) 1. धरती, पृथ्वी; 2. सहचर, संगी;
3. रैन, विभावरी; 4. कंचन, हेम; 5. चारु, रमणीक
( ग ) पेड़ : वृक्ष, पादप; गंगा : देवनदी, मंदाकिनी; घमंड : गरूर, गुमान; पहाड़ : पर्वत, अचल; पक्षी : खग, विहग; मित्र : सखा, सहचर; कोयल : कोकिला, पिक; बादल : मेघ, घन; पृथ्वी : धरा, वसुंधरा; समुद्र : सागर, रत्नाकर; हवा : वायु, पवन; हिमालय : हिमाद्री, नगेश; जल : नीर, पानी; रात : रात्रि, विभावरी
(घ) गंगा - भगीरथी, सूर्ष्बुत्री, जहुलुता, दश्र< न, शश्श।
ब्रह्म - चतुरानन, वंभर, चतुर्भुख, दश्शन, विधि।

देवता - 然, अमर, अस्लुख, पंक्रज, अजर।


## कार्यपह्रक-21

## अनेक शब्दों के लिए एक शब्द

(क) 1. जिसका तल बराबर हो; 2. अत्यधिक बोलने वाला; 3. दूर-दूर के देशों की लंबी यात्रा करना; 4. दुष्परिणाम भोगने वाला; 5. कम बोलने वाला।
( ख ) 1. पठनीय; 2. अंतर्राष्ट्रीय; 3. सहोदर; 4. दिखावा; 5. सम्माननीय; 6. आलोचक; 7. कुलीन; 8. अपवाद; 9. कटुभाषी; 10. मनोज्ञान
( ग ) 1. (v); 2. (i); 3. (iv); 4. (ii); 5. (iii)


## विराम चिह्न

(क) 1. उद्धरण (" ") जहाँ किसी के कथन को ज्यों-का-त्यों लिखना हो।
2. योजक (-) दो शब्दों को जोड़ने के लिए किया जाता है।
3. अपूर्ण (;) पूर्ण विराम से कुछ कम तथा अल्पविराम से अधिक।
4. निर्देशक (-) इसका प्रयोग कथन, उद्धरण तथा विवरण के लिए किया जाता है।
5. विस्मय (!) आकस्मिक भाव को दर्शाने के लिए।
6. (।) विराम का अर्थ है- ठहराव, विश्राम, रुकना।
(ख) 1. अरे वाह! इतने ताजे फल लाए हो।
2. श्याम, रवि तथा समीर स्कूल जा रहे हैं।
3. गाँधी जी ने कहा, "सदा सत्य बोलो।"
4. अ, आ, इ, ई $\qquad$ आदि सभी हिंदी-स्वर हैं।
5. उफ! कितनी गर्मी है।
6. आप कहाँ जा रहे हैं?
7. राम, तुम आज कहाँ जाओगे?
8. हम सभी को सुख-दुख भोगना पड़ता है।
(ग) कार्निवाल के मैदान में बिजली जगमगा रही थी। हँसी और विनोद का कलनाद गूँज रहा था। मैं खड़ा था उस छोटे फुहारे के पास जहाँ एक लड़का चुपचाप शरबत पीने वालों को देख रहा था। उसके गले में फटे कुरते के ऊपर से एक मोटी-सी सूत की रस्सी पड़ी थी और जेब में कुछ ताश के पत्ते थे। उसके मुँह पर गंभीर विषाद के साथ धैर्य की

रेखा थी। मैं उसकी ओर न जाने क्यों आकर्षित हुआ। उसके अभाव में भी संपूर्णता थी। मैंने पूछा, "जी, तुमने इसमें क्या देखा?"

## मुहावे



## वाक्य में प्रयोग

1. एकमात्र सहारा
2. अत्यधिक प्यारा
3. भरसक प्रयास करना
4. मित्र के रूप में शत्रु
5. क्रोध को प्रकट न होने देना
6. कही-सुनी बात पर ध्यान देने वाला
(क) अर्थ
. कम ज्ञान या गुण रखने वाला व्यक्ति बढ़ा-चढ़ाकर बातें करता है।
7. पक्षपात रहित न्याय करना।
8. दिखावा करना।
9. जैसा राजा वैसी प्रजा
10. हानि भी न हो और काम भी बन जाए
11. काम करना नहीं आना और बहाने बनाना
( ग ) 1. नौ दो ग्यारह होना; 2. आँखें दिखाना; 3. अंधों में काना राजा; 4. एक और एक ग्यारह होना; 5. अपने मुँह मियाँ मिट्ठू बनना; 6. अक्ल पर पत्थर पड़ना

## कार्यपत्रक-24

## संवाद लेखन

( क) अरुण - हाँ रवि, तुम ठीक कह रहे हो। वे काफी अच्छा पढ़ाते हैं।
रवि - मुझे विज्ञान में बिल्कुल भी चाव न था। पर अब मुझे यह विषय पढ़ने में रुचि आती है।
अरुण - बढ़िया बात है! काश हमारे गणित के अध्यापक भी यही होते!
रवि - तुम ठीक कह रहे हो। क्या हम प्रधानाचार्या जी से बात करें?
अरुण - चलो, पहले कक्षा के अन्य बच्चों के विचार भी जान लेते हैं।
(ख) दुकानदार - बोलो बेटी, तुम्हें क्या चाहिए?
ग्राहक - मुझे दो पेंसिलें, एक रबड़ और एक कटर चाहिए।
दुकानदार - ये लो बेटी तुम्हारा सामान।
ग्राहक - इन सबके कितने पैसे हुए?
दुकानदार - कुल मिलाकर अट्ठारह रुपये।
ग्राहक - यह लीजिए अट्ठारह रुपये।
( ग) भाई - पिंकी, तुम्हें म्यूजियम कैसा लगा?
बहन - बहुत अच्छा भइया। वहाँ हमें कितनी जानकारी मिली!
भाई - हाँ बहन। हमें हमारे अतीत के विषय में काफी जानकारी हासिल हुई है।
बहन - बिल्कुल। वहाँ रखे सिंहासन, पोशाकों और शस्त्रों से पता चलता है कि हमारे देश के राजामहाराजा, कितने वीर तथा सुडौल हुआ करते थे!
भाई - हाँ। उनके शाही अंदाज, उनका खाना-पीना कितना अच्छा था!
बहन - हाँ भैया। और प्राचीन समय में लिखे गए हस्तलिखित साहित्य आदि कितने अच्छे लग रहे थे!

## कायपद्यक-25

## डायरी लेखन

( क) भ्रमण का कार्यक्रम 15 दिन का था। पहाड़ी स्थल की यात्रा के लिए हिमाचल प्रदेश को चुना गया। सभी वहाँ जाने के लिए आतुर और उत्सुक थे। हिमाचल प्रदेश पर्यटकों के लिए भी आकर्षण का केंद्र है। हिमाचल प्रदेश में 'लाल टीन की छत' वाले सुंदर घर चीड़ और देवदार के घने हरे-भरे जंगल, कल-कल बहती नदियाँ, रंग-बिरंगे फूलों से भरी क्यारियाँ, सीढ़ीनुमा खेत, घुमावदार रास्ते, बर्फ से ढकी चोटियाँ ऐसी लगती हैं कि मानों हमें अपनी ओर बुला रही हों।
शिमला में महाराजा पटियाला का महल है जो होटल में बदल दिया गया है। वहीं पर विश्व का सबसे ऊँचा क्रिकेट मैदान है। शिमला से कुछ दूरी पर भारत का सबसे प्राचीन गोल्फ का छिद्रवाला मैदान है। हिमाचल की यात्रा करते हुए हम कुल्लू-मनाली भी गए।
लोग इसे धरती का स्वर्ग कहते हैं । कुल्लू और मनाली को व्यास नदी अपनी कल-कल ध्वनि का ऐसा सौंदर्य देती है जिसे सुनकर ऐसा लगता है कि मानों हम स्वर्ग में पहुँच गए हैं। कुछ दूरी पर सुंदर नगर हैं, जहाँ पहाड़ को काटकर झील बनाई है। जिसका सौंदर्य मंत्र-मुग्ध करता है ।
नगर में रूसी कलाकार रोरिक की आर्ट गैलरी है। मनाली में भीम की पत्नी घटोत्कच की माँ हिडिम्बा का मंदिर है, जो घने देवदार के पेड़ों के बीच खड़ा अपनी सुंदरता की कहानी स्वयं कहता है। वहाँ जाकर हम बर्फ के गोलों से भी खेले।
किन्नर प्रदेश की कल्पना का मूर्त रूप देखने के लिए किन्नौर के नगर कल्पा रिकांगयिओ गए। वहाँ की सभ्यता और संस्कृति, हरे-भरे खेत, बर्फीले पहाड़, सेब के बगीचे, सुंदर स्त्रियाँ और कन्याओं की मंत्र-मुग्ध मुस्कान और प्राचीनकाल में लेखन के काम आने वाला भोजपत्र भी यहीं देखने को मिला।
हिमाचल प्रदेश में लॉर्ड डलहौजी के नाम पर बना एक पर्यटन स्थल अपने नैसर्गिक सौंदर्य के लिए विश्वविख्यात है। वहाँ पर बहती हुई व्यास, रावी, चिनाब की नदियाँ, गगनचुंबी देवदार और चीड़ के वृक्ष और हरे-भरे जंगल पर्यटकों को अपनी ओर आकृष्ट करते हैं। हमने वहाँ खजियार झील का आनंद लिया। डाक बंगले में रुक कर चीते, तेंदुए, कस्तूरी मृग आदि को देखकर रोमांचित हुए।

## कार्यपह्रक-26

## चित्र-वर्णन

यह दृश्य एक रेल दुर्घटना का है। यहाँ इस रेल का इंजन तथा चार डिब्बे पटरी से उतर चुके हैं। दृश्य काफी दर्दनाक है। चारों ओर अफरा-तफरी का माहौल है। लोगों की चीख-पुकार का अंदाजा लगाया जा सकता है। अधिकांश लोग असमंजस में हैं! दहशत भी होना स्वाभाविक है। यहाँ का दृश्य तो वास्तव में रोंगटे खड़े कर देने वाला है। लोग लहू-लुहान हैं। अपनों को खोजने के लिए आवा-जाही का दृश्य है। बहुत-से यात्री स्वयं सहायता कार्यों में जुटे हैं। संयोग तो यह रहा कि सेना की एक टुकड़ी भी इसमें यात्रा कर रही थी। वे भी पूर्ण रूप से बचाव कार्य में लगे हुए हैं। पलभर में यहाँ लाशों के ढेर लग गए हैं। सेना की वायरलैस मदद से डॉक्टरों की टुकड़ी भी यहाँ दिखाई पड़ रही है। वे बिना किसी देरी के लोगों को प्राथमिक चिकित्सा दे रहे हैं। बचाव कार्य जारी है। ऐसे माहौल से भगवान सबको बचाए, ऐसे दृश्य को देखकर तो मैं यही कामना करता हूँ।

## कार्यपन्रक-27

## अनुच्छेद लेखन

(क) आजकल के इस युग में विद्यार्थी और फैशन एक साथ चलते हैं। विद्यार्थी जो अपने स्कूल या कॉलेज में पढ़ाई करते हैं वे अपने इस जीवन में तरह-तरह के फैशन अपनाते हैं। यहाँ पर फैशन से तात्पर्य है किसी व्यक्ति द्वारा अपने खान-पान, रहन-सहन, वेशभूषा आदि में नए तरह से बदलाव लाना। आज के इस युग में सबसे ज्यादा फैशन

का प्रभाव विद्यार्थियों पर पड़ा है। विद्यार्थी/अभिनेता और अभिनेत्रियों के द्वारा अपनाए गए नए फैशन को अपनाते हैं। इन फैशन को अपनाने वाले लड़के और लड़कियाँ दोनों होते हैं जिस वजह से इस युवा उम्र में उनका काफी नुकसान भी होता है। वह बहुत-सा पैसा अपने इन फैशनों पर खर्च करते हैं।
पहले के जमाने में फैशन सिर्फ गृहस्थ ही अपनाया करते थे लेकिन आज के इस युग में सभी तरह के वर्ग के लोग फैशन करने लगे हैं जिनमें फैशन अपनाने वाले लोगों की संख्या में से सबसे ज्यादा विद्यार्थियों की है। इन विद्यार्थियों में युवक एवं युवतियाँ हैं। आजकल के फैशन के इस दौर में लड़के, लड़कियों को पहचानना भी मुश्किल है। क्योंकि बहुत-सी लड़कियाँ लड़कों की तरह कपड़े पहनती हैं। लड़कों की तरह ही अपना हेयर स्टाइल बनाती हैं। वहीं दूसरी ओर ऐसे लड़के भी हैं जो लड़कियों की तरह हेयर स्टाइल बनाते हैं जिसकी वजह से उन्हें पहचानना भी मुश्किल होता है। विद्यार्थी जीवन वह जीवन होता है जिसमें एक शिक्षक अपने विद्यार्थियों को शिक्षा का ज्ञान कराकर जीवन में आगे बढ़ने के लिए प्रेरित करता है, लेकिन फैशन के दौर में विद्यार्थी शिक्षा से ज्यादा अपने फैशन पर ध्यान देते हैं। विद्यार्थियों का यह फैशन सिर्फ शहरों तक ही सीमित नहीं रहा है, गाँव के विद्यार्थी भी आज फैशन के लिए जाने जाते हैं।
कुछ विद्यार्थी तो ऐसे होते हैं जो अपने दोस्त से पढ़ाई के मामले में आगे निकलें या ना निकलें फैशन के मामले में वह अपने दोस्त से आगे निकलना चाहते हैं। इसके लिए वे बहुत सारा खर्च करते हैं। उनका अमूल्य समय निरंतर बर्बाद होता जाता है और वह अपने अमूल्य समय को खोकर जीवन में कुछ भी खास नहीं कर पाते। विद्यार्थियों का जीवन और उनका समय बहुत ही अमूल्य है। विद्यार्थियों पर ही हमारे देश का भविष्य निर्भर है लेकिन अगर विद्यार्थी अपना अमूल्य समय बर्बाद करता रहे तो हमारे देश के भविष्य का क्या होगा। इसलिए हमें विद्यार्थियों को सबसे ज्यादा विद्या अर्जित करने की ओर ध्यान दिलाना होगा और इस फैशन के कीड़े को विद्यार्थियों से दूर करना होगा।
( ख) कंप्यूटर आज लोगों के जीवन में बेहद सहज और प्राथमिक बन चुका है। यह कम समय में एक से अधिक कार्य संपन्न कर सकता है। यह कम समय खर्च करते हुए अकेले ही कई इंसानों के बराबर काम करने की योग्यता रखता है। यह उच्च सामर्थ्य की सार्थकता है। सबसे पहला कंप्यूटर मैकेनिकल था जो चार्ल्स बैबेज द्वारा बनाया गया था। कोई भी कंप्यूटर ठीक ढंग से काम करने के लिए अपने हार्डवेयर और इंस्टॉल्ड ऐप्लिकेशन सॉफ्टवेयर की सहायता लेता है। यूपीएस, सीपीयू, प्रिंटर, माउस, की-बोर्ड आदि कंप्यूटर की सहयोगी सामग्री है।
किसी डिवाइस के माध्यम से कंप्यूटर में डाले गए किसी भी डेटा को इनपुट डेटा और उसमें सहायक डिवाइस को इनपुट डिवाइस कहते हैं और जो डेटा हमें बाहर से प्रिंटर आदि के माध्यम से प्राप्त होता है उसे आउटपुट डेटा और इसमें उपयोग हुए डिवाइस को आउटपुट डिवाइस कहते हैं। कंप्यूटर में दिया गया इनपुट डेटा सूचना में परिवर्तित हो जाता है जिसे किसी भी समय संग्रहीत या बदलाव किया जा सकता है। कंप्यूटर, डेटा को संग्रहीत करने का सुरक्षित हथियार है जिसका विभिन्न क्षेत्रों में उपयोग होता है। इसके माध्यम से हम लोग बिल जमा कर सकते हैं, खरीदारी कर सकते हैं, वीडियो चैट, ईमेल, मैसेजिंग आदि कार्य दुनिया के किसी भी कोने से कर सकते हैं।

## कार्यपह्रण戸-28

## अपठित गद्यांश

* 1. गोपाल कृष्ण गोखले बचपन से सत्यवादी थे।

2. शिक्षक ने गोपाल को शाबाशी सत्य बोलने के लिए दी।
3. (i) गोपाल ने शिक्षक से कहा, "मै इस प्रशंसा का अधिकारी नहीं हूँ।"
(ii) शिक्षक ने गोपाल से कहा, "इसमें रोने की बात नहीं है।"
4. शिक्षक ने गोपाल को पुरस्कार में एक पुस्तक दी।
5. (i) शिक्षक; (ii) सत्यवादी।
6. गलत-सही, प्रश्न-उत्तर।
7. 8. बुरे समय में आपका साथ न छोड़े।
1. आपके अवगुणों से आपको अवगत कराए।
2. अच्छे कार्यों के लिए भेदों को स्वयं प्रेरित करे।
3. जो आपके गुप्त भेदों को स्वयं तक रखे।
4. जो मित्र की प्रगति देखकर प्रसन्न होता है।


## कहानी लेखन

एक धोबी के पास एक गधा और एक कुत्ता था। गधा धोबी के कपड़े धोबीघाट तक लेकर जाता, धोबी कपड़े धोकर गधे पर लादता और फिर गधा उसे लेकर घर आता। कुत्ते का काम था घर की रखवाली करना। एक दिन की बात है धोबी कुत्ते को खाना देना भूल गया। इस बात पर कुत्ता बहुत नाराज हो गया। संयोग की बात यह हुई कि उसी रात धोबी के घर चोर आ गया। धोबी और कुत्ते दोनों ने ही चोर को आते हुए देख लिया। कुत्ता अपने मालिक से नाराज था इसलिए वह नहीं भौंका। गधे ने कुत्ते से कहा- अरे, "तुम भौंकते क्यों नहीं?" गधे की बात सुनकर कुत्ते ने कहा, "मालिक तो हमें समय पर खाना भी नहीं देता। आज मैं अगर नहीं भौंकूँगा तो ही उन्हें मेरी कद्र होगी।" गधे ने कहा, "तुम कैसे नाशुक्रे हो। तुम्हारा फर्ज है कि तुम अभी मालिक के काम आओ।" कुत्ता अड़ गया और नहीं भौंका। गधे ने सोचा, "अब मुझे ही कुछ करना पड़ेगा और अगर मालिक जाग गया तो शायद मुझे इनाम भी मिल जाए।" गधा जोर-जोर से ढेंचू-ढेंचू करने लगा। धोबी दिन भर काम करके थका हुआ था। गधे की आवाज सुनकर उसकी नींद तो खुल गई लेकिन उसे बहुत गुस्सा आया। उसने अपने बेटे को बुलाया और गधे को खूब पीटा। गधे को पीटकर वह फिर सो गया। गधे की भावना सही थी लेकिन वह कुत्ते का काम करने चला था जो उसे आता नहीं था। तब से यह कहावत बन गई कि जिसका काम उसी को साजे और करे तो डंडा बाजे।


## पत्र-लेखन

कल रात से मुझे बुखार आ रहा है। डॉक्टर ने वायरल फीवर बताया है। अतः आपसे निवेदन है कि मुझे दिनांक 6 जुलाई से 9 जुलाई तक चार दिन का अवकाश प्रदान करने की कृपा करें।

इसके लिए मैं आपका आभारी रहूँगा।


## निबंध लेखन

## वृक्षों का महत्व

प्रस्तावना- हमारे जीवन में वृक्षों का बहुत महत्व है। वृक्ष हमारे देश की प्राकृतिक संपदा हैं। इन पेड़ों के झुंडों को जंगल के रूप में जाना जाता है। वृक्ष हमें उद्योगों के लिए लकड़ी देते हैं। पेड़ बाढ़ों और भूमि के कटाव को रोकते हैं। इनसे आँखों को भाने वाली हरियाली मिलती है। पेड़ हमें अनेक प्रकार की कच्ची सामग्री, जैसे- रबड़, इलायची, मसाले, उपयोगी जड़ी-बूटियाँ और फल-फूलों को प्रदान करते हैं। हमें पेड़ों का जीवन बचाना चाहिए। हमें अधिक से अधिक पेड़ लगाने चाहिए। गौतम बुद्ध को ‘निर्वाण’ एक वृक्ष के नीचे प्राप्त हुआ था। पेड़ हमें गर्मी में छाया देते हैं।

वृक्ष मानव-जीवन में बहुत उपयोगी होते हैं। वृक्षों की महिमा हमारे आदिग्रंथों में वर्णित है। ये हमारे जीवनदाता होते हैं। पेड़ पयार्वरण को प्रदूषण से बचाते हैं। ये दूषित वायु को सोखते हैं और शुद्ध ऑक्सीजन हमें देते हैं।

ऋषि-मुनियों एवं प्राचीन आचार्यों ने वृक्ष लगाने के महत्व को पुत्र-जन्म के महत्व के समान मान्यता प्रदान की है। वृक्ष विहीन धरती की तो हम कल्पना भी नहीं कर सकते। वृक्ष न हों तो पर्यावरण प्रदूषण इतना बढ़ जाएगा कि शुद्ध ऑक्सीजन के लिए हम तरस जाएँगे, मानवता का विनाश हो जाएगा।

उपंसहार- कुछ लोग स्वार्थवश लकड़ी को ईंधन के रूप में इस्तेमाल करने के लिए चोरी-चोरी पेड़ों को काटते हैं। हमें उन्हें रोकना चाहिए। प्रत्येक बच्चे को अपने प्रत्येक जन्मदिन पर एक-एक पेड़ लगाना चाहिए और उसकी देखभाल करनी चाहिए। ऐसा करने से हमें प्रदूषण की समस्या से छुटकारा मिल जाएगा।

## Maths-6

## Worksheet-1

## Number System

A. 1. (ii); 2. (i); 3. (iv); 4. (ii); 5. (iii)
B. 1. 999999; 2. Ten Lakhs; 3. 9; 4. Thousand millions; 5. 220; 6. LXVIII; 7. 70; 8. 495; 9. 20 millions; 10. 438000; 11. 2; 12. 1479; 13. 9210; $14 .<$

## Worksheet-2

## Operations on Whole Numbers

A. $1.84,09000-1=8808999$
2. Largest 4-digit number $=9999$;

Largest 5-digit number $=99999$;
Their difference $=99999-9999=90000$
3. 2 (i.e. $0 \& 1$ ); $4.2 \times 1837 \times 250=3674 \times 250=918500$;
5. An even number;
6. $4560-120 \times(200 \div 40)$
$=4560-120 \times(5)$
$=4560-600=3960$
7. $450 \times 7+750 \times 7=3150+5250=8400$
8. True; 9. Distributive; 10. True;
11. $625 \div 25-0=25-0=25$
12. $500+20+5+$ successor of 0 $=500+20+5+1=526$
13. No; 14. Yes (0);
15. $7013+22+2345+287+655+678$
$=7013+287+22+678+2345+655$
$=7300+700+3000=11000$;
16. $8203-1913=6290$
17. Predecessor of the successor of $11=11$

Successor of the predecessor of $9=9$
Difference $=11-9=2$
18. 1, 4, 9, 25;
19. $8165 \times 169-8165 \times 69$

$$
=1379885-563385=816500
$$

20. No

## Worksheet-3

## Integer and Its Absolute Value

A. 1. (); 2. (ii); 3. (iii); 4. (i)
B. All integers between -8 and -4
$=-5,-6,-7=3$ integers
C. 1. $(>)$; 2. (<); 3. (>); 4. (<); 5. (=); 6. (>); 7. (<); 8. (<); 9. (=); 10. (>); 11. (<);
12. (>); 13. (<); 14. (>)
D. 1. $(-5,0,4) ; 2 .(-2,1,8) ; 3 .(-6,-3,0) ; 4 .(-5,-3,-1,3) ; 5 .(-3,-2,0,7)$;
6. $(-11,0,1,9) ; 7 .(-4,-1,3,12) ; 8 .(-10,-8,1,15)$

## Worksheet-4

## Operations on Integers

A. $1.85+(-96)=85-96=-11 ; 2.80+57=137 ; 3.86+(-38)=86-36=50$;
4. $22+(-41)=22-41=-19 ; 5 \cdot-18+(-45)=-18-45=-63$;
6. $-32+48=48-32=16 ; 7.6+(-33)=6-33=-27$;
$8.6+(-47)=6-47=-41 ; 9 .(-78)+69=-78+69=-9$
10. $-72+(-30)+10=-72-30+10=-102+10=-92$
B. 1. $1-3=-2 ; 2.2-(-5)=2+5=7 ; 3.6-(-9)=6+9=15$
4. $-7-(-1)=-7+1=-6$; 5. $-7-4=-11 ; 6.3-(-2)=3+2=5$
7. $-1-9=-10 ; 8.2-9=-7 ; 9 .-8-(-1)=-8+1=-7$
C. 1. $(-1)(-12)=1 \times 12=12 ; 2 .-8 \times(-8)=64$
3. $(-8) \times(-10)=8 \times 10=80 ; 4.5 \times 1=5 ; 5 .(-10) \times(11)=-110$
6. $(-3) \times(-8)=24 ; 7 .-2 \times 6=-12 ; 8.7 \times(-12)=-84$
9. $4 \times(-10)=-40 ; 10 .(-9) \times(-6) \times(2)=-9 \times-6 \times 2=108$
D. 1. $-48 \div 6=\frac{-48}{6}=-8$;
2. $-81 \div-9=\frac{+81}{+9}=9$
3. $-18 \div(-6)=\frac{+18}{+6}=3$;
4. $25 \div(-5)=\frac{25}{-5}=-5$
5. $-10 \div 2=\frac{-10}{2}=-5$;
6. $-35 \div(-5)=\frac{+35}{+5}=7$
7. $-42 \div 6=\frac{-42}{6}=-7$;
8. $-70 \div(-7)=\frac{+70}{+7}=10$

## Worksheet-5

Factors and Multiples
A. 1. (a); 2. (i); 3 .
B. 1. No, 2. No, 3. Yes, 4. Yes, 5. Yes, 6. 7. No, 8. 9. Yes.
C. $24,30,36,42,48$
D. $2,3,5,7,11,13,17$
E. $4,6,8,9,10,12,14,15,16,18,20,21,22,24,25,26,27,28,36$
F. 1. $37,41,43,47$ 2. $53,57,59,67,71,73,79,83,87$

## Worksheet-6

## H.C.F and L.C.M.

A. 1. 1, 2. less, 3. highest common factor, 4.7
B. 1. False, 2. True
C. 1. 2. 2; 3. 5; 4. 11, 22, $23 ; 9.11 ; 10$. odd; 11. even

## Worksheet-7

## Fraction of a Whole

A. $1 . \frac{4}{6}=\frac{2}{3}$
2. $\frac{1}{3}$
3. $\frac{0}{6}=0$
4. $\frac{3}{6}=\frac{1}{2}$
5. $\frac{2}{8}=\frac{1}{4}$
6. $\frac{1}{8}$
7. $\frac{5}{6}$
8. $\frac{5}{8}$
9. $\frac{7}{8}$
10. $\frac{3}{5}$
B. 1 .

2.

3.

4.

5.

6.

7.

8.

C. 1. No of total slices of cake $=16$

No. of slices eaten $=5$
Fraction of eaten slices $=\frac{5}{16}$
Fraction left $=\frac{1}{1}-\frac{5}{16}=\frac{16-5}{16}=\frac{11}{16}$
2. $\quad$ No. of students $=20$

No. of girls $=11$
Fraction of girls $=\frac{11}{20}$
Fraction of boys $=1-\frac{11}{20}=\frac{20-11}{20}=\frac{9}{20}$
3. Distance of grandma's house $=25$ miles

We have driven $=11$ miles

Fraction of driven distance $=\frac{11}{25}$
Fraction of distance left $=1-\frac{11}{25}$

$$
\frac{1}{1}-\frac{11}{25}=\frac{25-11}{25}=\frac{14}{25}
$$

4. 

$$
\begin{aligned}
\text { Total cookies in a jar } & =36 \\
\text { No. of oreos } & =10 \\
\text { Fraction of oreos } & =\frac{10}{36}
\end{aligned}
$$

Fraction of cookies which are not oreas $=1-\frac{10}{36}$

$$
=\frac{36-10}{36}=\frac{26}{36}=\frac{13}{18}
$$

## Worksheet-8

## Types of Fractions

A.

| $2 \frac{2}{3}$ M | $\frac{8}{3}$ I | $\frac{3}{2}$ I | $\frac{6}{7} \mathrm{P}$ | $\frac{8}{9}$ P | $2 \frac{3}{8} \mathrm{M}$ | $7 \frac{1}{6} \mathrm{M}$ | $\frac{10}{6}$ I | $\frac{7}{2}$ I | $\frac{1}{6} \mathrm{P}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{3}{4}$ P | $\frac{9}{7} \mathrm{I}$ | $9 \frac{1}{2} \mathrm{M}$ | $\frac{4}{3}$ I | $8 \frac{1}{4} \mathrm{M}$ | $\frac{6}{5} \triangle$ | $\frac{3}{8} \mathrm{P}$ | $\frac{6}{9} P$ | $\frac{9}{7} \mathrm{I}$ | $\frac{15}{14} \mathrm{I}$ |

B. $1 . \frac{12}{7}=\frac{7}{\frac{12}{\frac{-7}{5}}}=1 \frac{5}{7}$

$$
\text { 3. } \frac{39}{8}=\frac{8 \sqrt{39} 4}{\frac{-32}{7}}=4 \frac{7}{8}
$$

5. $\frac{23}{4}=\frac{4 \sqrt{23} 5}{\frac{-20}{3}}=5 \frac{3}{4}$
6. $\frac{44}{9}=\underset{\frac{9}{44} 4}{\frac{-36}{8}}=4 \frac{8}{9}$
7. $\frac{16}{3}=\frac{\sqrt[3]{16} 5}{\underline{-15}}=5 \frac{1}{3}$
8. $\frac{25}{3}=\frac{\sqrt[3]{25} 8}{\frac{-24}{1}}=8 \frac{1}{3}$
9. $\frac{49}{11}=\frac{11 \sqrt[49]{49}}{\frac{-44}{5}}=4 \frac{5}{11}$
10. $\frac{35}{6}=\frac{6 \sqrt{35} 5}{\frac{-30}{5}}=5 \frac{5}{6}$
11. $\frac{22}{5}=\begin{aligned} & \frac{5}{22} 4 \\ & \frac{-20}{2}\end{aligned}=4 \frac{2}{5}$
12. $\frac{31}{2}=\frac{2 \sqrt{31}}{\frac{-2}{15}}=15 \frac{1}{2}$
C. 1 . $\frac{3}{7}=\frac{3 \times 2}{7 \times 2}=\frac{3 \times 3}{7 \times 3}=\frac{3 \times 4}{7 \times 4}=\frac{3 \times 5}{7 \times 5}$

$$
=\frac{6}{14}=\frac{9}{21}=\frac{12}{28}=\frac{15}{35}
$$

2. $\frac{2}{3}=\frac{2 \times 2}{3 \times 2}=\frac{2 \times 3}{3 \times 3}=\frac{2 \times 4}{3 \times 4}=\frac{2 \times 5}{3 \times 5}$

$$
=\frac{4}{6}=\frac{6}{9}=\frac{8}{12}=\frac{10}{15}
$$

D. $1.4 \frac{2}{9}=\frac{4 \times 9+2}{9}=\frac{36+2}{9}=\frac{38}{8}$
3. $6 \frac{4}{9}=\frac{6 \times 9+4}{9}=\frac{36+4}{9}=\frac{40}{9}$
5. $8 \frac{4}{5}=\frac{8 \times 5+4}{5}=\frac{40+4}{5}=\frac{44}{5}$
7. $2 \frac{3}{4}=\frac{2 \times 4+3}{4}=\frac{8+3}{8}=\frac{11}{4}$
9. $9 \frac{1}{2}=\frac{9 \times 2+1}{2}=\frac{18+1}{2}=\frac{19}{2}$
2. $1 \frac{5}{6}=\frac{1 \times 6+5}{6}=\frac{6+5}{6}=\frac{11}{6}$
4. $7 \frac{2}{3}=\frac{7 \times 3+2}{3}=\frac{21+2}{3}=\frac{23}{3}$
6. $5 \frac{1}{8}=\frac{5 \times 8+1}{8}=\frac{40+1}{8}=\frac{41}{8}$
8. $7 \frac{3}{7}=\frac{7 \times 7+3}{7}=\frac{49+3}{7}=\frac{52}{7}$
10. $6 \frac{4}{5}=\frac{6 \times 5+4}{5}=\frac{30+4}{5}=\frac{34}{5}$

## Worksheet-9

## Comparison of Fractions

A. 1. $\frac{60}{80}=\frac{60 \div 5}{80 \div 5}=\frac{12 \div 2}{16 \div 2}=\frac{6 \div 2}{8 \div 2}=\frac{3}{4}$
3. $\frac{12}{15}=\frac{12 \div 3}{15 \div 3}=\frac{4}{5}$
5. $\frac{8}{10}=\frac{8 \div 2}{10 \div 2}=\frac{4}{5}$
7. $\frac{6}{12}=\frac{6 \div 3}{12 \div 3}=\frac{2 \div 2}{4 \div 2}=\frac{1}{2}$
B. 1. $\frac{3}{4}$ and $\frac{9}{16}$

By cross multiplying
$3 \times 16 \square 9 \times 4$
$48>36$
$\therefore \frac{3}{4}>\frac{9}{16}$
3. $\frac{1}{3} \square \frac{1}{2}$

By cross multiplying
2. $\frac{20}{25}=\frac{20 \div 5}{25 \div 5}=\frac{4}{5}$
4. $\frac{14}{18}=\frac{14 \div 2}{18 \div 2}=\frac{7}{9}$
6. $\frac{27}{36}=\frac{27 \div 3}{36 \div 3}=\frac{3}{4}$
8. $\frac{16}{24}=\frac{16 \div 8}{24 \div 8}=\frac{2}{3}$
2. $\frac{2}{5} \square \frac{3}{10}$

By cross multiplying
$2 \times 10 \square 5 \times 3$
$20>15$
$\therefore \frac{2}{5}>\frac{3}{10}$
4. $\frac{10}{11} \square \frac{5}{5}$

By cross multiplying
$1 \times 2 \square 3 \times 1$
$2<3$
$\therefore \frac{1}{3}<\frac{1}{2}$
5. $\frac{7}{8} \square \frac{15}{16}$

By cross multiplying
$7 \times 16 \square 8 \times 15$
$118<120$
$\therefore \frac{7}{8}<\frac{15}{16}$
C. 1 . $\frac{3}{4}, \frac{3}{7}, \frac{2}{3}$

By converting these fractions having same denominator that
L.C.M. of 4, 7 and 3

| 2 | $4,7,3$ |
| :--- | :--- |
| 2 | $2,7,3$ |
| 7 | $1,7,3$ |
| 3 | $1,1,3$ |
|  | $1,1,1$ |

$\therefore$ L.C.M. $=2 \times 2 \times 7 \times 3=84$

$$
\begin{aligned}
& \frac{3}{4}=\frac{3 \times 21}{4 \times 21}=\frac{63}{84} \\
& \frac{3}{7}=\frac{3 \times 12}{7 \times 12}=\frac{36}{84} \\
& \frac{2}{3}=\frac{2 \times 28}{3 \times 28}=\frac{56}{84}
\end{aligned}
$$

$\therefore \frac{36}{84}<\frac{56}{84}<\frac{63}{84}$
or $\frac{3}{7}<\frac{2}{3}<\frac{3}{4}$
D. $1 . \frac{8}{11}, \frac{3}{4}, \frac{13}{22}$

Find the L.C.M. of 11, 4 and 22.

| 11 | $11,4,22$ |
| :--- | :--- |
| 2 | $1,4,2$ |
| 2 | $1,2,1$ |
|  | $1,1,1$ |

$10 \times 5 \square 11 \times 5$
$5 0 \longdiv { < } 5 5$
$\therefore \frac{10}{11}<\frac{5}{5}$
6. $\frac{15}{16} \square \frac{3}{4}$

By cross multiplying
$15 \times 4 \square 16 \times 3$
$60 \triangle 48$
$\therefore \frac{15}{16}<\frac{3}{4}$
2. $\frac{1}{7}, \frac{3}{14}, \frac{3}{28}$

First find the L.C.M. of 7, 14 and 28

| 7 | $7,14,28$ |
| :--- | :--- |
| 2 | $1,2,4$ |
| 2 | $1,1,2$ |
|  | $1,1,1$ |

$\therefore$ L.C.M. $=7 \times 2 \times 2=28$
Then, convert the given fraction into the fraction having same denominator.
$\frac{1}{7}=\frac{1 \times 4}{7 \times 4}=\frac{4}{28}$
$\frac{3}{14}=\frac{3 \times 2}{14 \times 2}=\frac{6}{28}$
$\frac{3}{28}=\frac{3 \times 1}{28 \times 1}=\frac{3}{28}$
So, $\frac{3}{28}<\frac{4}{28}<\frac{6}{28}$
or $\frac{3}{28}<\frac{1}{7}<\frac{3}{14}$
2. $\frac{7}{8}, \frac{35}{64}, \frac{5}{16}$

Find the L.C.M. of 8, 64 and 16.

| 8 | $8,64,16$ |
| :--- | :--- |
| 2 | $1,8,2$ |
| 4 | $1,4,1$ |
|  | $1,1,1$ |

$\therefore$ L.C.M. $=11 \times 2 \times 2=44$
Now, convert the given fraction into the fraction having same denominator

$$
\begin{aligned}
& \frac{8}{11}=\frac{8 \times 4}{11 \times 4}=\frac{32}{44} \\
& \frac{3}{4}=\frac{3 \times 11}{4 \times 11}=\frac{33}{44} \\
& \frac{13}{22}=\frac{13 \times 2}{22 \times 2}=\frac{26}{44} \\
& \therefore \frac{33}{44}>\frac{32}{44}>\frac{26}{44} \\
& \text { or } \frac{3}{4}>\frac{8}{11}>\frac{13}{22}
\end{aligned}
$$

$\therefore$ L.C.M. $=8 \times 2 \times 4=64$
Now, convert the given fraction into the fraction having same denominator.

$$
\begin{aligned}
& \frac{7}{8}=\frac{7 \times 8}{8 \times 8}=\frac{56}{64} \\
& \frac{35}{64}=\frac{35 \times 1}{64 \times 1}=\frac{35}{64} \\
& \frac{5}{16}=\frac{5 \times 4}{16 \times 4}=\frac{20}{64}
\end{aligned}
$$

So, $\frac{56}{64}>\frac{35}{64}>\frac{20}{64}$
or $\quad \frac{7}{8}>\frac{35}{64}>\frac{20}{64}$
E. 1. (ii), 2. (ii)

## Worksheet-10

## Operations on Fractions

A. 1. (iii) , 2. (iv), 3. (iii)
B. 1 .

$\stackrel{|c| c|c|}{|c|}$| $\frac{2}{3}$ | $\frac{4}{3}$ |
| :---: | :---: |
| $\frac{1}{3}=2$ |  |
| $\frac{1}{3}$ | $\frac{2}{3}$ |
| $\frac{3}{3}$ | $\frac{2}{3}$ |

C. 1 . $\frac{4}{9}+\frac{2}{9}=\frac{6}{9}=\frac{2}{3}$
D. 1. $\frac{3}{19} \times \frac{19}{17}=\frac{57}{323}=\frac{3}{12}$
2.

2. $\frac{7}{28}+\frac{7}{28}+\frac{7}{28}=\frac{21}{28}=\frac{3}{4}$
2. $\frac{4}{11} \times \frac{30}{13}=\frac{120}{143}$

## Worksheet-11

## Representation of Decimals

A. 1. (iii), 2. (i), 3. (iv), 4. (i), 5. (i), 6. (iv)
B. 1. $0.04,2.0 .26$ rupees, 3. $49.079,4.2200 \mathrm{~cm}, 5.908 \mathrm{~cm}, 6 . \frac{3}{10}=0.3, \quad 7.3$ and 4
C. 1. $>, 2 .<, 3 .<, 4 .>, 5 .<, 6 .>, 7 .>, 8$.
D. 1. $10+3+0.30+0.01$
2. $30+3+0.400+0.60+0.4$
E. 1. 73.047, 2. 68.008, 3. 76.034, 4. 04.003

## Worksheet-12

## Fractions and Decimals

A. 1. (iii), 2. (ii), 3. (iii)
B. $1.6 .35=\frac{6 / 35}{100} \div \frac{5}{5}=\frac{127}{20}$
2. $113.85=\frac{113,85 \div 5}{100 \div 5}=\frac{2277}{20}$
C. $1.210 .200=\frac{210,2 \emptyset 0}{10 \emptyset \emptyset}=\frac{2102}{10}=210 \frac{2}{10}=210 \frac{1}{5}$
2. $0.0125=\frac{0,0125}{10000}=\frac{125 \div 5}{10000 \div 5}=\frac{25 \div 5}{2000 \div 5}=\frac{5 \div 5}{400 \div 5}=\frac{1}{80}$
3. $3.125=\frac{3 / 125}{1000}=\frac{3125 \div 5}{1000 \div 5}=\frac{625 \div 5}{200 \div 5}=\frac{125 \div 5}{40 \div 5}=\frac{25}{8}=3 \frac{1}{8}$
4. $32.04=\frac{32,04}{100}=\frac{3204 \div 2}{100 \div 2}=\frac{1602 \div 2}{50 \div 2}=\frac{801}{25}=32 \frac{1}{25}$
5. $94.07=\frac{94 / 07}{100}=94 \frac{7}{100}$
6. $2.253=\frac{2,253}{1000}=2 \frac{253}{1000}$
D. 1. $\frac{1111}{100}=11.11$

| $1 0 0 \longdiv { 1 1 1 1 } 1 1 . 1 1$ |
| :---: |
| $\frac{-100}{111}$ |
| $\frac{-100}{110}$ |
| $\frac{-100}{100}$ |
| $\frac{-100}{0}$ |

3. $\frac{6}{1000}=6 \div 1000=0.006$

| $1 0 0 0 \longdiv { 6 0 0 0 } . 0 0 6$ |
| :---: |
| $-\underline{6000}$ |
| $-\quad 0$ |

2. $\frac{5}{100}=5 \div 100=0.05$

$$
\begin{gathered}
1 0 0 \longdiv { 5 0 0 } . 0 5 \\
\frac{-500}{0} \\
\hline
\end{gathered}
$$

4. $\frac{88}{100}=88 \div 100=0.88$

| $1 0 0 \longdiv { 8 8 0 } . 8 8$ |
| :---: |
| $-\frac{800}{800}$ |
| $\frac{-800}{0}$ |

5. $27 \frac{3}{100}=\frac{27 \times 100+3}{100}=\frac{2703}{100}=27.03$

| $1 0 0 \longdiv { 2 7 0 3 } 2 7 . 0 3$ |
| :---: |
| $\frac{-200}{703}$ |
| $\frac{-700}{300}$ |
| $\frac{-300}{0}$ |

7. $\frac{371}{10000}=371 \div 10000=0.0371$

| $1 0 0 0 0 \longdiv { 3 7 1 0 0 } 0 . 0 3 7 1$ |
| :---: |
| $\frac{-30000}{710000}$ |
| $\frac{-70000}{10000}$ |
| $\frac{-10000}{0}$ |

E. 1. $\frac{5}{8}=5 \div 8=0.625$

$$
\begin{gathered}
8 \longdiv { 5 0 } 0 . 6 2 5 \\
\frac{-48}{20} \\
\frac{-16}{40} \\
\frac{-40}{0} \\
\hline
\end{gathered}
$$

3. $7 \frac{2}{5}=\frac{7 \times 5+2}{5}=\frac{37}{5}=37 \div 5=7.4$

4. $\frac{7}{1000}=7 \div 1000=0.007$

| $1 0 0 0 \longdiv { 7 0 0 0 } 0 . 0 0 7$ |
| :---: |
| $\frac{-7000}{0}$ |

8. $\frac{51}{100}=51 \div 100=0.51$

$$
\begin{gathered}
1 0 0 \longdiv { 5 1 0 } 0 . 5 1 \\
\frac{-500}{100} \\
\frac{-100}{0} \\
\hline
\end{gathered}
$$

2. $\frac{45}{12}=45 \div 12=3.75$

| 1245 <br> $\frac{-36}{90}$ <br> $\frac{-84}{60}$ <br> $\frac{-60}{0}$ |
| :---: |

4. $\frac{31}{80}=31 \div 80=0.3875$
$8 0 \longdiv { 3 1 0 } 0 . 3 8 7 5$

$$
\begin{array}{r}
\frac{-240}{700} \\
\frac{-640}{600} \\
\frac{-560}{400} \\
\frac{-400}{0} \\
\hline
\end{array}
$$

## Operations of Decimals

A. 1. (iv), 2. (), 3. (iii)
B. 1. $84.16+0.28+1.357$

$$
=\begin{array}{r}
84.160 \\
0.280 \\
+\quad 1.357 \\
85.797
\end{array}
$$

C. $1438.6704-346.8912$

$$
\begin{array}{r}
1438.6704 \\
-346.8912 \\
1091.7792
\end{array}
$$

D. 1. $34 l 2 \mathrm{~m} l+2 l 56 \mathrm{~m} l$

$$
\begin{array}{r}
l \quad m l \\
34.002 \\
+\quad 2.056 \\
36.058
\end{array}
$$

$$
=36.058 l
$$

3. $100 \mathrm{~kg} 433 \mathrm{~g}+20 \mathrm{~kg} 360 \mathrm{~g}$

$$
\begin{array}{r}
\mathrm{kg} \mathrm{~g} \\
100.433 \\
+\quad 20.360 \\
120.793
\end{array}
$$

$$
=120.793 \mathrm{~kg}
$$

E. Total distance covered in five days

$$
=(15.4+24.2+10.4+18.7+7.5) \text { miles }
$$

| 15.4 |
| :--- |
| 24.2 |
| 10.4 |
| 18.7 |
| 7.5 |
| $=76.2$ miles $\quad 76.2$ |

$$
\text { 2. } \begin{aligned}
& 36.13+108.08+4.32 \\
& =\begin{array}{r}
36.13 \\
108.08 \\
+\quad 4.32 \\
148.53
\end{array}
\end{aligned}
$$

2. ₹ $22.50+₹ 84.60$

$$
\begin{gathered}
₹ \\
22.50 \\
+84.60 \\
107.10 \\
=₹ 107.10
\end{gathered}
$$

4. $4 \mathrm{~km} 235 \mathrm{~m}+5 \mathrm{~km} 138 \mathrm{~m}$

$$
\begin{array}{r}
\mathbf{k m} \quad \mathbf{m} \\
4.235 \\
+5.138 \\
9.373
\end{array}
$$

$$
=9.373 \mathrm{~km}
$$

F. Total amount of all three cheques

$$
=₹ 36.98+₹ 17.27+₹ 260
$$


G. For 1 gallon of fuel, car travels $=42.1$ miles

Then, for 340 miles, it will need $=\frac{340}{42.1}=8.076$ gallon
After rounding off to the nearest tenth it will be 8.1 gallons.
H. Total length of glass $=14$ feet

No. of pieces to be cutted $=5$
Length of each piece $=(14 \div 5)$ feet

$$
=2.8 \text { feet }
$$

| $5 \longdiv { 1 4 } 2 . 8$ |
| :---: |
| $\frac{-10}{40}$ |
| $\frac{-40}{0}$ |

## Worksheet-14

## Ratio

A. 1. No. of circles $=15$

No. of moons $=6$

$$
\text { Ratio }=\frac{15^{5}}{\sigma_{2}}=5: 2
$$

3. No. of triangles $=5$

$$
\begin{aligned}
\text { No. of stars } & =9 \\
\text { Ratio } & =\frac{5}{9}=5: 9
\end{aligned}
$$

2. No. of pentagons $=2$

No. of circles $=12$
Ratio $=\frac{\frac{2}{2}^{1}}{12}=\frac{1}{6}=1: 6$
4. No. of pentagons $=8$

No. of circles $=5$
Ratio $=\frac{8}{5}=8: 5$
B. 1. (i), 2. (iii), 3. ()
C. 1. ratio
2.:
3. simplest
4. same
D. 1. $\frac{75 \div 25}{100 \div 25}=\frac{3}{4}=3: 4$
2. $\frac{33 \div 11}{44 \div 11}=\frac{3}{4}=3: 4$
3. $\frac{16 \div 8}{24 \div 8}=\frac{2}{3}=2: 3$
4. $\frac{12 \div 6}{18 \div 6}=\frac{2}{3}=2: 3$
5. $\frac{21 \div 3}{6 \div 3}=\frac{7}{2}=7: 2$
6. $\frac{90}{450}=\frac{9 \div 9}{45 \div 9}=\frac{1}{5}=1: 5$
E. 1. $\frac{30 \mathrm{~min}}{1.5 \mathrm{hr}}=\frac{30 \mathrm{~min}}{90 \mathrm{~min}}=\frac{30 \div 10}{90 \div 10}=\frac{3 \div 3}{9 \div 3}=\frac{1}{3}=1: 3$
2. $\frac{40 \mathrm{~cm}}{1.5 \mathrm{~m}}=\frac{40 \mathrm{~cm}}{150 \mathrm{~cm}}=\frac{40 \div 10}{150 \div 10}=\frac{4}{15}=4: 15$
3. $\frac{5 \mathrm{p}}{₹} 1=\frac{5 \mathrm{p}}{100 \mathrm{p}}=\frac{5 \div 5}{100 \div 5}=\frac{1}{20}=1: 20$
4. $\frac{500 \mathrm{~m} l}{2 \text { lit }}=\frac{500 \mathrm{~m} l}{2000 \mathrm{~m} l}=\frac{500 \div 100}{2000 \div 100}=\frac{5 \div 5}{20 \div 5}=\frac{1}{4}=1: 4$

## Worksheet-15

## Proportion

A. 1. (iv), 2. (i), 3. (i)
B. 1. proportion, 2. extreme terms, 3. mean terms, $4.3 / 20=3: 20$
C. 1. Yes
2. Yes
3. Yes
4. No
D. Let $x$ is defined as second

$$
\begin{aligned}
\frac{4}{x} & =\frac{x}{16} \\
x^{2} & =4 \times 16=64 \\
x & =\sqrt{64}=8
\end{aligned}
$$

E. 1. $\frac{125}{x}=\frac{x}{5}$

$$
\begin{aligned}
x \times x & =125 \times 5 \\
x^{2} & =625 \\
x & =\sqrt{625}=25
\end{aligned}
$$

F. 1st : 3rd $=2 \mathrm{nd}: 4$ th

$$
34: x=136: 120(\text { suppose } 3 \text { rd terms }=x)
$$

$$
\frac{34}{x}=\frac{136}{120}
$$

$$
x \times 136=34 \times 120
$$

$$
x=\frac{34 \times 120}{136}=30
$$

G.

| 3 | 6 | 9 | 12 |
| :---: | :---: | :---: | :---: |
| 5 | 10 | 15 | 20 |


| 2 | 6 | 12 | 18 |
| :---: | :---: | :---: | :---: |
| 7 | 21 | 42 | 63 |


| 4 | 8 | 20 | 40 |
| :---: | :---: | :---: | :---: |
| 5 | 10 | 25 | 50 |

## Worksheet-16

## Algebraic Expressions

A. 1. (i), 2. (), 3. (iv)
B. 1. variable, 2. equation, 3. constant, 4. LHS and RHS
C. $x^{15}$
D. $6 y^{2}$
E. 1. $a b$ 2. $8 p=y-x$
F. 1. sum of $a$ and $b$
2. Negative three times of number
3. One less than twice a number

## Worksheet-17

## Operation on Algebraic Expressions

A. 1. (ii), 2. (i), 3. (iii)
B. 1. True, 2. False, 3. True, 4. False, 5. True
C. (i) $x^{3}+9 x-5$

$$
\frac{-4 x^{2}+12 x+5}{x^{3}-4 x^{2}+21 x-10}
$$

(ii)

$$
\begin{array}{r}
4 a^{2}+a b-2 b^{2} \\
-9 a^{2}-5 a b+b^{2} \\
4 a^{2}-3 a-6 b^{2} \\
\hline-a^{3}-3 a-4 a b-7 b^{2} \\
\hline
\end{array}
$$

D. $a^{2}-b^{2}+2 a b+4$

$$
\frac{-a^{2}+b^{2}-4 a b+5}{-2 a b+1}
$$

E. $4 x^{3}-8 x^{2}+2 x+1$
F. $a^{2}-2 a+7$

## Worksheet-18

## Solution of an Equation

A. 1. $3 x-4=5 ; 2.6 x=x+10 ; 3 \cdot \frac{x}{2}-10=5 \Rightarrow x-20=10$
4. $\mathrm{x}=\frac{x}{3}+9 \Rightarrow 3 x=x+27$
5. $2 x-15=13$
B. 1. (ii) , 2. (ii), 3. (ii), 4. (i)
C. 1. 5, 2. 24, 3. 2, 4.0
D. 9
E. No
F. Yes
G. $x+3=5$

$$
\begin{aligned}
x & =5-3 \\
& =2
\end{aligned}
$$

## Worksheet-19

## Basic Geometrical Concepts

A. 1. (ii), 2. (iii), 3. (iii)
B. 1. True, 2. False, 3. True, 4. True
C. 1. intersecting, 2. parallel, 3. intersecting, 4. perpendicular, 5. parallel
6. intersecting, 7. perpendicular, 8. perpendicular, 9. parallel , 10. perpendicular

## Worksheet-20

## Line Segments

A. 1. (i)
B. 1. Ray, 2. Line segment, 3. Line, 4. Line segment, 5. Line, 6. Ray
C. 1 .

D. $M$ : Ray $A B$, ray $E D$, line segment $B C$ and line segment $C D$

A : Line segment : HF, HJ, GI
T : Line MK and ray LN
H : Line: OQ, RT and PS

## Worksheet-21

## Measurement of an Angle

A. 1. (iv), 2. (iii), 3. (ii)
B. 1. $90^{\circ}$, 2. Q, 3. 60, 4. equal, 5. adjacent
C. 1. $0^{\circ}, 2.180^{\circ}, 3.90^{\circ}, 4.270^{\circ}$
D. (i) $50^{\circ}+x=90^{\circ}$

$$
\begin{aligned}
x & =90^{\circ}-50^{\circ} \\
& =40^{\circ}
\end{aligned}
$$

(ii) $x+60^{\circ}=180^{\circ}$

$$
\begin{aligned}
x & =180^{\circ}-60^{\circ} \\
& =120^{\circ}
\end{aligned}
$$

(iii) Since opposite angles are equal

Hence $x=100^{\circ}$
(iv) $60^{\circ}+x+40^{\circ}=180^{\circ}$ $100^{\circ}+x=180^{\circ}$
$x=180^{\circ}-100^{\circ}$
E. (i) $3 x+2 x=180^{\circ}$
$x=80^{\circ}$

$$
\begin{aligned}
5 x & =180^{\circ} \\
x & =\frac{180^{\circ}}{5}=36^{\circ}
\end{aligned}
$$

$\therefore$ The degree measure of $3 x=3 \times 36^{\circ}=108^{\circ}$
The degree measure of $2 x=2 \times 36^{\circ}=72^{\circ}$
(ii) $(2 x-10)+(3 x+15)=180^{\circ}$

$$
\begin{aligned}
2 x-10+3 x+15 & =180^{\circ} \\
5 x+5 & =180^{\circ} \\
5 x & =180-5 \\
5 x & =175 \\
x & =\frac{175}{5}=35^{\circ}
\end{aligned}
$$

Now, the degree measure of $2 x-10^{\circ}=2 \times 35-10$

$$
=70-10=60^{\circ}
$$

The degree measure of $3 x+15^{\circ}=3 \times 35+15$

$$
=105+15=120^{\circ}
$$

(iii) $\left(x+25^{\circ}\right)+\left(x-15^{\circ}\right)=180^{\circ}$

$$
\begin{aligned}
& =x+25^{\circ}+x-15^{\circ}=180^{\circ} \\
& =2 x+10^{\circ}=180^{\circ} \\
& =2 x+180^{\circ}-10^{\circ} \\
2 x & =170^{\circ} \\
x & =\frac{170^{\circ}}{2}=85^{\circ}
\end{aligned}
$$

Now, the degree measure of $x+25^{\circ}=85^{\circ}+25^{\circ}=110^{\circ}$
The degree measure of $x-15=85^{\circ}-15=70^{\circ}$

## Worksheet-22

## Types of Angles

A. Part A : 1. vertically opposite, 2. adjacent, 3. $87^{\circ}, 4.93^{\circ}$

Part B: 5. adjacent, 6. $180^{\circ}$, 7. $65^{\circ}$
Part C : 8. adjacent, 9. $90^{\circ}, 10.50^{\circ}$
B. 1. (ii), 2. (ii)
C. 1. $3 x+10=100$

$$
\begin{aligned}
3 x & =100-10 \\
3 x & =90 \\
x & =\frac{90}{3}=30^{\circ}
\end{aligned}
$$

2. $5 x-7=138$

$$
5 x=138+7
$$

$$
5 x=145
$$

$$
x=\frac{145}{5}=29^{\circ}
$$

## Worksheet-23

## Pair of Lines and Transversal

A. 1. (ii), 2. (i), 3. (ii)
B. 1. parallel, 2. perpendicular, 3. same
C. 1. $\mathrm{m} \angle 3, \mathrm{~m} \angle 7, \mathrm{~m} \angle 2, \mathrm{~m} \angle 6$,
3. UT
5. $\mathrm{m} \angle 1$, and $\mathrm{m} \angle 8, \mathrm{~m} \angle 5$ and $\mathrm{m} \angle 4$,
7. (i) $\mathrm{m} \angle 1=\mathrm{m} \angle 6$ (opposite angle)

$$
\begin{array}{rlrl} 
& & \mathrm{m} \angle 6 & =75^{\circ} \\
\because & \mathrm{m} \angle 1 & =75^{\circ} \\
\therefore & & =105^{\circ}
\end{array}
$$

(iii) $\mathrm{m} \angle 3=\mathrm{m} \angle 8$
and $\mathrm{m} \angle 8=\mathrm{m} \angle 6$ (corresponding angles)
$\because \quad \mathrm{m} \angle 6=75^{\circ}$
$\therefore \quad \mathrm{m} \angle 8=75^{\circ}$ and $\mathrm{m} \angle 3=75^{\circ}$
(v) $\quad \mathrm{m} \angle 7=\mathrm{m} \angle 8=180^{\circ}$
$\mathrm{m} \angle 7+75^{\circ}=180^{\circ}$

$$
\mathrm{m} \angle 7=180^{\circ}-75^{\circ}
$$

$$
=105^{\circ}
$$

D. 1. $\mathrm{m} \angle 1=\angle 138^{\circ}$ (opposite angle)
3. $\mathrm{m} \angle 1+\mathrm{m} \angle 3=180^{\circ}$
$\angle 138^{\circ}+\mathrm{m} \angle 3=180^{\circ}$
$\mathrm{m} \angle 3=\angle 180^{\circ}-\angle 138^{\circ}=42^{\circ}$
5. $\mathrm{m} \angle 5=\mathrm{m} \angle 1=\angle 138^{\circ}$
7. $\mathrm{m} \angle 8+\mathrm{m} \angle 5=\angle 180^{\circ}$
$\mathrm{m} \angle 8+\angle 138^{\circ}=180^{\circ}$
$\mathrm{m} \angle 8=\angle 180^{\circ}-\angle 138^{\circ}=\angle 42^{\circ}$
E. 1. $70^{\circ}, 2.70^{\circ}, 3.70^{\circ}, 110^{\circ}$
F. 1. (iii), 2. (i), 3. (iv), 4. (ii)
(iv) $\mathrm{m} \angle 5+\mathrm{m} \angle 6=180^{\circ}$
2. $\mathrm{m} \angle 4, \mathrm{~m} \angle 8, \mathrm{~m} \angle 1, \mathrm{~m} \angle 5$,
(ii) $\mathrm{m} \angle 2+\mathrm{m} \angle 6=180^{\circ}$

$$
\mathrm{m} \angle 5+75^{\circ}=180^{\circ}
$$

$$
\mathrm{m} \angle 5=180^{\circ}-75^{\circ}
$$

$$
=105^{\circ}
$$

6. $\mathrm{m} \angle 5=\mathrm{m} \angle 7=\angle 138^{\circ}$
7. $\mathrm{m} \angle 3$ and $\mathrm{m} \angle 7, \mathrm{~m} \angle 6$ and $\mathrm{m} \angle 3$
8. $\mathrm{m} \angle 2$ and $\mathrm{m} \angle 4, \mathrm{~m} \angle 6$, and $\mathrm{m} \angle 8$, $\mathrm{m} \angle 1$ and $\mathrm{m} \angle 3, \mathrm{~m} \angle 5$ and $\mathrm{m} \angle 7$

$$
\begin{aligned}
\mathrm{m} \angle 2+75^{\circ} & =180^{\circ} \\
\mathrm{m} \angle 2 & =180^{\circ}-75^{\circ}
\end{aligned}
$$

(vi) $\mathrm{m} \angle 8=\mathrm{m} \angle 3=75^{\circ}$
2. $\mathrm{m} \angle 2+\angle 138^{\circ}=180^{\circ}$

$$
\mathrm{m} \angle 2=\angle 180^{\circ}-\angle 138^{\circ}
$$

$$
\mathrm{m} \angle 2=42^{\circ}
$$

4. $\mathrm{m} \angle 4=138^{\circ}$

## Worksheet-24

## Triangles

A. 1. Yes, scalene;
2. Yes, scalene
3. Yes, isosceles
4. Yes, equilateral
5. Yes, scalene
6. Yes, scalene
7. Yes, isosceles
8. Yes, isosceles
9. Yes, equilateral
10. Yes, scalene
11. Yes, scalene
12. Yes, scalene
B. 1. Acute
4. Acute
2. Obtuse
3. Acute
7. Acute
5. Obtuse
6. Acute
8. Right angle
9. Obtuse
10. Right angle
11. Obtuse
12. Obtuse
13. Acute
14. Acute
15. Acute
C. (a) $\angle 55^{\circ}+\angle 82^{\circ}+\angle x=180^{\circ}$

$$
\begin{aligned}
& 137^{\circ}+\angle x=180^{\circ} \\
& x=180^{\circ}-137^{\circ}=43^{\circ}
\end{aligned}
$$

(b) This triangle is a right angled triangle.

Hence, $\quad \angle 52^{\circ}+\angle 90^{\circ}+\angle x=180^{\circ}$ $\angle 142^{\circ}+\angle x=180^{\circ}$ $\angle x=180^{\circ}-142^{\circ}$
 $=38^{\circ}$
(c) $y+124^{\circ}=180^{\circ}$
$y+180^{\circ}=124^{\circ}$
$=56^{\circ}$
Now, $x+77^{\circ}+56^{\circ}=180^{\circ}$
$x+133^{\circ}=180^{\circ}$
$x=180^{\circ}-133^{\circ}=47^{\circ}$

D.


## Worksheet-25

## Classification of Quadrilaterals

A. 1. T
2. $K$
3. R
4. H
5. P
6. K
7. S
8. Q
9. R
10. H
11. P
12. Q

## Worksheet-26

## Circles

A. 1. (iii), 2. (iv), 3. (ii), 4. (i), 5. (iii)
B. 1. Radius, 2. Diameter, 3. Centre, 4. Chord
C. 1. Radius, 2. Circumference,
3. Chord, 4. Radius, 5. Diameter, 6. Circumference
7. Diameter

## Worksheet-27

## Types of Three Dimensional Shapes

A. 1. $6,8,12$
2. $5,5,8$
3. $5,6,9$
B. 2
C. 2
D. 1

## Worksheet-28

## Constructions

A. 1. (iii), 2. (ii), 3. (iv)
B. 1. True, 2. True, 3. True, 4. True
C. 1. angle, 2. angles, 3. 4, 4. two
D. 1. Radius : Line segment from centre of circle to any point on the circle.
2. Circumference : It is the perimeter of a circle.
3. Diameter : A chord that passes through centre of circle.

A. 1. 1, 2. Isosceles, 3. F
B. 1. 2, 2. 4
C.

D. 1
E. 0
F.

G. 1
H. 11
I. False

## Worksheet-30

## Area and Perimeter

A. 1. The given figure is a rectangle.

We know that opposite side of a rectangle are equal. Hence,

$$
\begin{aligned}
\text { Perimeter } & =2(l+b) \\
& =2(8+3) \\
& =2 \times 11=22 \mathrm{~cm} \\
\text { Area } & =l \times b \\
& =8 \times 3=24 \mathrm{~cm}^{2}
\end{aligned}
$$

2. The given figure is a triangle.

$$
\begin{aligned}
\text { Hence, Perimeter } & =10+3+9 \\
& =22 \mathrm{~cm} \\
\text { Area } & =\frac{1}{2} \times 9 \times 3 \\
& =\frac{27}{2}=13.5 \mathrm{~cm}^{2}
\end{aligned}
$$

3. $\quad$ Perimeter $=16+56+18+30$

$$
\begin{aligned}
& =120 \mathrm{~cm} \\
\text { Area } & =\left(\frac{1}{2} \times 16 \times 12\right)+(30 \times 12)+\frac{1}{2}
\end{aligned}
$$


4. $\quad$ Perimeter $=2 \pi r$

$$
\begin{aligned}
& =2 \times \frac{22}{7} \times 35 \\
& =2 \times 22 \times 5=220 \mathrm{~cm} \\
\text { Area } & =\pi \mathrm{r}^{2}
\end{aligned}
$$



$$
\begin{aligned}
& =\frac{22}{7} \times 35^{5} \times 35 \\
& =22 \times 5 \times 35=3850 \mathrm{~cm}^{2}
\end{aligned}
$$

5. $\quad$ Perimeter $=2(l+b)$

$$
\begin{aligned}
& =2(6+4) \\
& =2 \times 10=20 \mathrm{~cm} \\
\text { Area } & =l+b \\
& =6 \times 4 \\
& =24 \mathrm{~cm}^{2}
\end{aligned}
$$


B. 1. (iv), 2. (i), 3. (iii), 4. (ii)

## Worksheet-31

## Interpretation of Pictograph and Bar Graph

A. 1. Class 4, 2. Class 2, 3. 129 boys
B. School bus
C. Football
D.

| Marks | No. of students | Tally marks |
| :---: | :---: | :---: |
| -9 | 4 | $\\|\\|\\|$ |
| 5 | 10 | $H \nmid H \mid$ |
| 2 | 10 | $H \nmid H \mid$ |
| -7 | 3 | $\\|\\|$ |
| -8 | 5 | $H \nmid$ |
| 6 | 9 | $H \nmid\\|\\|$ |

## Science-6

## Worksheet-1A

## Food : Where Does it Come From?

A. 1. (ii); 2. (iii); 3. (iv); 4. (ii)
B. 1. NECTAR; 2. CARNIVORES; 3. HERBIVORES; 4. OMNIVORES
C. Parasites : A parasite feeds of living hosts.

Scavengers: A scavenger feeds of dead organisms.
D. Peanut : It is rich in vitamins and minerals.


## Food : Where Does it Come From?

A. 1. True; 2. True; 3. True; 4. False; 5. True
B. 1. Crab, Fish; 2. Tomato, Brinjal; 3. Moong Daal, Black Gram; 4. Sugarcane, Potato;
5. Clove, Black peeper; 6. Sunflower, Mustard
C. 1. Plant; 2. Plant; 3. Sea; 4. Nature; 5. Animal; 6. Plant; 7. Animal
D. 1. Stem; 2. Sugarcane, Sugar beets; 3. Mushroom; 4. Plants, animals; 5. Stems

## Worksheet-2A

## Components of Food

A. 1. nutrients; 2. carbohydrates; 3. fat; 4. protein; 5. balanced diet; 6. deficiency disease
B. 1. (vii); 2. (i); 3. (v); 4. (iii); 5. (vi); 6. (ii); 7. (iv)
C. 1. The state of being fat or overweight is called obesity.
2. The fibrous indigestible material present in our food is called roughage.
3. The diet rich in all the nutrients is called balanced diet.

## Worksheet-2B

## Components of Food

A. 1. Wheat, Maize; 2. Amla, Lemon; 3. Night blindness; 4. Rickets; 5. Anaemia
B. 1. True; 2. False; 3. True; 4. True
C. 1. Food ingredients contain some components that are needed by our body. These components are called nutrients.
2. The fibrous indigestible material present in our food is called roughage.
3. A disease caused by lack of vitamins or minerals in a diet is called deficiency diseases.
D. Tasty food is not always nutritious and nutritious food may not always be tasty to eat. Certain examples in favour of the above statement are :

1. Potato chips are tasty to eat but not nutritious as they contain a huge amount of fat.
2. Green leafy vegetables either boiled or steamed are very nutritious but not good in taste.
E. 1. Starch; 2. Proteins; 3. deficiency disease; 4. fibre


Fibre to Fabric
A. 1. (c); 2. (b); 3. (b); 4. (d)
B. 1. (iv); 2. (v); 3. (i); 4. (iii); 5. (ii)
C. 1. natural fibres; 2. sheep and goat; 3. spinning; 4. stem
D. 1. Charkha; 2. hand spinning; 3. rainy season; 4. fruit; 5. bobbin


## Fibre to Fabric

A. Cotton/Jute
school bag
dusters
towels bed sheets

## Synthetic

gunny bag
table clothes

## Wool/Silk

sweater
curtains
blankets
B. (i) cotton; (ii) spinning; (iii) weaving; (iv) fibres
C. 1. carpets; 3. bags; 4. mats; 5. door mats; 6. rugs; 7. curtains; 8. chair coverages
D. 1. Removal of seeds from fibre is called ginning.
2. Weaving involves placing two sets of threads or yarn made of fibre, called warp and weft of the loom. The warps are drawn tight in parallel order, with the weft being interplaced at right angles to the warps.
3. The process of soaking jute stalks in water for $10-15$ days to soften is called retting.

## Worksheet-4A

## Sorting Materials into Groups

A. 1. opaque; 2. soluble; 3. salt and sand
B. 1. Chalk is not edible.
2. A flower is natural.
C. 1. Cotton, silk, nylon, wool
2. Stainless steel
3. Iron, cement, mud, wood, marble, bricks, glass, steel
4. leather, rubber, plastic
D. 1. (i); 2. (ii); 3. (i); 4. (i); 5. (iii)


## Sorting Materials into Groups

A. 1. Solubility is the property of a solid, liquid or gaseous chemical substance called solute to dissolve in a solid, liquid or gaseous chemical solvent.
2. The glowing property of a material is called lustre.
3. A solution in which no more solute can be dissolved is called saturated solution.
B. 1. Aim : To prepare a saturated solution of sugar.
2. Material Required : Sugarcubes, cold water in a clean spoon for stirring.
3. Theory : Sugar dissolves in water as a gap between the molecules of sugar is sufficient to accommodate sugar molecules.
4. Method : Add sugar in a glass of water and stir continuously till all sugar dissolves completely.
5. Observation : Sugar will slowly dissolve in water.
6. Results : A clear sugar solution will be formed.
7. Precautions : Avoid adding excess guar.
C. 1. Metal; 2. Glass; 3. Plastic; 4. Opaque; 5. Rubber

## Worksheet-5A

## Separation of Substances

A. 1. Sieving; 2. Water; 3. heterogeneous; 4. pure substance
B. 1. (ii); 2. (i); 3. (iv)
C. 1. (ii); 2. (i); 3. (iii); 4. (iv); 5
5. (vi);
6. (v)
D. Water dissolves a large number of substances in it. So it is called universal solvent.

## Worksheet-5B

## Separation of Substances

A. 1. When a solvent with a gas is heated the kinetic energy of both the solvent and solute increases.
2. Hot water holds less oxygen than cool water, shallow ponds get warmer than deeper ponds.
B. 1. False; 2. False; 3. False
C. 1. Supernatant liquid; 2. condensation; 3. evaporation; 4. saturated solution; 5. stainer or chani; 6. loading
D. 1. It is the property of the solute to get dissolved in the solvent.
2. The process of separating the grains from stalks is called threshing.
E. A saturated solution is a solution that contains the maximum amount of solute that is capable of being dissolved.
An unsaturated solution is a solution that contain less than the maximum amount of solute that is capable of being dissolved.

## Worksheet-6A

## Changes Around Us

A. 1. reversible; 2. irreversible; 3. reversible; 4. irreversible; 5. irreversible
B. 1. Iron parts are heated before they are fixed on the wooden parts of the bullock cart.
2. Cooking is an irreversible change.
3. On heating solids expand.
4. Conversion of cow dung to bio-gas is a chemical change.
C. 1. less; 2. hot, cold; 3. heat
D. Chemical change : In a chemical change the molecular composition of a substance completely changes and a new substance is formed.
Physical change : In a physical change the molecules are rearranged while their actual composition remains same.
E. Reversible : • melting of wax, • freezing of ice

Irreversible : • cooking of raw egg, • Ash obtained by the combustion of paper.

## Worksheet-6B

## Changes Around Us

A. 1. True; 2. False; 3. True
B. 1. (v); 2. (iv); 3. (i); 4. (iii); 5. (ii)
C. 1. increases; 2. expand; 3. physical; 4. desirable; 5. chemical
D. (i) burning of matchstick; (ii) dissolution of quicklime in water
E. 1. desirable change, permanent change
2. permanent change, chemical change
F. Undesirable changes are those changes which we do not want to take place. For examplerusting of iron, rottening of fruits and vegetables, global warming etc.
G. Melting of glass physical change Burning of incense stick chemical change

Tearing of cloth Cooking of food
physical change Formation of seed from flower chemical change Formation of cloud
chemical change physical change

## Worksheet-7A

## Getting to Know Plants

A. 1. stamen; 2. root; 3. leaves; 4. stem
B. 1. The process of water passing out from the surface of a plant or leaf.
2. Stomata is the very small holes in the surface of a leaf or the stem of a plant that allow gases to pass in or out.
3. Stamens are thin male part in the middle of a flower that produces a fine powder called pollen.
C. 1. It holds leaves in position and helps them to spread out as the stem and its branches grow. This ensures that they get enough light for photosynthesis. It conducts water and mineral salts from the roots to the leaves.
2. It is usually green due to the presence of a green pigment called chlorophyll. A leaf prepares food for the plants. The process of making food by the plant using carbon dioxide, water, chlorophyll, and light is called photosynthesis. Plants store food in the leaves, fruits, and stems in the form of starch.

- Plants breathe with the help of their leaves. Leaves of most plants have tiny openings called stomata (singular: stoma) under their surface. The exchange of gases takes place through the stomata.
- Leaves also lose water through the stomata. The loss of water through the stomata is called transpiration. Transpiration helps the plant in the following ways:
- It helps in cooling the leaves, just as loss of water during sweating helps in keeping our bodies cool.
- During transpiration, more water is 'pulled' upwards from the roots to compensate for the lost water. This water brings along important nutrients from the roots, which are required by the leaf. Thus, transpiration helps in the transport of nutrients within the plant.
D. 1. A tall plant that can live for a long time. Trees have a thick wooden central part from which branches grow.

2. The part of a plant that grows under the ground and takes in water and food from the soil.
3. Climbers are plants with a tender stem which grow with the help of external support.

## Worksheet-7B

## Getting to Know Plants

A. 1. Periwinkle, Hibiscus; 2. Rose, Magnolia
B. 1. The process by which green plants and some other organisms use sunlight to synthesize nutrients from carbon dioxide and water. Photosynthesis in plants generally
involves the green pigment chlorophyll and generates oxygen as a by-product.
2. Onion Potato; 3. Parallel and reticulate venation; 4. Fibrous root
C. 1. False; 2. True; 3. True; 4. True
D.


## Worksheet-8A

Body Movements
A. 1. skeleton; 2. ear, in many areas; 3. pairs; 4. hollow and thin; 5. stream lined
B. 1. False; skeleton is made up of many bones, joints and cartilage.
2. Upper jaw show false mixed joint.
3. Muscles working in pairs contract and expand simultaneously.
C. 1. femur; 2. cartilage; 3. heart and lungs
D. The skeletal system serves four main functions. Looking specifically at the human skeleton, those functions are:

1. It gives shape to the body. It also helps in the movement of the body.
2. It protects the internal organs from damage.
3. The bones are the storehouse of calcium.
4. Bone marrow present in the bones helps in the production of various cell types like RBCs and WBCs.

## Worksheet-8B

## Body Movements

A. 1. (iv); 2. (ii); 3. (ii); 4. (iii)
B. 1. The joint that allow movement in all directions. The rounded end of one bone fits into the hollow space of other bone by joint between upper arm and shoulder.
2. This type of joint allow movement in all planes. i.e., up and down, side and other planes, for example-head.
3. The joint which allows movement only in one plane is called hinge joint. For example-fingers, knee.
4. Those joints which do not allow movement are called fixed joint. These are found in human skull.
5. Ribs are joined with the backbone to form a case. This case is called as rib cage.
C. Blood cells are produced in the bone marrow.
D. A snail moves with the help of a muscular foot. An earthworm moves by contraction and extension of body using muscles. During movement, the earthworm first extends the front part of the body, keeping the rear portion fixed to the ground. While the snail fixes the front end and releases the rear end.
E. Bones are hard and cartilage is soft. Bones cannot be bends while cartilage can be bend.

## Worksheet-9A

## The Living Organisms and their Surroundings

A. 1. Nasticism or Nastic movements are non-directional responses to stimuli (e.g. temperature, humidity, light irradiance), and are usually associated with plants. The movement can be due to changes in turgor or changes in growth. The tropic movement is growth movement but nastic movement may or may not be growth movement.
2. An organism that is able to form nutritional organic substances from simple inorganic substances such as carbon dioxide.
3. The process of change by which an organism or species becomes better suited to its environment.
4. A plant which grows only in or on water is called Hydrophytes.
B. 1. touch me not; 2. stomata; 3. lungs; 4. frog
C. Living : leaves, snail, jackal, rose

Non-living : cheese, cotton, silk, bed, sugar, wood, plastic
D. 1. biotic; 2. dolphins and whales; 3. adaptation; 4. oxygen, carbon dioxide; 5. excretion

## Worksheet-9B

## The Living Organisms and their Surroundings

A. 1. Some submerged aquatic plants have narrow ribbon like leaves, so that they can easily bend with flowing water.
2. When they are in water they breathe with skin and when on land they breathe with their lungs. That is the reason frog live both in water and on land.
3. Because spines help prevent water loss by reducing air flow close to the cacti.
4. To avoid the accumulation of snow on the leaves.
B. 1. desert, aquatic, aerial
2. Hibernation is a state of minimal activity and metabolic depression. Hibernation refers to a season of heterothermy characterized by low body temperature, slow breathing and heart rate, and low metabolic rate.
3. Oxygen through photosynthesis and water through transpiration.
4. They lose very little water through urination and perspiration.
C. (i) they have sharp teeth.
(ii) they have strong hind legs to run faster.
(iii) they have special hair colour to match the background and hide from enemies.
(iv) they can survive on small amount of water for a long time.
D. 1. (ii); 2. (iv); 3. (iii); 4. (i)

## Worksheet-10A

## Measurement of Distance and Motion

A. 1. Rectilinear and circulatory or curvilinear.
2. To avoid the confusion and make the measurement universal.
B. 1. (b); 2. (d); 3. (c); 4. (c)
C. 1. False; 2. True; 3. True; 4. False
D. 1. (iii); 2. (iv); 3. (v); 4. (i); 5. (ii)

## Worksheet-10B

## Measurement of Distance and Motion

A. 1. Measuring tape; 2. Moving of wheel; 3. rocking chair; 4. linear motion
B. 1. $1420 \mathrm{~mm} ; \mathbf{2 .} 5400 \mathrm{~m} ; \mathbf{3} .750 \mathrm{~cm}$
C. 1. linear motion; 2. circular motion; 3. wave motion; 4. periodic motion; 5. rectilinear motion; 6. oscillatory motion
D. Similarities : - The blades of the fan and the bicycle are fixed at a point. • Both have circular motion about their respective fixed point.
Differences : - A bicycle have a linear motion, blander of a ceiling fan do not have a linear motion. - the motion of the blades of a fan is periodic, whereas the motion of a bicycle is rectilinear motion.

## Worksheet-11A

Light, Shadows and Reflections
A. 1. False; 2. False; 3. True; 4. False
B. 1 .

| Luminous Objects | Non Luminous Objects |
| :--- | :--- |
| - An object that gives out light is called |  |
| a luminous object. |  | \(\left.\begin{array}{l}• An object that does not gives out light is <br>


called a non-luminous object.\end{array}\right\}\)| Eg : Sun, candle, lamp, torch, diya,Eg : paper, table, kite, bell, bed, clock, <br> fireflies, lantern etc. |
| :--- |
| buildings etc. |

2. 

| Image | Shadow |
| :--- | :--- |
| - It is formed by intersection of | • Shadow is formed when light does not |
| reflected rays. |  |
| - Image is seen when reflected rays behind the object. |  |
| approach to observer's eyes. |  | • No light enters the observer's eyes.

3. 

| Translucent objects | Transparent objects |
| :--- | :--- |
| - The objects through which light can | • The objects through which light can pass |
| pass partially are called translucent <br> objects. | easily are called transparent objects. <br> - for example : tracing paper, waxed <br> paper. |
| • Example : water, glass, air. |  |

## Worksheet-11B

## Light, Shadows and Reflections

A.

B. 1. (d); 2. (c)
C. 1. Image;
2. Pinhole camera cannot be used for studying moving objects.
3. The shadows will be red and blue, when we turn off the blue light, leaving on the red and green lights, the screen will appear to be yellow. Whether a mixture of red and green light or yellow light alone whenever the cones in our eyes are stimulated in just these proportions, We will see the colour yellow.

## Worksheet-12A

## Electricity and Circuits

A. 1. negative to positive; 2. control device; 3. conductors; 4. positive
B. Conductors : copper, iron, silver, tap water, gold, brass, aluminium

Insulators : rubber, pure water, plastic, wood, cotton.
C. 1. The current will not flow through it.
2. The current will flow through the metal key.
D.

Dry Cell Battery


## Worksheet-12B

## Electricity and Circuits

A. When we consume less power, we reduce the amount of toxic fumes released by power plants, conserve the earth's natural resources and protect ecosystems from destruction.
B.

C.

D. 1. True; 2. False; 3. True; 4. True

## Worksheet-13A

## Magnets and Magnetism

A. 1. Repulsion; 2. lodestone; 3. float
B. Magnetic : Iron, cobalt, nickle.

Non-magnetic : paper, leather, grass, plastic.
C. 1. False; 2. False; 3. False
D. 1. a. Magnet has two poles- North pole and south pole.
b. Unlike poles attract each other and like poles repel.
2. Iron.
3. The two ends of a magnet are called poles.
4. Iodestone.
E. 1. (ii); 2. (iii); 3. (i); 4. (iv); 5. (v)

## Worksheet-13B

## Magnets and Magnetism

A. 1. (i); 2. (iii); 3. (ii); 4. (iii)
B.


Bar Magnet


Ring Magnet
C. 1. magnetic; 2. repel; 3. compass; 4. attract
D. 1. False; 2. False; 3. True; 4. True

## Worksheet-14A

## Water

A. Water, as vapour goes into atmosphere by the process of evaporation and transpiration and forms clouds which on condensation fall in the form of rain and snow.
B. 1. cooking, drinking, bathing, washing etc.
2. Farming, gardening, fishing etc.
3. Industrial purposes, manufacturing.
4. Hydropower generation.
C. Well, Rain (draw pictures yourself.)
D. 1. The cycle of processes by which water circulates between the earth's oceans, atmosphere, and land, involving precipitation as rain and snow, drainage in streams and rivers, and return to the atmosphere by evaporation and transpiration.
2. The harvesting of rainwater simply involves the collection of water from surfaces on which rain falls, and subsequently storing this water for later use. Normally water is collected from the roofs of buildings and stored in rainwater tanks.
E. Three ways to conserve water :

1. Rainwater harvesting system should be followed in villages, towns and cities.
2. Industries should not discharged effluents directly into water bodies.
3. Efforts should be made by each individual at a personal level to conserve water.

## Worksheet-14B

## Water

A. 1. False; 2. False; 3. False; 4. False
B. 1. Rain, lakes; 2. River, Wells; 3. drinking, washing, bathing, cooking
4. loss of human life, water borne diseases
C. 1. Rainwater harvesting; 2. evaporation; 3. drought; 4. flood
D.


Water Cycle

## Worksheet-15A

## Air Around Us

A. 1. - Sustain life and growth.

- Combustion.
- Maintain temperature.
- Supplies energy.
- Photosynthesis

2. Transpiration and photosynthesis.
B. 1. oxygen; 2. nitrogen and oxygen; 3. skin, 4. odourless, visible; 5. space, weight; 6. photosynthesis
C. 1. (iii); 2. (vi); 3. (v); 4. (i); 5. (ii); 6. (iv)

## Worksheet-15B

## Air Around Us

A. 1. Used in grinding of grains and spices.
2. Pumping water and sawing weed.
3. Today these are also used for creating electricity.
B. 1. (iii); 2. (i); 3. (iii)
C. 1. Nitrogen, oxygen together is $99 \%$ in air.
2. Aquatic animals respire through dissolved air.
3. Motion of air is called wind.
D. Do yourself.

## Worksheet-16

## Garbage in, Garbage out

A. 1. Use cloth and paper bags.
2. Avoid using disposables.
3. Use 3 R's formula.
B. Reduce

Paper
Crisp packets
Disposable
Plastic bottles

Reuse
Glass jars
Plastic bags
Newspapers
Paper bags

## Recycle

Paper
Cardboard
Loose plastic begs
Metals
C. 1. biodegradable; 2. trees; 3. water; 4. water.
D.


## Social Science-6

## Worksheet-1

## An Introduction to History

A. 1. History is a chronological account of events as they took place in the past.
2. The science of excavating and studying old remains.
3. Scholars who study the past are called historians.
4. The written records engraved on very hard surfaces like stone or metal.
B. 1. Bangladesh; 2. Thar; 3. Rodes; 4. Palm leaf; 5. literary.
C. 1 .

## Four Major Pillars of History



The three types of sources of history:

2. The three oceans surround India on three sides
3. The regions of Indian subcontinent:


## Worksheet-2

History- When, Where and How
A. 1. Yangtze river valley; 2. Magadha; 3. The Rigveda; 4. Prakrit; 5. Palm leaf
B. 1. (a); 2. (d); 3. (b); 4. (a)
C. 1. We know about the past through history.
2. Archaeologists are people who study several sources to us about the past.
3. The written records engraved on very hard surfaces like stone or metal.
4. Birth of Jesus Christ has been taken as year 0 (zero). Any event before that is called Before Christ (BC) also called as Before Common Era and any event after the birth of Jesus is called Anno Domini (AD).
D. 1. (iv), 2. (iii), 3. (ii), 4. (i)

## Worksheet-3

## The Earliest People

A. 1. (iv); 2. (iii); 3. (ii); 4. (i)
B. 1. The period when mostly stone tools were made is known as stone age.
2. This is also called new stone age. The tools of this age were much sharper and polished to sparkle. A large number of axes, sickles, spears and arrow heads from these sites have been found.
3. Wheat and barley.
4. A flint is a hard grey stone that can produce a spark whenever it is rubbed.
C. 1. (b); 2. (b); 3. (d); 4. (c)

## Worksheet-4

## Beginning of Farming and Herding

A. 1. Pakistan; 2. Crops; 3. pot excavated; 4. Farming, fire; 5. small
B. 1. (iv); 2. (ii); 3. (i); 4. (iii)
C. 1. The new stone age started a new era in history. After hading a nomadic life for years, man around 10,000 years began to lead a settled life. Many new developments changed the early human's life.
2. As seed, as food, as gifts, as means of exchange and stored for food.
3. Agriculture helped the man to lead a settled life.
D. 1. The taking of animals for various purpose is referred to as domestication.
2. Ancient wood that has hardened into stone is called fossil wood.
3. Many farmers and herders lived in groups, which are called tribes.
4. Ancient people who hunt wild animals and gather forest produce.

## Worksheet-5

## The Earliest Cities— The Harappan Civilisation

A. 1. (b); 2. (c); 3. (a); 4. (c)
B. 1. Lothal; 2. Gulf of Khambat; 3. burst brides; 4. Indus region.
C. 1. If there is not enough rainfall, water is shared and supplied in the fields when the plants are growing.
2. People who knew how to write, who helped people the reals and perhaps wrote on stone materials that have survived.
3. Harappan objects were made of stone, shell and metal. Copper and bronze were used to make tools, weapons, ornaments and vessels. Harappans also made stone seals. They made pots with beautiful place designs.
D. 1. Fortresses for protecting a city or town, places of refugee or safety are called citadels.
2. Stamping tools made of clay or metal with a design on their one side are called seals.


## The Vedic Period ( 1500 BC-600 BC)

A. 1. (b); 2. (a); 3. (c); 4. (a)
B. 1. True; 2. False; 3. True; 4. True
C. 1. Sages composed the vedas.
2. There were two groups of people in terms of their work the brahmins and the rajas.
3. About 3500 years.
D. Religious poems composed in praise of gods were called Hymns and hymns of the vedas were called suktas, which means well said.

## Worksheet-7

## The Early States- Janapadas and Mahajanapadas

A. 1. Each of the four categories of the Hindu society based on occupation of different set of functions was referred to as varnas.
2. Some janapadas which became more important than others.
3. Kingdoms were referred to as janapadas.
B. 1. Aryans; 2. tribe; 3. taxes; 4. monarchy
C. 1. (a); 2. (b); 3. (a); 4. (a)
D. 1. True; 2. True; 3. False; 4. False
E. 1. (i); 2. (iii); 3. (iv); 4. (ii)

## Worksheet-8

## Emergence of New Ideas and Religions

A. 1. (a); 2. (b); 3. (a)
B. 1. (iv); 2. (ii); 3. (iii); 4. (i)
C. 1. They stressed the need to creak a derive for knowledge to achieve moksha. They also focused on the fact that knowledge of Atman (self soul) should be acquired and related with parmatman (whmate reality).
2. Permanent shelters of bhikkhus are called viharas.
D. 1. Man and woman who joined the sangha went to cities and villages to beg for food during fixed hours.
2. Permanent place of living of the monks and mens of Jainism and Buddhism is known as monastery.
3. Association of those who left their homes.

## Worksheet-9

## The First Empire and The Great Emperor, Ashoka

A. 1. Chanakya; 2. Dharma; 3. grandson; 4. Taxila; 5. Chandragupta's
B. 1. (iv); 2. (iii); 3. (ii); 4. (i)
C. 1. (b); 2. (b)
D. 1. Chandragupta Maurya the grand father of Ashoka founded the Mauryan empire. He did so more than 2300 years ago.
2. Agriculture, art and architecture.
E. 1. False; 2. True; 3. False; 4. True

## Worksheet-10

## Life in Villages and Towns

A. 1. hereditary, 2. Sangam, 3. Arretine, 4. Sangam
B. 1. (c), 2. (b), 3. (a)
C. 1. Rows of pots of ceramic rings arranged are on top of other came to he known as ring wells.
2. The village headman in the northern part of the country called the Grambhojaka.
3. The Cholas and the Pandyas period.
D. 1. Guild of crafts persons or traders is called shreni.
2. Big land owners were called vellalars in Tamil region.

## Worksheet-11

## India after the Mauryan Period (200 BC to AD 300)

A. 1. The Chinese pilgrims who came to India were Fa Xian, Xuan Zang and I-Qing.
2. They came to India to get first hand knowledge about Buddha.
3. They visited places associated with the life of Buddha to collect books and statues of Buddha.
4. Nalanda was famous for Buddhist monastery.
B. 1. (ii), 2. (iv), 3. (i), 4. (v), 5. (iii)
C. 1. True, 2. True, 3. True, 4. False, 5. True, 6. True, 7. False
D. They were holy persons who had attained enlightment.

## Worksheet-12

## India from the 4th Century to the 7th Century

A. 1. Kanchipuram; 2. Harisena; 3. Siddhachol
B. 1. (a); 2. (b); 3. (b); 4. (b)
C. 1. Sanskrit; 2. Hiuen Tsang; 3. Mahendraverman I; 4. Organisation of merchants;
5. Bhuktis; 6. Mathura and Sarnath; 7. Gwalior
D. 1. False; 2. False; 3. True; 4. False; 5. False

## Worksheet-13

## Culture and Science in Ancient India

A. 1. Vedas are the earliest forms of Indian scripture.
2. Puranas of literary means old. The purana contain stories about Hindu's Gods and Goddesses.
B. 1. (a); 2. (a); 3. (c); 4. (b)
C. 1. Puranas and Mahabharata; 2. Aryabhata; 3. Vedas; 4. Durga temple; 5. Buddha
D. 1. False; 2. True; 3. False; 4. True; 5. True
E. 1. (ii); 2. (iv); 3. (i); 4. (v); 5. (iii)

A. 1. The sense of variety that exists in the traits, books, behaviour, culture, religion, language, abilities, resources and opportunities related to different people is saved to be diversity.
2. The differences between two or more people that arise because of their abilities, resources and opportunities or their caste etc., are termed as inequalities.
B. 1. (a); 2. (b); 3. (b)
C. 1. Southwest; 2. Discovery of India; 3. pashmina wool; 4. inequality.
D. 1. If all had similar lives in aspects of region, religion, opportunities etc., then writers would lack innovation.
2. The main occupations are cultivation and fishing. They grow spices like pepper, cloves and cardamoms. They are good traders also.

## Worksheet-15

## Diversity and Discrimination

A. 1. The process of separating or dividing a person from other person on the basis of caste, creed and colour is called discrimination.
2. Prejudice means judging of other people negatively or seeing other people inferior.
3. The process of fixing people into a bad image is called stereotypes.
4. Persons engaged in excavanging and is removal of dead animals are called untouchables.
B. 1. untouchables; 2. Dr Bhim Rao Ambedkar; 3. discriminating
C. 1. (iv); 2. (iii); 3. (ii); 4. (i)
D. 1. Considering all as equal is called equality.
2. Inequality in the term in which people are not equal on the basis of economic conditions and opportunities available to them. Whereas the process of separating/dividing one person from another on the basis of caste, creed and colour, is called discrimination.
E. 1. True; 2. True; 3. False; 4. True; 5. False

## Worksheet-16

## Government

A. 1. (b); 2. (b); 3. (c); 4. (c)
B. 1. (iv); 2. (iii); 3. (ii); 4. (i)
C. Monarchy : A system of government which is run by a king/queen on a hereditary basis and where people do not get their say in decision making is called a monarchy. The king/queen is said to be the monarch.
Democracy : A system of government in which the people of the country choose their leaders to rule is called democracy. The elected government is answerable to its people for its decisions.
D. 1. The rules laid down by the government for the proper functioning of the country are called laws.
2. The rule that allows are adults in the country, irrespective of caste, creol, gender, literacy, occupation etc., to vote and take part in the elections, is the universal adult franchise.

## Worksheet-17

## Key Elements of a Democracy

A. 1. (a); 2. (b); 3. (b); 4. (b)
B. 1. British; 2. Vote, employment; 3. Media; 4. fixed
C. 1. False; 2. True; 3. True; 4. False
D. 1. It refers to a system under which separation is practiced on the basis of race.
2. Differences between people of various castes, cultures or creed. The conflict may arise on the name of region, religion, language etc.

## Worksheet-18

## Rural Local Government- The Panchayati Raj

A. 1. Gram Sabha is a meeting where adult people directly participate and seek answers from their elected representatives.
2. Janpad Panchayat consisting of several gram panchayats at block level is called Janpad Panchayat.
3. Gram Panchayat are bodies of elected representatives at village level.
B. 1. (a); 2. (a); 3. (b); 4. (c)
C. 1. (iv); 2. (iii); 3. (ii); 4. (i)
D. Watershed development helps in conserving water and recharging the ground water resources.
Under watershed development scheme the following tasks are performed :

- Trees are planted.
- Check dams and tanks are constructed to harvest rainwater.
- Ample quantity of water is available both for drinking and irrigation.
- Barren lands are turned into green meadows.
- Arable land is redeemed.


## Worksheet-19

## Rural Administration

A. 1. (c); 2. (b); 3. (a)
B. 1. bund; 2. police; 3. villager; 4. women
C. 1. (iv); 2. (iii); 3. (ii); 4. (i)
D. 1. - It maintains law and order in villages. - It keeps records of its land and revenue.
2. Tehshildar is the head of the tehsil who supervises the work of patwaris and kanungoes.
3. Few year back, only sons got a share in their father's property. After the Hindu Succession Amendment Act 2005 women are entitled to an equal share in their father's property.

## Worksheet-20

## Urban Local Government

A. 1. (d); 2. (c); 3. (a)
B. 1. different; 2. 25-30; 3. ward/area; 4. ward councillor
C. 1. False; 2. True; 3. False; 4. False
D. 1. The head of a ward of a municipality is called a councillor.
2. The head of a municipal corporation is called a mayor.
3. The members of the municipal corporation elect some matured and returned people of the city to the corporation, they are called aldermen.
E. Municipal Council : The organisation that looks after the welfare of small towns is known as municipal council.
Municipal Corporation : The organisation that takes care of big cities is known as municipal corporation.

## Worksheet-21

## Rural Livelihoods

A. 1. underground; 2. two third; 3. Pudupet
B. 1. (iii); 2. (ii); 3. (i)
C. 1. True; 2. True; 3. True; 4. False
D. 1. Catamaran; 2. Pesticide; 3. Harvesting
E. 1. The movement of large number of people from one place to another to find jobs.
2. This is a type of farming in which the land on a hill slope is made into flat plots and carved out in steps. The sides each plot are raised in order to retain water. This allows water to stand in the field which is suitable for cultivation.
F. Working in rural areas is found only in the harvesting season. People work as daily labourers. Women have to do their domestic duties and even work outside. People find it very difficult even to meet their basic needs. About two third of India's agricultural labourers are landless labourers.

## Worksheet-22

## Urban Livelihoods

A. 1. (iii); 2. (v); 3. (i); 4. (ii); 5. (iv)
B. 1. The unorganized sector consists of casual workers, self employed person in unorganized sector and private households that do not receive fixed or regular wages, are not eligible either for paid, sick or annual leave.
2. The work that we do to earn our living is called an occupation.
3. Primary, Secondary and Tertiary.
4. Men having permanent jobs get a regular salary with perks and other benefits every month. They can expect their job to continue for a long period of time.
C. 1. True; 2. True; 3. False; 4. False
D. The crossing where labourers wait for jobs on the basis of daily wages, is known as labour chowk.
E. Migration means shifting from one place to another. Due to lack of employment in rural areas villagers migrate to cities. This urns rural urban livelihoods. It leads to overcrowding of cities and puts a burden on civic amenities in a city. However it has disadvantages. It leads to prosperity. The rural people send the income to their dependants in rural areas. Further it helps urban people to expand their business with the rural.

## Worksheet-23

## The Earth in the Solar System

A. 1. A pattern or design of stars is called a constellation such as saptarishi.
2. Revoluting of heavenly bodies around the sun or their planet on their paths is called revolution.
3. Small pieces of rocks which revolve round the sun.
4. A huge system of millions of heavenly bodies and stars like the milky way form a galaxy.
B. 1. size, shape; 2. big, hot; 3. heat, light; 4. friction
C. 1. (v); 2. (iv); 3. (iii); 4. (ii); 5. (i)
D. From the outer space the earth appears blue because its $2 / 3$ rd surface is covered by water. It is therefore, called a blue planet.
E. Planet : - A planet does not have its own light and heat.

- A planet is usually smaller than a star.

Star : - A star have its own heat and light.

- Stars are very huge objects compared to a planet.


## Worksheet-24

## Globe : Latitudes and Longitudes

A. 1. (c); 2. (a); 3. (b); 4. (b)
B. 1. half; 2. grid; 3. frigid; 4. longitude.
C. 1. (iv); 2. (iii); 3. (ii); 4. (i)
D. Longitudes : These are imaginary lines. They run from the north pole to the south pole. They are 360 in number.
Latitudes : These are imaginary circles. They run parallel to the equator. They are 150 in number.

## Worksheet-25

## Motions of the Earth

A. 1. Plane formed by the orbit is know as the orbital plane.
2. The circle that divides the day from night on the globe is called the circle of illumination.
3. In the northern hemisphere the longest day and the shortest night occur on 21 st June. In the southern hemisphere the shortest day and the longest night occur on this day. The position of the earth is called summer solstice.
B. 1. (iv); 2. (iii); 3. (ii); 4. (i)
C. 1. earth day; 2. Capricorn; 3. 23rd September; 4. rotation; 5. spherical.
D. Summer solstice : 1. It occurs on 21st June.; 2. In this, Northern hemisphere tilts towards the sun.; 3. In this, sun rays fall directly on the tropic of cancer.
Winter solstice : 1. It occurs on 22nd December.; 2. In this, Southern hemisphere tilts towards the sun.; 3. In this sun rays fall directly on tropic of Capricorn.
E. The earth reverses light from the sun because of its spherical shape only half of it light from the sun at a time. The portion facing the sun experiences day time while the other portion away from the sun experiences night.

## Worksheet-26

## Maps

A. 1. The four directions North, South, East and West are called cardinal points.
2. A sketch is a drawing mainly based on memory and spot observation and not to scale.
3. To represent buildings, roads, bridges, etc., on the map we use symbols. These symbols are of universal significance.
B. 1. (a); 2. (a); 3. (d); 4. (b)
C. 1. True; 2. True; 3. False; 4. False
D. A sketch is a drawing mainly based on memory and spot observation and not to scale where as a plan is a drawing of a small area on a large scale.

## Worksheet-27

## Major Domains (Spheres) of the Earth

A. 1. $8848 \mathrm{mtrs} . ;$ 2. Temperature decreases as we go up higher and longer.
3. The Sahara Desert in Africa.; 4. It is because it is very salty.
B. 1. False; 2. False; 3. False; 4. True
C. 1. (a); 2. (c); 3. (b); 4. (a)
D. 1. Mariana Trench; 2. Indian; 3. biosphere; 4. Eurasia

## Worksheet-28

## Major Landforms of the Earth

A. 1. Plant species are considered as flora.
2. Animal species are considered as fauna.
3. A moving heap of snow and ice is called glacier.
4. The process in which the surface of the earth is worn away is termed as erosion.
B. 1. (c); 2. (b); 3. (b); 4. (a)
C. 1. True; 2. False; 3. True; 4. True
D. 1. volcanic; 2. river basins; 3. mauna kea (havii); 4. plateau; 5. harsh; 6. heights; 7. Russia

## Worksheet-29

## India : Our Motherland

A. 1. An area of land formed at the mouth of the river. It is usually triangular in shape.
2. A small river or stream that contributes its water to the main river by discharging it into main river from either side.
3. A piece of land that is surrounded by water on all sides.
B. 1. (a); 2. (b); 3. (d)
C. 1. China; 2. three; 3. western; 4. narrow
D. 1. These are very fine soils brought down by rivers and deposited in the river basins.
2. The peninsular plateau is surrounded by the coastal plains from both eastern and western sides. The plains on the east coast are known as eastern coastal plains, whereas on the west side are known as western coastal plains.
E. Thar desert, also called Great Indian Desert, arid region of rolling sand hills on the Indian subcontinent. It is located partly in Rajasthan state, northwestern India, and partly in Punjab and Sindh provinces eastern Pakistan. The That Desert covers some 77,000 square miles of territory.

## Worksheet-30

## India : Physical Features

A. 1. coral; 2. Jindhagadar peak; 3. Indus river; 4. deposition of sediments; 5. three
B. 1 .


## Worksheet-31

## India : Climate

A. 1. Migratory birds : Birds that migrate to our country in the winter season every year. They arrive in December and stay till early March.
2. Climate : It is the average weather conditions which have been measured over many years.
3. Loo: It is a hot and dry wind that blows during the day in summer.
B. 1. (b); 2. (d); 3. (a); 4. (b)
C. 1. True; 2. False; 3. False; 4. True
D. 1. Monsoon; 2. soil; 3. common; 4. great Indian desert; Rann of Kuchchh; 5. Jaisalmer

## Computer Science-6

## Worksheet-1A

## Computer System and Software

A. 1.
(i); 2. (iii);
3. (iii);
4. (iii); 5
5. (i); 6. (i); 7. (i)
B. Hardware components that are used to provide data and control signals to a computer are called input devices. For example : keyboard, mouse, scanner, microphone, Optical Character Reader (OCR).
Hardware components that are used to received data from a computer to perform a task are called output devices. For example monitor, speaker, printer.
C. 1. Processing; 2. keyword; 3. ROM; 4. information

## Worksheet-1B

## Computer System and Software

A. 1. (v); 2. (iv); 3. (i); 4. (ii); 5. (iii)
B. 1. True; 2. False; 3. False; 4. False
C. 1. Application software is a computer software designed to perform a group of coordinated functions, tasks or activities for the benefit of the user.
2. System software is a type of computer program that is designed to run a computer's hardware and application programs. If we think of the computer system as a layered model, the system software is the interface between the hardware and user applications.
3. Utility software, often referred as utility is a system software that is designed to help analyze, configure, optimize or maintain a computer and enhance the computer's performance. It is a program that performs a specific task, which is usually related to managing the system resources.
D.

| Output Devices | Input Devices |
| :--- | :--- |
| 1. Hardware components that are used <br> to received data from a computer to <br> perform a task | 1. Hardware components that are used <br> to provide data and control signals to <br> a computer. |
| 2. Get the data from the computer. | 2. Send data to the computer. |
| 3. Example : monitor, speaker, printer. | 3. Example $:$ keyboard, mouse, scanner, <br> microphone, Optical Character <br> Reader (OCR). |

## Worksheet-2A

## More on MS Windows 7

A. 1. (iii); 2. (iii); 3. (iv)
B. File : A file is an object on a computer that stores data, information, settings, or commands used with a computer program. In a GUI (graphical user interface), such as Microsoft Windows, files display as icons that relate to the program that opens the file.
Folder : A folder is a storage space where many files can be placed into groups and organize the computer. A folder can also contain other folders.
Wildcards : Wildcard alternatively referred to as a wild character or wildcard character, a wildcard is a symbol used to replace or represent one or more characters. Wildcards are typically either an asterisk (*), which represents one or more characters or question mark (?), which represents a single character.
Fonts : A font is a graphical representation of text that may include a different typeface, point size, weight, color, or design.
Control panel : The Control Panel is a component of Microsoft Windows that provides the ability to view and change system settings. It consists of a set of applets that include adding or removing hardware and software, controlling user accounts, changing accessibility options, and accessing networking settings.

## Worksheet-2B

## More on MS Windows

A. 1. ripping; 2. taskbar; 3. control; 4. system tray; 5. shutdown
B. 1. hold down windows key and press down arrow key.
2. Window key + Shift + Left Arrow
3. Alt + Shift + tab
4. $\mathrm{Ctrl}+\mathrm{Esc}$
C. 1. Finding a File or Folder

1. Click Start, and then Computer.
2. Click Organize, and then Folder and search options.
3. Click Search, and enable Always search files names and contents (this might take several minutes).
4. Click OK to confirm.

## 2. How to Add Fonts

1. Find a reputable font site. ...
2. Download the font file that you want to install. ...
3. Extract the font files (if necessary). ...
4. Open the Control Panel. ...
5. Click the "View by" menu in the upper-right corner and select one of the "Icons" options. ...
6. Open the "Fonts" window. ..
7. Drag the font files into the Fonts window to install them.

## 3. How to Delete Fonts

1. Open Settings.
2. Click on Personalization.
3. Click on Fonts.
4. Select the font you want to remove.
5. Under "Metadata, click the Uninstall button.
6. Click the Uninstall button again to confirm.

## Worksheet-3A

## More on Algorithms and Floweharts

A. 1. (ii); 2. (iii); 3. (i)
B. 1. A set of instructions which is used to execute a specific task or solve a mathematical or logical problem is called is algorithm.
2. Algorithm breaks every problem into a set of small and stepwise solution.
3. The pictorial representation of an algorithm is called a flowchart.
4. Some of the common uses of flowcharts include:

- Planning a new project.
- Documenting a process.
- Modeling a business process.
- Managing workflow.
- Auditing a process.
- Mapping computer algorithms.
- Data management.
- Chemical and process engineering.
C. True and False :

1. True; 2. False; 3. True; 4. True

## Worksheet-3B

## More on Algorithms and Flowcharts

A. 1. $\rightleftarrows$
2.

3.

4.

5. $\square$
6.

B. Flowcharts have many limitations, including oversimplifying, repeated modifications and reproduction. If you draw flowcharts by hand, it will be quite time and effort consuming.
C.


## Worksheet-4A

## More Features of MS Word 2010

A. 1. (ii); 2. (i); 3. (iv); 4. (i)
B. 1. rows, columns; 2. layout; 3. home; 4. Ctrl + E; 5. Insert
C. 1. bar tab; 2. indent; 3. bulleted and numbered lists


## More Features of MS Word 2010

A. 1. (iv); 2. (iii); 3. (ii); 4. (i)
B. 1. Clipboard have you can share copied content and use the copy and paste commands.
2. Font where you can change the way the text appears in the document.
3. Paragraph have you can change the format or layout of your paragraphs and headings.
4. Styles where you can apply a preset style for headings and main bodies of text.
5. Editing where you can select, search, find and replace text.

D. 1. True; 2. True; 3. True
E. 1. $\mathrm{Ctrl}+\mathrm{R}$; 2. $\mathrm{Ctrl}+\mathrm{L} ;$ 3. $\mathrm{Ctrl}+\mathrm{E}$


## Worksheet-5A

## Mail Merge

A. 1. Mail merge consists in combining mail and letters and pre-addressed envelopes or mailing labels for mass mailings from a form letter. Microsoft Word can insert content from a database, spreadsheet, or table into Word documents.
B. 1. Mail Merge; 2. Mail Merge; 3. Record; 4. data source
C. 1. mail merge; 2. tab key; 3. database; 4. preview results group of the mailings tab
D. 1. True; 2. False; 3. True; 4. True


Mail Merge
A. 1. (v); 2. (vi); 3. (iv); 4. (i); 5. (iii); 6. (ii)
B. 1. (ii); 2. (i); 3. (iii); 4. (i)
C. 1. The placeholders, such as addresses and greeting are called fields.
2. A structured set of data held in computer, especially one that is accessible in various ways.

## Worksheet-6A

## More about MS Excel 2010

A. 1. (i); 2. (iii); 3. (ii); 4. (iv)
B. Excel has the following components : Quick access toolbar, title bar, ribbon, status bar, worksheet, workbook, raw, column, cell, cell address, cell pointer, range of cells and formula bar.
C.

| Worksheet | Workbook |
| :--- | :--- |
| Worksheet is a work area made up of <br> horizontal rows and vertical columns <br> where in row enter and work with data | A workbook is a collection of worksheets <br> starred under a single file name. By default <br> three worksheet are added to the workbook. |

D. Types of data that can be added to an excel sheet are Numbers, Data and Time formulas and text.

## E. 1. G8, 2. J108

F. Every cell in a Excel worksheet is defined using an address that corresponds to the column and the row number. For example if fifth row and column B intersect, the address of the cell formed by this intersection becomes B5.

## Worksheet-6B

## More about MS Excel 2010

A. 1. cell; 2. autofill; 3. cell pointer; 4. formula bar; 5. range of cells; 6. workbook.
B. 1. False; 2. True; 3. False; 4. False; 5. True; 6. False
C. - Select the cell and type the data.

- Press the enter key or click the enter button on the formula bar to accept the entry.
- To reject the entry, press the Esc key or the cancel button.
D. A formula is a expression involving number values, operators like,+- , and cell addresses for performing calculations on worksheet. All formulas begin with an equal ( $=$ ) sign.
E. The steps to be followed for renaming a worksheet are :
- Double click the name of the worksheet on the worksheet tab.
- Type a new name and press enter.
F. Autofill is a feature in excel that allows you to quickly create a series of numbers, dates or other items that follow a particular pattern. Using autofill, you can fill the cells using the pre defined or user defined series of data.


## Worksheet-7A

## Formatting Data in MS Excel 2010

A. 1. (iv); 2. (i); 3. (ii); 4. (iii)
B. 1. border; 2. Orientation; 3. number; 4. alignment
C. 1. True; 2. True; 3. False; 4. True; 5. False; 6. False
D. - Click the arrow next to the borders option in the font group on the home tab.

- Choose a line colour and a style for the border using the line colour and line style options under the draw borders section.
E. Draw border : The cursor changes to a pencil. To apply a border, draw the mouse on the cell boundary to color the border needs to be applied.
Draw border grid : The cursor shape changes to a pencil with a small square next to it. Drag the mouse on the cell or the range of cells to which the border needs to be applied.


## Worksheet-7B

## Editing Data in MS Excel 2010

A. 1. (iv); 2. (i); 3. (ii); 4. (i); 5. (ii); 6. (ii)
B. 1. Esc; 2. single cell; 3. delete cells;
4. right-clicking;
5. paste.
C. 1. True, 2. False, 3. True, 4. False
D. 1. Insert options - Insert sheet rows
2. Insert option - Insert cells
3. Format option - Column width
4. Delete option - Delete sheet columns


## Introduction to QBasic

A. 1. (i); 2. (iii); 3. (ii); 4. (iii)
B. 1. Programmers, 2. beginners, 3. menu bar, 4. untitled, 5. output, 6. Numeric constants
C.

| Assembly language | High-level language |
| :--- | :--- |
| An Assembly language is the language in <br> which instructions are given in the form of <br> short words called mnemonics such as <br> MOV, ADD and LD | A High-level language is the language in <br> which programs are written using English |
| words and mathematical symbols. |  |

D. QBASIC is a high-level computer language. It is a simple language which is easy to learn and master. This language is suitable for beginners. BASIC stands for Beginners Allpurpose Symbolic Instruction Code.
E. Click File for New Program.

- A new file opens with the program name Untitled. You can write the program in the work area.


## Worksheet-8B

## Introduction to QBasic

A. 1. variable; 2. question mark (?); 3. machine language; 4. high level; 5. statements;
6. dollar (\$); 7. plus (+)
B. 1. True; 2. False; 3. True; 4. False; 5. False
C. 1. Click File - save as dialog box opens.
2. Type the name of the file and choose the folder in which you want to save it. Click ok.
D. A constant, as the name suggests, is a value that does not change during the execution of the program. BASIC has two types of constants, numeric constants and string constants.
E.

| Numeric constants | String constants |  |
| :--- | :--- | :---: |
| Numeric constants are positive or negative <br> numbers without decimal points. | String constants are a sequence of <br> lphabets, digits, characters such as \# and <br> $\%$ enclosed with double quotes. |  |

## Worksheet-9A

## Statements in QBasic

A. 1. (i); 2. (iii); 3. (iv); 4. (iv); 5. (i); 6. (ii)
B. The print statement is used to display numbers, messages or values of variables on the output screen you can use a comma or a semicolons to combine numbers, messages or values in a single print statement.
C. This statement in used to take a value from the user and store it in a variable. The computer asks for a value by displaying a question mark (?) and puts a cursor on the screen where the user should type the data and press enters.
D. The REM statement is used to give remarks or comments in a program. The statement is not executed. The computer ignores the REM statement.
E. Conditional statements are used to execute a block of statements depending upon a condition. They help to control the flow of the program and hence are also known as control statements.

## Worksheet-9B

## Statements in QBasic

A. 1. True; 2. False; 3. True; 4. False; 5. True
B. A variable in assigned an area in the memory that can be used to share a value. The value stored in the variable can be changed during the program execution.
C. Let $\mathrm{A}=100$. This statement assigns the value 100 to the numeric variable A .
D.

| Operator | Symbol |
| :--- | :--- |
| equal to | $=$ |
| Less than | $<$ |
| Less than or equal to | $<=$ |
| Greater than | $>$ |
| Greater than or equal to | $>=$ |
| Not equal to | $<>$ |

E.

| Operator | Symbols |
| :--- | :---: |
| Addition | + |
| Subtraction | - |
| Multiplication | $*$ |
| Division | $/$ |
| Exponential | $\wedge$ |

## Worksheet-9C

## Program Practice in QBasic

A. REM Sum and Average

Input "enter any numbers :", A, B
Let $\mathrm{C}=\mathrm{A}+\mathrm{B}$
Let $A V G=c / 3$
Print "sum of 2 Nos $=$ "; C
Print "Average = "; AVG
END
B. REM arithmetic Operations

Input "Enter any 2 numbers :", A, B
LET C $=\mathrm{A}+\mathrm{B}$
LET D $=\mathrm{A}-\mathrm{B}$
LET E $=\mathrm{A}$ * B
LET F = A / B
PRINT "SUM = "; C
PRINT "DIFFERENCE = "; D
PRINT "PRODUCT = "; E
PRINT "QUOTIENT = "; C
EXIT
C. REM Greater among two numbers

Input "Enter any 2 numbers :", A, B
If $A>B$ then
PRINT "A is Greater"
ELSE
PRINT "B is Greater"
END IF
END

## Worksheet-10A

## More on Internet

A. 1. (iii); 2. (i); 3. (ii); 4. (iii); 5. (i); 6. (i); 7. (ii); 8. (i); 9. (ii)
B. LAN (local area network) is a group of computers and network devices connected together, usually within the same building.
WAN (wide area network) connects several LANs, and may be limited to an enterprise (a corporation or an organization) or accessible to the public. The technology is high speed and relatively expensive.
C. The three parts of a URL are protocol, the domain name and the Path.

## Worksheet-10B

## More on Internet

A. 1. HTML; 2. URL; 3. web browser; 4. hyperlinks; 5. home page; 6. Mozilla Firefox and Internet Explorer; 7. web server; 8. MAN; 9. Network
B. 1. True; 2. False; 3. False; 4. False; 5. False; 6. True; 7. False; 8. True; 9. False; 10. True; 11. True
C. 1. World Wide Web : The World Wide Web, commonly known as the Web, is an information space where documents and other web resources are identified by Uniform Resource Locators, which may be interlinked by hypertext, and are accessible over the Internet.
2. HTML : Hypertext Markup Language, a standardized system for tagging text files to achieve font, colour, graphic, and hyperlink effects on World Wide Web pages.
3. Website
: A set of related web pages located under a single domain name.
4. ISP
: An Internet Service Provider (ISP) is a company that provides customers with Internet access. Data may be transmitted using several technologies, including dial-up, DSL, cable modem, wireless or dedicated high-speed interconnects.

## Worksheet-10C

## Internet Services

A. 1. (i); 2. (iii); 3. (iv); 4. (iv); 5. (ii); 6. (ii); 7. (iii)
B. 1. Blogger is a free Web log service from Google that allows users to share text, photos and videos.
2. A video conference is a live, visual connection between two or more people residing in separate locations for the purpose of communication. At its simplest, video conferencing provides transmission of static images and text between two locations.
C. Cc : (Carbon Copy) - Put the email address here if you are sending a copy for their information (and you want everyone to explicitly see this)
Bce: (Blind Carbon Copy) - Put the email address here if you are sending them a Copy and you do not want the other recipients to see that you sent it to this contact.

## Worksheet-10D

## Internet Services

A. 1. spam; 2. facebook; 3. web feed; 4. e-commerce; 5. search engine; 6. social networking sites; 7. dcop box; 8. web feed
B. 1. internet; 2. emoticons; 3. e-commerce; 4. blog
C. 'Reply' sends your response only to the person that sent you the mail.
"Forward" sends the message to another person or group, and will include any attachments included in the original email. This means that the person/group to whom the mail has been forwarded can see all details about the original sending. You can remove any attachments or edit the original response before forwarding the message.
D. Spam folder given you the chance to restore or recover spam messages that you once confident useless.
E. Less loss, $24 \times 7$ availability, flexibility in capacity, all over functioning, carbon footprint, automated up dates on software, security.

