

AVB PUBLIC SCHOOL
SUMMER HOLIDAY HOMEWORK
(2026-27)
CLASS IX



As the golden rays of summer brighten our days and the school corridors grow quiet, it is time to relax, rejuvenate, and enjoy a well-earned break. Summer vacation is not just a pause from regular classes; it is also a valuable opportunity to learn beyond textbooks, discover new interests, and spend meaningful time with family and friends.

Here are a few wonderful ways to make your holidays enjoyable, productive, and memorable:

- **Stay Active and Healthy:** Engage in outdoor activities such as cycling, badminton, cricket, yoga, or morning walks to keep yourself fit and energetic.
- **Lend a Helping Hand at Home:** Support your family members with daily chores and responsibilities. Small acts of care and kindness build strong values.
- **Improve Your Communication Skills:** Practice speaking in English confidently in your daily conversations to strengthen your language skills.
- **Develop Good Handwriting Habits:** Spend a little time each day improving your handwriting, as neat and beautiful writing reflects patience and discipline.
- **Read, Explore, and Imagine:** Cultivate the habit of reading by exploring inspiring books, stories, newspapers, and magazines in both Hindi and English. Reading opens the door to creativity and knowledge.

To make your vacation both enjoyable and educational, we have carefully planned holiday homework that blends revision, creativity, critical thinking, and independent learning. These activities are designed to strengthen your understanding, spark curiosity, and nurture important life skills.

Remember to maintain a healthy balance between study, recreation, and rest. Use this time wisely to learn something new, pursue your hobbies, spend quality time with loved ones, and return refreshed and motivated for the new academic session.

Wishing you a joyful, safe, healthy, and enriching Summer Vacation!

Happy Holidays!

ENGLISH HOLIDAY HOMEWORK

CLASS IX

SESSION 2026-2027

Q1. Creative Pamphlet on Poetic Devices:

Poetry becomes beautiful and expressive through the use of poetic devices. Your task is to design a creative and informative pamphlet showcasing different poetic devices used in literature.

Instructions:

Prepare a handmade pamphlet/booklet/foldable brochure using coloured sheets, charts, drawings, calligraphy, or other craft materials.

Include at least 8–10 poetic devices such as:

Simile, Metaphor, Personification, Alliteration, Imagery, Hyperbole, Onomatopoeia, Repetition, etc.

For each poetic device, write:

Definition, One or two suitable examples (Optional). A small illustration or decorative design related to it.

The pamphlet should be:

Neat and well-organised

Colourful and visually attractive

Creative enough.

Q2. Design a Creative Cover Page for Your English Grammar Book:

Grammar is the foundation of good communication. This holiday, use your creativity and imagination to design an attractive and meaningful cover page for your own English Grammar Book.

Q3. Prepare an attractive and creative Vocabulary Chart:

Using A3 size sheet, write 20 new English words along with their;

Meanings, One meaningful sentence for each word.

Q4. Self-Composed Poem Writing Activity:

Compose and write an original poem on an A4 size sheet on any topic of your choice such as nature, friendship, dreams, courage, kindness, or environment.

Q5. Revise and prepare well for PT-1 Examination.

WORKSHEET

CLASS IX

A. Read the passage and answer the following questions based on it.

At the edge of a quiet town stood an old clock tower that few people noticed anymore. Once, it had been the pride of the town, marking every hour with a deep, resonant chime. Children would gather beneath it, counting the bells, while shopkeepers set their routines by its steady rhythm. But as years passed, digital clocks and mobile phones replaced its importance, and the tower slowly faded into neglect.

The paint peeled from its walls, and vines crept up its sides. The clock hands had stopped at exactly 3:17, as if time itself had decided to rest there. Most people walked past it without a second glance, except for an old watchmaker named Mr. Dutta. Every morning, he would sit on a nearby bench, gazing up at the silent clock.

One day, a curious teenager named Riya noticed him and asked why he cared so much about a broken clock. Mr. Dutta smiled and said, "This clock once kept the town connected. It wasn't just about time—it was about togetherness." Intrigued, Riya began visiting him regularly, listening to stories of how the clock tower had once been the heart of the town.

Inspired, Riya decided to do something. She gathered her friends and started a small campaign to restore the tower. They raised funds, cleaned the structure, and convinced the local authorities to repair the mechanism. Weeks later, the day finally came when the clock was ready to function again.

As the clock struck noon for the first time in decades, its chime echoed across the town. People stopped in their tracks, surprised and nostalgic. Slowly, they gathered around the tower, smiling and reminiscing. The forgotten clock had not only been restored—it had brought the town back together.

Questions

1. Why had the clock tower become neglected?
 - a) It was damaged in a storm
 - b) People preferred modern devices
 - c) It was too expensive to maintain
 - d) It was located far from the town
2. What was special about the time 3:17?
 - a) It was when the clock was built
 - b) It was the last time the clock worked
 - c) It marked an important event
 - d) It was Mr. Dutta's favorite time
3. "The clock tower was more than just a timekeeping device." Explain this statement with reference to the passage.
4. Describe the condition of the clock tower before it was repaired.
5. Why did Riya decide to restore the clock tower?
6. What did Mr. Dutta value most about the clock?
 - a) Its design

- b) Its history
- c) Its ability to bring people together
- d) Its accuracy

7. How did the townspeople react when the clock started working again?
8. Find words from the passage that mean:
- a) Loud and echoing (para 1)
 - b) Slowly declined or weakened (para 1)
 - c) Interest or curiosity (para 3)
 - d) Remembering the past fondly (last para)

B. Read the paragraph carefully and fill in the blanks with suitable modals or semi-modals (can, could, should, must, ought to, have to, need to, used to, etc.):

Aman had his science exhibition the next day. He knew he ___complete his project on time because the teacher was very strict. Earlier, he ___spend a lot of time playing video games, but now he had become more responsible. His father advised him that he ___focus on his work and ___avoid distractions. Aman also realised that he ___practise his presentation well so that he could speak confidently. “You ___worry too much,” his sister said. “You have prepared well, and you ___do a great job.”

C. Fill in the blanks with suitable modals (Will, Would, Can, Could, Shall, Should, May, Might, Must, Need, Dare, Ought to, Used to)

- a) When I was a child, I _____ climb trees very easily.
- b) You _____ respect your teachers at all times.
- c) _____ you help me carry these bags, please?
- d) She _____ be at home; the lights are on.
- e) We _____ to complete this project before the deadline.
- f) How _____ you speak to me like that?
- g) He _____ visit his village every summer when he was young.
- h) I promise I _____ finish this work by tonight.
- i) _____ we start the meeting now?
- j) You _____ does not worry so much about small issues.

D. Fill in the blanks with the correct form of the verbs given in brackets.

Paragraph 1- Last Sunday, Rohan and his family went to the zoo. They (reach) there early in the morning. The weather ___(be)pleasant, and many people _____(visit) the zoo that day. Rohan ___(see) different kinds of animals and _____(enjoy) watching the monkeys play. While they _____(walk) around, they ___(find) a lost child and _(help) him reach his parents. By the time they (leave), they _____(spend) almost five hours there.

Paragraph 2 - Ananya ___(work) on her science project for the past two weeks. She _____(collect) information from books and the internet. Yesterday, she _____(realize) that she _____(miss) an important detail. So, she ___(decide) to visit the library. Right now, she ___(sit) there and _____(complete) her notes. By tomorrow, she _____(finish) her project and _____(submit) it to her teacher.

ग्रीष्मावकाश गृहकार्य (2026-27)

कक्षा – नवमी

विषय- हिन्दी

सामान्य निर्देश:-

1. कार्य करते समय स्वच्छता का विशेष ध्यान रखें।
2. समस्त लिखित कार्य अपनी संबंधित उत्तर पुस्तिका में कीजिए।

रचनात्मक कार्य

- हिन्दी साहित्यकारों का परिचय: भारत के किन्हीं तीन प्रसिद्ध कवियों (जैसे कबीर, प्रेमचंद, महादेवी वर्मा) की जीवनी, उनकी प्रमुख कृतियों और चित्रों के साथ एक फाइल तैयार करें। (अनुक्रमांक 1 से 12)
- दोहा संकलन: कबीरदास या रहीम के किन्हीं 10-15 दोहों को अर्थ सहित A4 साइज की रंगीन शीट पर लिखें और उन्हें फाइल में लगाएँ। (अनुक्रमांक 13 से 24)
- भित्ति-पत्रिका (Wall Magazine): 'पर्यावरण संरक्षण' या 'योग का महत्व' विषय पर एक पोस्टर या भित्ति-पत्रिका तैयार करें। (अनुक्रमांक 25 से 36)
- अकबर के नवरत्न: एक चार्ट पेपर पर अकबर के दरबार के 'नौ रत्नों' के चित्र लगाएँ और उनके बारे में कुछ पंक्तियाँ लिखें। (अनुक्रमांक 37 से आगे)

तकनीकी और डिजिटल कार्य

- यात्रा वृत्तान्त (Travelogue): इस गर्मी की छुट्टी में आप जहाँ भी घूमने जाएँ, वहाँ की फोटोज के साथ एक छोटा सा ब्लॉग या डायरी एंट्री हिन्दी में लिखें।
- कहानी का नाट्य रूपांतरण: अपनी पाठ्यपुस्तक की किसी कहानी (जैसे 'दो बैलों की कथा') को एक छोटे नाटक की स्क्रिप्ट में बदलें।

लेखन कौशल

- पाठ पर आधारित निम्नलिखित प्रश्नों के उत्तर दीजिए-

- 1) कांजी हौस में किन्हें कैद किया जाता है तथा उनके साथ कैसा व्यवहार होता है?
- 2) कहानी में बैलों के माध्यम से कौन-कौन से नीति-विषयक मूल्य उभरकर आए हैं?
- 3) पाठ 'दो बैलों की कथा' के आधार पर सिद्ध कीजिए कि एकता में शक्ति होती है।
- 4) संत रैदास बाहरी आडंबरों की अपेक्षा किसे अधिक महत्व देते हैं और क्यों?
- 5) "तुम्हरे चरन कमल एक भरोसां" पंक्ति में कवि ने किस विश्वास को व्यक्त किया है?
- 6) रैदास की भक्ति में समर्पण भाव कैसे प्रकट हुआ है? उदाहरण सहित लिखिए।

- अनुच्छेद लेखन:

(i) पुस्तकालय का महत्व

संकेत बिंदु: ज्ञान का भंडार, एकाग्रता का केंद्र, अच्छी पुस्तकों का चयन, निष्कर्ष।

(ii) समय किसी के लिए नहीं रुकता

संकेत बिंदु: समय की गतिशीलता, बीता समय वापस नहीं आता, सफलता का आधार, विद्यार्थी जीवन में महत्व।

• पत्र लेखन:

अपने मित्र के पिता के सीमा पर शहीद हो जाने का समाचार प्राप्त होने पर अपनी भावनाएँ व्यक्त करते हुए मित्र को संवेदना पत्र लिखिए।

• चित्र वर्णन

नीचे दिए गए चित्र देखकर मन में उभरे विचारों को अपनी भाषा में 35 से 40 शब्दों में प्रस्तुत कीजिए।



कार्यपत्रिका

प्रश्न 1: निम्नलिखित वाक्यों में से संज्ञा शब्द छाँटकर उनके भेद लिखिए।

- 1) हिमालय भारत का सबसे ऊँचा पर्वत है।
- 2) ईमानदारी सबसे अच्छी नीति है।
- 3) कक्षा में छात्र शांति से बैठे हैं।
- 4) बाजार से एक किलो चीनी ले आओ।
- 5) यमुना एक पवित्र नदी है।
- 6) महात्मा गांधी ने देश को अहिंसा का मार्ग दिखाया।
- 7) मैदान में बच्चों की टोली खेल रही है।
- 8) रेगिस्तान में पानी की बहुत कमी होती है।
- 9) ताजमहल अपनी सुंदरता के लिए प्रसिद्ध है।
- 10) लोहे से कई प्रकार के औजार बनाए जाते हैं।

प्रश्न 2: रिक्त स्थानों में उचित संज्ञा शब्द भरिए।

- 1) _____ हमारी कक्षा की सबसे समझदार लड़की है। (व्यक्तिवाचक)
- 2) हमें हमेशा _____ का पालन करना चाहिए। (भाववाचक)
- 3) भारतीय _____ बहुत बहादुर है। (समूहवाचक)
- 4) सोने-चांदी के _____ बहुत महंगे हैं। (द्रव्यवाचक)
- 5) _____ फलों का राजा है। (जातिवाचक)
- 6) कल हमारे घर _____ मेहमान आए थे। (जातिवाचक)
- 7) अंगूरों का _____ देखकर मुँह में पानी आ गया। (समूहवाचक)
- 8) _____ से प्रदूषण कम होता है। (जातिवाचक)
- 9) माँ की _____ का कोई मोल नहीं है। (भाववाचक)
- 10) पूजा के लिए थोड़ा _____ लेकर आओ। (द्रव्यवाचक)

प्रश्न 3: निम्नलिखित सभी शब्दों में से उपसर्ग और मूल शब्द अलग करके लिखिए।

शब्द	उपसर्ग		मूलशब्द
1) अतिवृष्टि	_____	+	_____
2) दुर्बल	_____	+	_____
3) परतंत्र	_____	+	_____

4) सपरिवार	_____	+	_____
5) निर्दोष	_____	+	_____
6) अधखिला	_____	+	_____
7) अवगुण	_____	+	_____
8) बेईमान	_____	+	_____
9) प्रतिकूल	_____	+	_____
10) उपकार	_____	+	_____

प्रश्न 4: दिए गए सभी उपसर्गों का प्रयोग करके दो-दो नए शब्द बनाइए।

- 1) प्र
- 2) अनु
- 3) बे
- 4) उप
- 5) सु
- 6) अ
- 7) कु
- 8) वि
- 9) सम्
- 10) ना

प्रश्न 5: निम्नलिखित सभी शब्दों में से मूल शब्द और प्रत्यय अलग करके लिखिए।

शब्द	मूलशब्द	प्रत्यय
1) भारतीय	_____	_____

2) सामाजिक	_____	+	_____
3) सजावट	_____	+	_____
4) बचपना	_____	+	_____
5) मनुष्यता	_____	+	_____
6) चतुरता	_____	+	_____
7) दुकानदार	_____	+	_____
8) घबराहट	_____	+	_____
9) जहरीला	_____	+	_____
10) धनवान	_____	+	_____

प्रश्न 6: दिए गए सभी प्रत्ययों का प्रयोग करके दो-दो नए शब्द बनाइए।

- 1) आई
- 2) इक
- 3) दार
- 4) ता
- 5) मान
- 6) ईय
- 7) आवट
- 8) पन
- 9) ई
- 10) वाला

ग्रीष्मावकाश गृहकार्य (2026 - 27)

कक्षा – नवमी

विषय – संस्कृतम्

1 अधोलिखितं गद्यांशं पठित्वा प्रश्नान् उत्तरत।

अस्माकं भारतवर्षः प्राकृतिक सुषमायाः भण्डारो वर्तते। अत्र प्रकृति नटी प्रतिक्षणं नव्यं भव्यं च नाटयति। अत्र एकस्मिन् वर्षे षड्ऋतवो भवन्ति- वसन्तः, ग्रीष्मः, वर्षा, शरत्, शिशिर, हेमन्तश्च। एषु वसन्तस्यैव प्राधान्यं वर्तते। समागमे वसन्ते नातिशीतं नात्युष्णं भवति। साधुः एष ऋतुः ऋतुराज इति कथ्यते। अस्मिन् ऋतौ वसुन्धरा सुसज्जितं मनोरमं रूपं धारयति। सर्वमपि चारुतरं प्रतिभाति। अस्य तात्पर्यं एषः अस्ति। कोऽपि ऋतुः महत्त्वहीनाः नास्ति। प्रत्येकस्य स्वकीय महत्त्वम् अस्ति। कवयः अपि अस्य वर्णनम् कृतः। महाकवि कालिदासेन ग्रीष्मस्य वर्णनम् कृतः। यत्र वसन्तम् ऋतुराजम् कथ्यते तत्रैव ग्रीष्म ऋतुराजोऽपि कथ्यते। अस्मिन् ऋतौ आम्रवृक्षेषु बौराः आयान्ति। कौकिलाः कूजन्ति। बालकाः सरोवरे जलक्रीडां कुर्वन्ति च।

(I) एकपदेन उत्तरत। (एक पद में उत्तर दीजिए।)

- (I) कस्मिन् समागमे नातिशीतं नात्युष्णं भवति?
- (II) अत्र एकस्मिन् वर्षे कति ऋतवो भवन्ति?
- (III) भारतवर्षः कस्य भण्डारः वर्तते?

(II) पूर्णवाक्येन उत्तरत। (पूर्ण वाक्य में उत्तर दीजिए।)

- (I) कः प्राकृतिकसुषमायाः भण्डारो वर्तते?
- (II) कदा वसुन्धरा सुसज्जितं मनोरमं रूपं धारयति?
- (III) ऋतौ कस्य प्राधान्यं वर्तते?

(III) अस्य अनुच्छेदस्य समुचितं शीर्षकं लिखत।

(इस अनुच्छेद का उचित शीर्षक लिखिए।)

(IV) यथानिर्देशम् उत्तरत। (निर्देशानुसार उत्तर दीजिए।)

(i) एषाः ऋतु ऋतुराजः इति कथ्यते। रेखांकितस्य पदस्य विशेषण पदं किमस्ति?

(क) एषः (ब) इति (स) कथ्यते (द) ऋतुराजः

(ii) “अत्र प्रकृतिनटी प्रतिक्षणं नृत्यं भव्यं च नाटयति” उपर्युक्तवाक्ये क्रियापदं किम्?

(क) प्रतिक्षणं (ब) नृत्यं (स) प्रकृतिनटी (द) नाटयति

2 भवान् निखिलः। भवतः मित्राय रक्तदानशिविरविषयकं लिखितम् इदं पत्रं मञ्जूषायां लिखितैः उचितपदैः पूरयत।

परीक्षा भवनात्,

मेरठतः।

दिनाङ्कः

प्रियमित्र अरुण !

.....।

अत्र (ii) अस्ति। ह्यः अस्माकम् विद्यालयेन (iii) आयोजनम् कृतम्।
अस्माकम् (iv) प्रथमं स्वरक्तम् (v)। छात्राणाम् उत्साहम् (vi)
..... मया अपि (vii) कृतम्। आशास्ति भवान् अपि अस्मिन् (viii)
..... योगदानं करिष्यति। शेषं कुशलम् विद्यते।

(ix) नमः।

भवतः मित्रम्

(x)

मञ्जूषा: दृष्ट्वा, रक्तदानम्, सर्वकुशलम्, अयच्छत्, प्राचार्यः, सप्रेमनमः, रक्तदानशिविरस्य, कार्ये,
निखिलः, पितृभ्याम्।

3 रिक्तस्थानानि पूरयित्वा अधोलिखित संवादं पुनः लिखत।

शकुन्तला कोऽयम् द्वारि ?

दुष्यन्तः अहं (i) ।

प्रियंवदा हे राजन् स्वागतोऽसि। महाराज भवान्

प्रियंवदा (ii) ।

दुष्यन्तः अहम् हस्तिनापुरस्य नृपोऽस्मि ।

प्रियंवदा (iii) अस्ति।

दुष्यन्तः अहं (iv) ।

प्रियंवदा भवान् (v) ।

मञ्जूषा

- अतिथिरूपेण द्वारि तिष्ठामि।
- कथय किम् वृत्तान्तम् अस्ति।
- अस्माकं अतिथयः (अतिथि) देवो भव।
- अहं अस्य प्रान्तरे विश्रामं कर्तुम् इच्छामि।
- अस्मिन् प्रान्ते आगच्छन् कः देशः शून्यम् अकरोत्।

4 अधोलिखितां कथां मञ्जूषायाः सहायतया पूरयित्वा पुनः लिखत।

एकस्मिन् दिने (i).... पत्नी सुदाम्न अवदत् हे भर्तुः (ii).... यत् श्रीकृष्णः भवान् सखा अस्ति। भवान्
(iii) द्वारिद्रयमस्ति । अस्माकं गृहे अशितव्यम् किञ्चिदापि नास्ति । अतः भवान् (iv).... सकाशं
गच्छ कश्चित् सहायतां आनय। अहम् (v).... यत् ते दीनान् दयां कुर्वन्ति। ते (vi) अस्माकं सहायतां
करिष्यन्ति। भवान् इदानीम् (vii) अवस्थायाम् लज्जा न कुरु। ते अवश्यमेव सहायतां कुर्वन्तु।
कथ्यते यत् (viii)..... मित्रमेव मित्रस्य सहायतां करोति। भवान् तेन सहायतां प्राप्नुवन्ति। येन
(ix)..... निर्वाहं पूर्णरूपेण भविष्यति। आशासे भवान् मम प्रार्थनां (x)..... तत्र गमिष्यति च।

मञ्जूषा: सुदाम्नः, विपत्तौ, शृणोति, श्रूयते, इदानीम्, त्वमकथयत्, श्रीकृष्णस्य, अस्माकं, अस्यामेव, अवश्यमेव ।

5 निम्नलिखित शब्दरूप कार्यपुस्तिका में पूर्ण करें।

बालक, कवि, साधु, भवत्, लता, नदी, फलम्

सर्वनाम शब्दाः - अस्मद्, युष्मद्, तत्, किम् (त्रिषु लिङ्गेषु)

6 निम्नलिखित धातुरूप कार्यपुस्तिका में पूर्ण करें।

भू, नम्, गम्, अस्, प्रच्छ्, कृ, ज्ञा, क्षाल्, नी (पञ्चलकारेषु)

7 रचनात्मक कार्यमूढतुचक्रम् (ऋतुओं का पहिया): एक घूमती हुई 3D डिस्क या पॉप-अप बुक बनाएं। इसमें भारत की छह ऋतुओं (वसन्त, ग्रीष्म आदि) को मधुबनी या वारली जैसी पारंपरिक चित्रकला शैली में दर्शाएं और प्रत्येक ऋतु के लिए एक संस्कृत श्लोक लिखें।

HOLIDAY HOME WORK

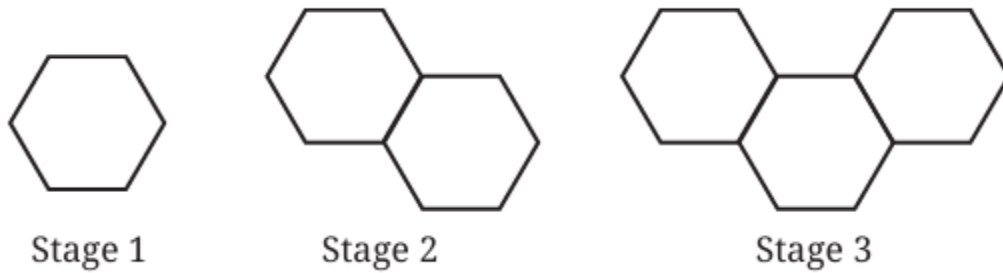
CLASS – IX (2026 -27)

MATHS

1. What is the x-coordinate of a point on the y-axis?
2. Is there a similar generalization for a point on the x-axis?
3. Does point Q (y, x) ever coincide with point P (x, y)? Justify your answer.
4. If $x \neq y$, then $(x, y) \neq (y, x)$; and $(x, y) = (y, x)$ if and only if $x = y$. Is this claim true?
5. Consider the points R (3, 0), A (0, -2), M (-5, -2) and P (-5, 2). If they are joined in the same order, predict:
 - (i) Two sides of RAMP that are perpendicular to each other.
 - (ii) One side of RAMP that is parallel to one of the axes.
 - (iii) Two points that are mirror images of each other in one axis. Which axis will this be?Now plot the points and verify your predictions.
6. Plot point Z (5, -6) on the Cartesian plane. Construct a right-angled triangle IZN and find the lengths of the three sides.
7. What would a system of coordinates be like if we did not have negative numbers? Would this system allow us to locate all the points on a 2-D plane?
8. Using the origin as one vertex, plot the vertices of:
 - (i) A right-angled isosceles triangle.
 - (ii) An isosceles triangle with one vertex in Quadrant III and the other in Quadrant IV.
9. The following table shows the coordinates of points S, M and T. In each case, state whether M is the midpoint of segment ST. Justify your answer.

S	M	T	Is M the midpoint of ST? Yes or No	Reason for your answer
(-3, 0)	(0, 0)	(3, 0)		
(2, 3)	(3, 4)	(4, 5)		
(0, 0)	(0, 5)	(0, -10)		
(-8, 7)	(0, -2)	(6, -3)		

10. A city has two main roads which cross each other at the centre of the city. These two roads are along the North–South (N–S) direction and East–West (E–W) direction. All the other streets of the city run parallel to these roads and are 200 m apart. There are 10 streets in each direction.
- (i) Using $1\text{ cm} = 200\text{ m}$, draw a model of the city in your notebook. Represent the roads/streets by single lines.
- (ii) There are street intersections in the model. Each street intersection is formed by two streets — one running in the N–S direction and another in the E–W direction. Each street intersection is referred to in the following manner: If the second street running in the N–S direction and 5th street in the E–W direction meet at some crossing, then we call this street intersection (2, 5).
- Using this convention, find:
- (a) how many street intersections can be referred to as (4, 3).
- (b) how many street intersections can be referred to as (3, 4).
11. Plot the points A (2, 1), B (–1, 2), C (–2, –1), and D (1, –2) in the coordinate plane. Is ABCD a square? Can you explain why? What is the area of this square?
12. A rectangular garden of length l metres and width w metres has to be fenced and decorated. A wire fence is to be laid along the length costing Rs.100 per metre and a wooden fence is to be built along the width costing Rs.80 per metre. Special seeds have to be sown throughout the garden which will cost Rs.50 per square metre.
13. A chess club charges a joining fee of Rs.200 plus Rs.50 for every match played. The following table shows the amount a player will have to pay as the number of matches varies. If a player paid Rs.750, how many matches did he play?
14. The sum of two numbers is 64. One of the numbers is 10 more than the other. What are the two numbers?
15. Draw the graphs of the equations $y = 3x + 1$, and $y = -3x + 1$.
16. Look at the first three stages of a growing pattern of hexagons made using matchsticks. A new hexagon gets added at every stage which shares a side with the last hexagon of the previous stage.



(i) Draw the next two stages of the pattern. How many matchsticks will be required at these stages?

(ii) Complete the following table.

Stage Number	1	2	3	4	5	...	n
Number of matchsticks							

(iii) Find a rule to determine the number of matchsticks required for the n^{th} stage.

17. We know that Integers are closed under addition (the sum of any two Integers is always an Integer). Are they closed under subtraction? Provide a couple of examples to justify your answer.

18. A rational number is defined as any number that can be expressed in the form of $\frac{p}{q}$, where p and q are integers and $q \neq 0$. Can you explain why we need $q \neq 0$ in the definition of a rational number?

19. Represent $\frac{4}{7}$ and $\frac{-5}{8}$ on number line.

20. Represent 0.532 on number line.

21. Prove that $\sqrt{7}$ is an irrational number.

22. CASE STUDY – 1

Fig. shows Manoj's room with points OABC marking its corners. The x- and y-axes are marked in the figure. Point O is the origin.

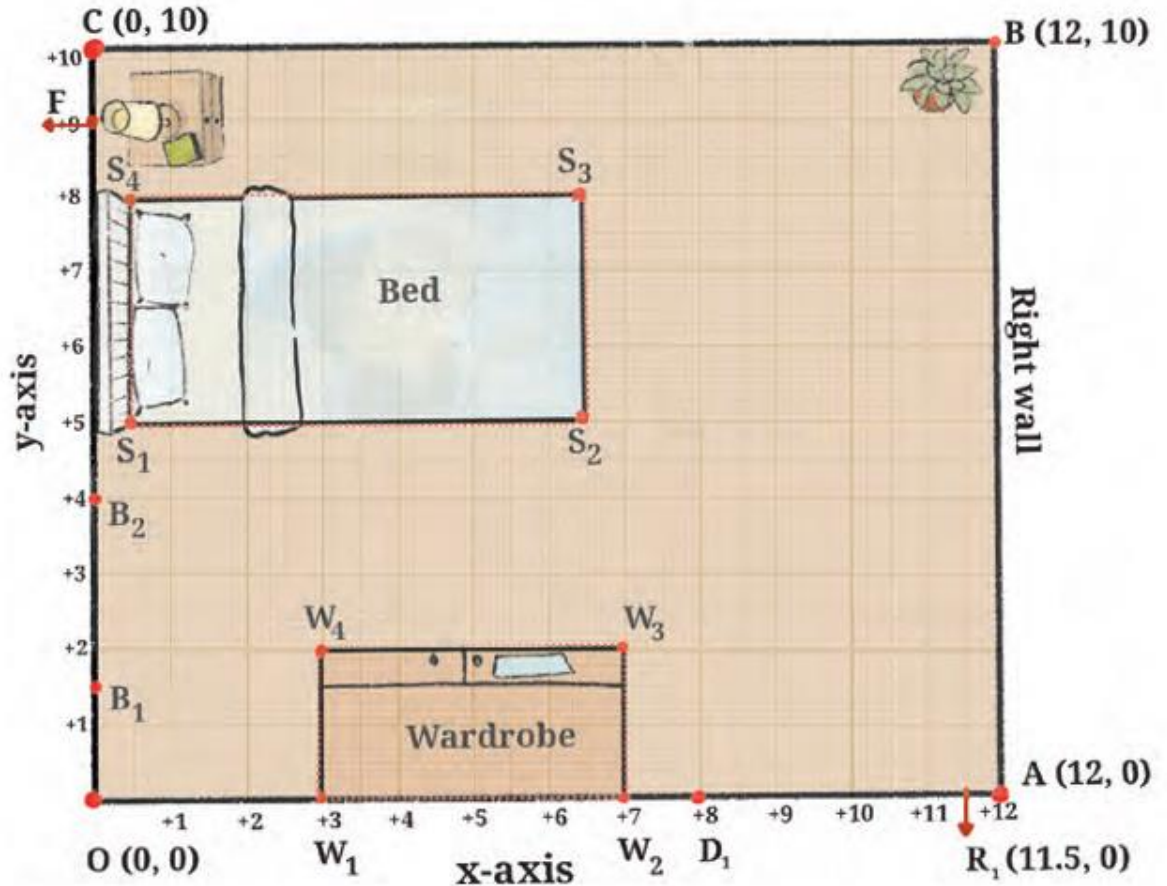


Fig . 1

Referring to Fig., answer the following questions:

- (i) If $D_1 R_1$ represents the door to Manoj's room, how far is the door from the left wall (the y-axis) of the room? How far is the door from the x-axis?
- (ii) What are the coordinates of D_1 ?
- (iii) If R_1 is the point $(11.5, 0)$, how wide is the door? Do you think this is a comfortable width for the room door? If a person in a wheelchair wants to enter the room, will he/she be able to do so easily?
- (iv) If $B_1 (0, 1.5)$ and $B_2 (0, 4)$ represent the ends of the bathroom door, is the bathroom door narrower or wider than the room door?

NOW THINK

Look around your home and find out the standard widths for a room door?

23. CASE STUDY – 2

On a graph sheet, mark the x-axis and the origin O. Mark points from (-7, 0) to (13, 0) on the x-axis and from (0, -15) to (0, 12) on the y axis.

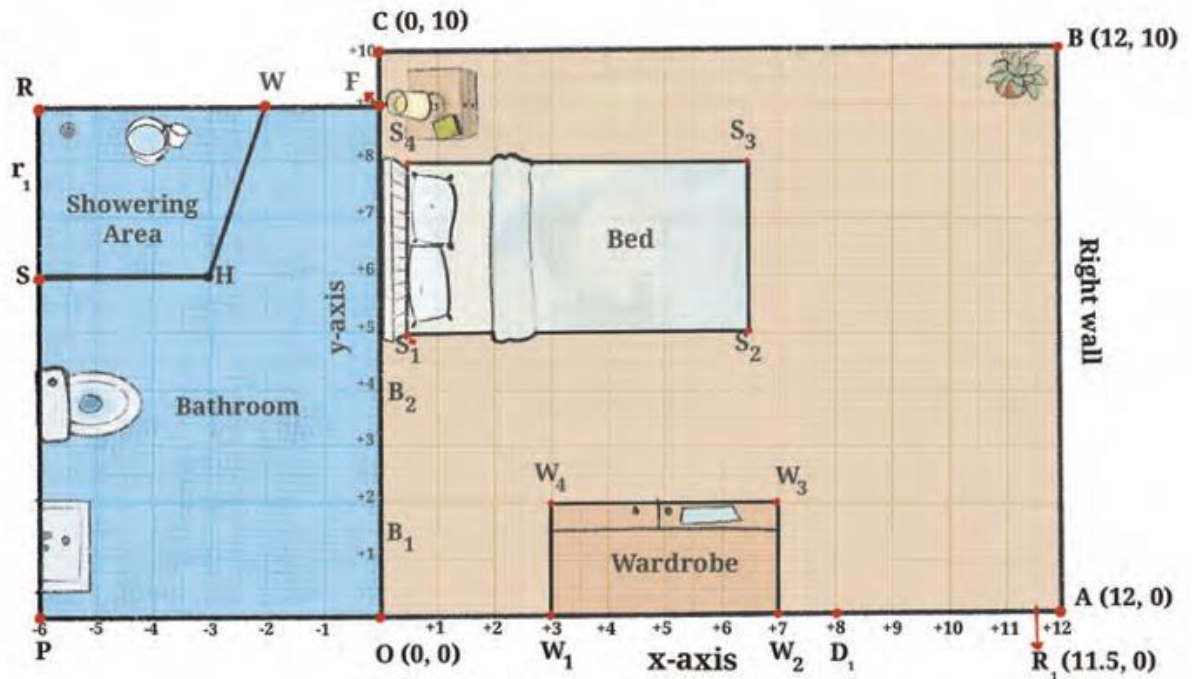
(i) Mark points A(-7, 12), B(13, 12), C(-7, -15) and D(13, -15). Join ABCD.

(ii) Let us assume ABCD is Priya’s room. Place Priya’s rectangular study table with three of its feet at the points (8, 9), (11, 9) and (11, 7). Where will the fourth foot of the table be? What is the width of the table? The length?

(iii) Place a bed taking two of its vertices lying on y-axis. Write the coordinates of the end points of the bed.

24. CASE STUDY – 3

Using Fig., answer the given questions.



(i) If the bathroom door has a hinge at B_1 and opens into the bedroom, will it hit the wardrobe? Are there any changes you would suggest if the door is made wider?

(ii) Look at Piyush’s bathroom.

- (a) What are the coordinates of the four corners O, F, R, and P of the bathroom?
- (b) What is the shape of the showering area SHWR in Piyush's bathroom? Write the coordinates of the four corners.

(c) Mark off a $3 \text{ ft} \times 2 \text{ ft}$ space for the washbasin and a $2 \text{ ft} \times 3 \text{ ft}$ space for the toilet. Write the coordinates of the corners of these spaces.

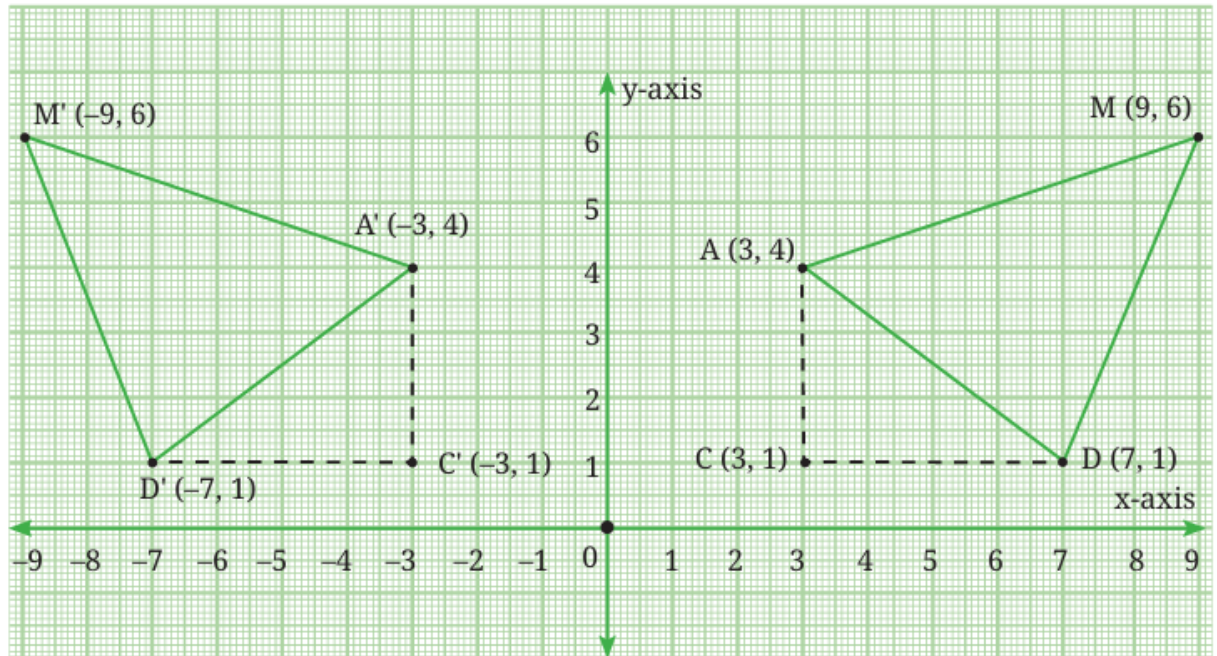
(iii) Other rooms in the house:

(a) Piyush's room door leads from the dining room which has the length 18 ft and width 15 ft. The length of the dining room extends from point P to point A. Sketch the dining room and mark the coordinates of its corners.

(b) Place a rectangular $5 \text{ ft} \times 3 \text{ ft}$ dining table precisely in the centre of the dining room. Write down the coordinates of the feet of the table.

25. CASE STUDY – 4

Triangle AMD is reflected in the y-axis.



- (i) What are the coordinates of the images of points A, M, and D?
- (ii) What has remained the same and what has changed with this reflection?
- (iii) Would these observations be the same if $\triangle ADM$ is reflected in the x-axis (instead of the y-axis)?

ACTIVITY TIME

Make a beautiful square root spiral image on A3 size sheet.

1. Case -Based Question

A student observed onion peel cells under a microscope

- Name the type of cells observed.
- Which cell organelle is clearly visible?
- Why is a stain used in this experiment?

2. Compare “cell as a city”

Cell organelle	City part
Nucleus	mayor
Mitochondria	Powerhouse
Cell membrane	Security gate
Ribosomes	Factory

Make a creative model of Cell factory.

3. Answer the following questions:

- Why do plant cells have a cell wall but animal cells do not?
- If the cell membrane loses its selective permeability, what will happen to the cell?
- Describe the structure of mitochondria and its function.

4. Cell Organelle Flashcards

- Make colorful flashcards:
- One side: Organelle name
- Other side: Function + diagram
- Helps in quick revision.

5. Osmosis Experiment

- Use potato strips or raisins:
- Put them in salt water vs plain water
- Observe changes and explain **osmosis**

Holiday Homework

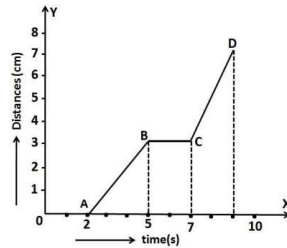
Chemistry

Class -IX

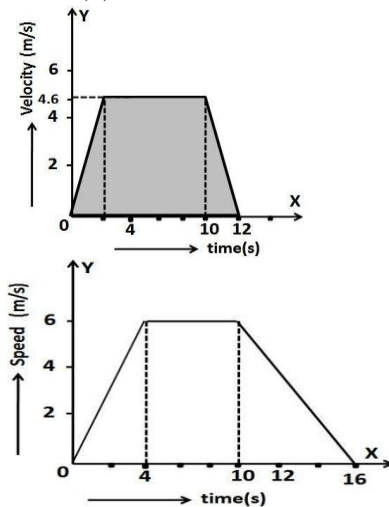
- Q1. 2.5 g of sugar is dissolved in 47.5 g of water. Calculate its percent by mass.
- Q2. Calculate the amount of glucose required to prepare 250 g of 5% solution of glucose by mass.
- Q3. Calculate the amount of water required to prepare 500 g of 2.5% solution of sugar by mass.
- Q4. Why is milk considered a colloid? Name its dispersed phase and dispersion medium.
- Q5. Both smoke and fog are aerosols. In what way are they different?
- Q6. What is an aerosol? In which liquid droplets are dispersed in a gas?
- Q7. Differentiate between true solution, suspension, and colloid in tabular form.
- Q8. Can sea water be classified as both a homogeneous and heterogeneous mixture? Explain.
- Q9. Why is water called a universal solvent?
- Q10. How will you test whether a given solution is a true solution or a colloid?
- Q11. Is sugar soluble in water? If yes, what type of mixture is formed when sugar is dissolved in water?
- Q12. Which separation techniques will you apply for the separation of the following?
- (a) Sodium chloride from its solution in water
 - (b) Ammonium chloride from a mixture containing sodium chloride and ammonium chloride
 - (c) Different pigments from an extract of flower petals
 - (d) Butter from curd
- Q13. Explain the following separation techniques with neat labelled diagrams:
- (a) Filtration
 - (b) Distillation
 - (c) Chromatography
 - (d) Centrifugation

Physics Holiday Homework
Class IX
Physics

1. The graph in below figure shows the positions of a body at different times. Calculate the speed of the body as it moves from (i) A to B (ii) B to C and (iii) C to D.



2. The velocity time graph of an ascending passenger lift is given below. What is the acceleration of the lift: (i) during the first two seconds (ii) between 2nd and 10th second (iii) during the last two seconds.



3. In the above question, calculate (i) distance travelled from O to A (ii) distance travelled from B to C. (iii) total distance travelled by the body in 16 sec.
4. A moving train is brought to rest within 20 seconds by applying brakes. Find the initial velocity, if the retardation due to brakes is 2m/s^2 .
5. A car accelerates uniformly from 18km/h to 36 km/h in 5 seconds. Calculate (i) acceleration and (ii) the distance covered by the car in that time.
6. A body starts to slide over a horizontal surface with an initial velocity of 0.5 m/s . Due to friction, its velocity decreases at the rate of 0.05 m/s^2 . How much time will it take for the body to stop?
7. A train starting from the rest moves with a uniform acceleration of 0.2 m/s^2 for 5 minutes. Calculate the speed acquired and the distance travelled in this time.
8. A bus was moving with a speed of 54 km/h . On applying brakes, it stopped in 8 seconds. Calculate the acceleration and the distance travelled before stopping.
9. A motor cycle moving with a speed of 5 m/s is subjected to an acceleration of 0.2 m/s^2 . Calculate the speed of the motor cycle after 10 seconds and the distance travelled in this time.
10. A cyclist goes once round a circular track of diameter 105m in 5 minutes. Calculate his speed.
11. A cyclist moving on a circular track of radius 50m complete revolution in 4 minutes. What is his (i) average speed (ii) average velocity in one full revolution?
12. A car starts from rest and moves along the x-axis with constant acceleration 5m/s^2 for 8 seconds. If it then continues with constant velocity, what distance will the car cover in 12 seconds since it started from the rest?

HOLIDAY HOMEWORK
Class -IX
SOCIAL SCIENCE

Make a PowerPoint Presentation on the topics mentioned below Disasters :-

- Roll no. 1 -10 : Earthquakes
- 11- 20: Floods
- 21- 30: Landslides
- 31 onwards: Fire

Note: Include its causes , prevention, helpline numbers etc. It should have at least 10-12 slides

Assignment

Geography - Shaping of the Earth

Choose the correct option for each question.

1. Which of the following is an example of an Endogenic force?

- A) Wind erosion
- B) Volcanic eruption
- C) Glacial deposition
- D) River meanders

2. The process of 'breaking of rocks in their place' is known as:

- A) Erosion
- B) Transportation
- C) Weathering
- D) Aggradation

3. A 'U-shaped valley' is a landform typically created by:

- A) Running water
- B) Sea waves
- C) Glaciers
- D) Wind

4. The point on the Earth's surface directly above the focus of an earthquake is the:

- A) Epicentre
- B) Crater
- C) Fault
- D) Vent

5. Which landform is formed at the mouth of a river where it meets the sea?

- A) Gorge

- B) Waterfall
- C) Delta
- D) Ox-bow lake

Answer the following in 50–80 words.

1. What are agents of Gradation ?
2. Explain how an Ox-bow lake is formed.
3. Differentiate between Endogenic and Exogenic forces.
4. Briefly explain the process of weathering.

Answer the following in 100–120 words.

1. Describe how glaciers shape the landscape.
2. Describe the layers of the interior of the earth and their chemical composition.
3. Discuss the role of running water as the most powerful agent of gradation. Describe the various landforms created by a river during its journey from the mountains to the sea.

Or

Compare the land-shaping processes of Glaciers in high altitudes/latitudes with Wind in arid regions.

Political Science -Democracy

Q1 Choose the correct option:-

1. A country where the President is both head of the state and head of the government follows _____

Parliamentary system

Federal system

Separation of powers

Federal structure

2. Which action by citizens strengthens democracy the most?

Voting only once in five years

Obeying laws silently

Participating in discussions and public debates

Avoiding political matters

3. Democracy means a form of government in which rulers are _____

Appointed by the military

Selected by religious leaders

Elected by the people

Born into power

4. The principle of “One Person, One Vote, and One Value” ensures _____

Social equality

Economic equality

Political equality

Religious equality

5. Which example shows a challenge to democracy in India?

Universal adult franchise

Independent judiciary

Corruption in public offices

Monarchical system

Q2 Match the following values with their meanings and choose the correct option.

Column A

i) Parliamentary system.

ii) Presidential system.

iii) India.

iv) USA.

Column B

a) Fixed tenure of executive

b) Vote of no confidence

c) Prime Minister as head of government

d) President as head of government

Options:

(i)-(c),(ii)-(a),(iii)-(b),iv)-(d)

(i) -(b),(ii)-(a),(iii)-(c),(iv)-(d)

(i)-(a),(ii)-(b),(iii)-(d),(iv)-(c)

(i)-(c),(ii)-(b),(iii)-(a),(iv)-(d)

Q3 Answer the following in 50-80 words:-

1. Explain how democratic values can be practiced beyond the sphere of government.
2. Why are free and fair elections essential for democracy?
3. Explain Abraham Lincoln's definition of democracy in your own words.
4. How do democratic institutions ensure peaceful transfer of power?

Q4 Answer the following in 100-120 words:-

1. Compare the two systems of government with reference to separation of powers and accountability.

OR

Compare direct and representative democracy, highlighting their suitability in different contexts.

2. Analysis of the major challenges faced by Indian democracy and their impact on its quality.
3. Explain the major features of democracy.
4. Explain a semi-presidential system with both president and Prime Minister.

History -Beginning of Early Civilization

Very short answer type questions

1. Why are tools important sources for studying early human history?
2. Who were human ancestors? Name any two and mention one feature of each.
3. Describe the lifestyle of Palaeolithic humans.
4. What were microliths? During which age were they used?

Short answer type questions

1. How did the Mesolithic Age differ from the Palaeolithic Age?
2. Explain the significance of microliths in human development.
3. Describe the beginning of agriculture in the Neolithic Age.
4. How did the Neolithic Revolution transform human life?

Long answer type questions

1. Give a detailed account of the Palaeolithic Age.
2. Explain why the Mesolithic Age is called a transitional phase..
3. Describe the Neolithic Age and the beginning of settled life.

CLASS – IX

HOLIDAY HOMEWORK

INFORMATION TECHNOLOGY (CODE:402)

I. Answer the Following Questions in IT register.

(Chapter: Communication Skills)

1. What is communication? Explain its types.
2. What are verbal and non-verbal communication? Give examples.
3. What is active listening? Why is it important?
4. List any 5 barriers to effective communication.
5. What are the qualities of a good communicator?

(Chapter: Digital Documentation)

1. What is a word processor? Give examples.
2. What is formatting? Name different types.
3. What are styles in documents?
4. What is the use of headers and footers?
5. What is mail merge?

II. Activity (Creative Work)

Make a Poster/Chart on:

“Effective Communication Skills” OR “Do’s and Don’ts of Communication”

- ✓ Use colors, diagrams, and examples.

III. Practical Activity

Create a document (in LibreOffice Writer / MS Word) with

Title: “My Holiday

Experience”

Apply formatting (like: bold, italic, underline etc)

- ✓ Insert a picture
- ✓ Add header & footer
- ✓ Save , print and submit in a file/ folder.

IV. Project Work

Project Topic (Choose Any One)

1. Importance of Communication Skills in Daily Life
2. Uses of Digital Documentation in Offices and Schools

Project Guidelines:

- ✓ Write 5–7 pages neatly

Include:

- ✓ Introduction
 - ✓ Content with headings
 - ✓ Images/diagrams
 - ✓ Conclusion
-
- Use A4 sheets or a notebook
 - Make it creative and well-presented

Submission Instructions:

- ❖ Submit after holidays in a proper file/folder
- ❖ Ensure neatness and originality

Worksheet – I
(Chapter: Communication Skills)

Choose the correct answer:

1. Communication involves:

- a) Only speaking
- b) Only writing
- c) Sending and receiving messages
- d) None

2. Which is a type of non-verbal communication?

- a) Email
- b) Letter
- c) Body language
- d) Speech

3. Active listening means:

- a) Ignoring speaker
- b) Listening carefully and responding
- c) Talking continuously
- d) None

4. Which is a barrier to communication?

- a) Noise
- b) Clear message
- c) Good listening
- d) Feedback

5. Eye contact shows:

- a) Confidence
- b) Fear
- c) Anger
- d) Silence

Worksheet – II

(Chapter: Digital Documentation)

1. Which software is used for digital documentation?

- a) Paint
- b) Word Processor
- c) Calculator
- d) Browser

2. Shortcut for saving a document:

- a) Ctrl + P
- b) Ctrl + S
- c) Ctrl + C
- d) Ctrl + X

3. Header appears at:

- a) Bottom
- b) Middle
- c) Top
- d) Side

4. Mail merge is used for:

- a) Drawing
- b) Sending multiple letters
- c) Editing images
- d) None

5. Bold formatting makes text:

- a) Slanted
- b) Dark
- c) Underlined
- d) Small