

AUTUMN BREAK HOLIDAY HOMEWORK

1. Complete all work neatly in a small copy.
2. Make sure that your handwriting is beautiful.
3. Avoid any spelling mistakes.
4. You can decorate your work with many pictures and colours.

CLASS I — ENGLISH

Daily Practice: Read aloud the story- **THE CAP- SELLER AND THE MONKEYS** for **10 minutes** from your textbook and copy **two lines daily** from it with beautiful cursive handwriting.

1. **Missing Letters:** Complete: m_th_r, f_th_r, gr_ndm_th_r, gr_ndf_th_r, u_cl_, a_nt, cou__n. Also learn the spellings of all your family members.
2. **Action Words:** Write five action words, such as *run, jump, eat, read* and *write*. Make simple sentences using these like- I like to eat apples.
3. **Rhyming Words:** Find 7 pairs of rhyming words from your book and write.
4. **Picture Comprehension:** Look at this picture. Write the names of any three things you see and two sentences about the picture.



5. **Poem Recitation:** Learn all poems that have been done in class with actions.
6. **Revision:** Revise Ch 1 to 3 from copy and textbook.

CLASS I — MATHEMATICS (गणित)

1. **गिनती:** रोज़ 1 से 20 तक सीधी और उलटी गिनती बोलकर दोहराइए।
2. **खाली स्थान भरिए:**
(क) 1, 2, __, 4, __, 6, 7, __, 9, 10
(ख) 11, __, 13, __, 15, 16, __, 18, __, 20
(ग) 18, __, __, 15, __, __, 12, __, 10
(घ) 9, __, 7, 6, __, __, 3, 2, __, __
3. **पहले और बाद की संख्या लिखिए:**
(क) __, 5, __ (ख) __, 9, __ (ग) __, 12, __
(घ) __, 16, __ (ङ) __, 19, __
4. **सबसे छोटी और सबसे बड़ी संख्या पहचानिए:**
(क) 12, 5, 1 (ख) 6, 13, 8 (ग) 9, 4, 17
(घ) 12, 15, 11
5. **आरोही क्रम:** छोटी से बड़ी संख्या में लिखिए।
(क) 4, 1, 13 (ख) 8, 15, 7 (ग) 12, 10, 11
6. **अवरोही क्रम:** बड़ी से छोटी संख्या में लिखिए।
(क) 2, 15, 4 (ख) 9, 16, 8 (ग) 13, 11, 17
7. **जोड़ कीजिए:**
(क) $2 + 3 =$ __ (ख) $11 + 1 =$ __ (ग) $6 + 2 =$ __
(घ) $3 + 6 =$ __ (ङ) $13 + 7 =$ __ (च) $14 + 5 =$ __

याद रखें: सभी कार्य स्वयं करने का प्रयास करें। अभिभावक बच्चों को पढ़ने और समझने में सहायता करें।

CLASS 1- HINDI

PM SHRI KENDRIYA VIDYALAYA KANKER (2026-27)

AUTUMN BREAK (15/10/26 TO 24/10/26)

HOLIDAY HOMEWORK

(सभी कार्य A4 साइज़ पेपर पर करें और उसमें अपना नाम, रोल न. लिखें-)

कक्षा -1 HINDI

1. निम्नलिखित विषय पर अपने अनुक्रमांक (रोल न.) के अनुसार 5-5 प्रतैश कार्ड्स बनाइए।

ROLL NO. 1 TO 10 - सब्जियाँ

ROLL NO. 11 TO 20 - फल

ROLL NO. 21 TO 30 - जानवर

ROLL NO. 31 TO 40 - पक्षी

ROLL NO. 41 TO 47 - फूल

2. रोजाना एक पन्ना साफ- सुथरा सुलेख लिखो और अपने माता-पिता को पढ़कर सुनाओ।



Class 1 – Gardening Autumn Break Holiday Homework

Let's grow, learn and care for nature!



Activity 1: My Little Plant

- Choose any one plant from your home or nearby area.
- Give it water every day.
- Take care of the plant.
- Paste a photo of the plant with you or draw the plant.



Paste your photo here or draw the plant

Activity 2: Leaf Collection

- Collect 3 different leaves from your surroundings.
- Paste them in your notebook.
- Look at the colour and shape of each leaf.



Leaf 1



Leaf 2



Leaf 3

Activity 3: My Favourite Fruit

- Choose your favourite fruit.
- Draw or paste its picture.
- Write its name.
- Colour it nicely.



My favourite fruit is



Activity 4: Seed Activity

- Take a small bowl or cup.
- Put some cotton in it.
- Add a few moong seeds.
- Keep the cotton slightly wet.
- Observe the changes every day.
- When the seedling comes out, draw the plant.



Day 1
(Seeds)



Day 3
(Sprouting)



Day 5
(Growing)



Day ...
(Plant)

Activity 5: Draw and Colour

- Draw your favourite flower or plant.
- Colour it beautifully.





Happy Holidays!

Be kind to plants, they give us fresh air, food and a beautiful world.




PM SHRI KENDRIYA VIDYALAYA KANKER
AUTUMN BREAK HOMEWORK (15/10/26 to 24/10/2026)

Class 2

Mathematics –

General Instructions

1. Solve all questions neatly in class notebook.
2. Practice Mathematics for 15–20 minutes every day.
3. Try to complete all activities independently.

Q1. Learn and write number names from 1 to 100.

Q2. Solve 10 carry addition and 10 subtraction problems.

Q3. Solve the following word problems.

a) Reena had 25 pencils. She received 14 more pencils. How many pencils does she have altogether?

b) There were 48 mangoes in a basket. If 16 mangoes were eaten, how many mangoes are left?

c) A library has 32 Hindi books and 25 English books. How many books are there altogether?

d) There were 45 passengers on a bus. If 18 passengers got down, how many passengers are left on the bus?

Q4. Name the shapes and draw one example of each.

a) ○ – _____ Example: _____

b) □ – _____ Example: _____

c) $\triangle$ - _____ Example: _____

d) $\square$ - _____ Example: _____

Q 5. Imagine that you are shopping for the following items. Write their prices and calculate the total cost.

- Pencil: ₹__

- Eraser: ₹__

- Notebook: ₹__

Total cost = ₹__

Happy Learning! Keep practicing and enjoy Mathematics every day.

हिन्दी

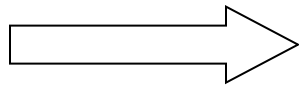
1. प्रतिदिन हिंदी की पाठ्यपुस्तक सारंगी अथवा बालभारती की कोई कहानी पढ़िए। किसी एक कहानी का शीर्षक, मुख्य पात्रों के नाम और उससे मिली सीख लिखिए।
2. निम्नलिखित विषयों पर 5–6 वाक्य लिखिए:
 - मेरा परिवार
 - मेरा विद्यालय
3. महीनों और सप्ताह के दिनों के नाम हिंदी में लिखें और याद करें।

ACTIVITY-

मेरा मिनी शब्दकोश (Mini Dictionary)

गतिविधि के लिए निर्देश:

1. शब्द चुनें- अपने आसपास या किताबों में से 10 नए शब्द चुनें। नए शब्द ऐसे हों जिन्हें आप पहले नहीं जानते या अच्छे से याद नहीं करते। उदाहरण: पुष्प, मित्र, साहस, उत्सव।
2. चित्र बनाएं - हर शब्द के पास उसका संबंधित चित्र बनाएं या चिपकाएँ। चित्र रंगीन और साफ़ होना चाहिए ताकि आसानी से समझ में आए।
उदाहरण: शब्द: पुष्प → चित्र: फूल का चित्र
शब्द: मित्र → चित्र: दो बच्चे हाथ में हाथ डालकर खड़े
3. सरल अर्थ लिखें- हर शब्द के नीचे उसका सरल और आसान अर्थ लिखें और उस शब्द से एक वाक्य भी बनाएं।
उदाहरण: पुष्प – फूल
वाक्य – यह गुलाब का पुष्प लाल रंग का है।
4. शब्दकोश तैयार करें- शब्द, चित्र, अर्थ और वाक्य को एक साफ़-सुथरी कागज़/छोटी किताब पर लिखें। हर पेज पर 2 शब्द लिखें ताकि पढ़ना आसान हो।
5. उदाहरण के लिए



ENGLISH

Instructions:

1. Complete all your work in separate thin notebook.



सायं एवं सुखं अगच्छतु
केन्द्रीय विद्यालय संगठन

PM SHRI KENDRIYA VIDYALAYA KANKER

AUTUMN BREAK HOLIDAY HOMEWORK

CLASS-2 SUBJECT: ENGLISH



1

Do 5 pages of handwriting practice.



Good Handwriting Builds a Brighter Future 😊

2

Read one page of your book daily to your family members.



3

Write and learn 10 opposite words. (2 times)

big	↔	small
hot	↔	cold



Opposites make sense! 😊

4

Find 10 naming words (nouns) around your home. Write them in your holiday homework notebook and draw their pictures.

 house	 tree	 chair	 table
 book	 bottle	 ball	 cat

5

Write 2 action words daily and make a sentence using each of them.



run
I run in the park.

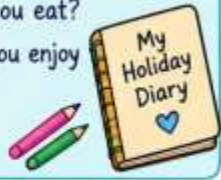


jump
She jumps with joy.

6 MY HOLIDAY DIARY

Write 5 sentences about how you spent your holiday.

- ★ Where did you go?
- ★ Whom did you meet?
- ★ What did you eat?
- ★ What did you enjoy the most?





Happy Holidays!

Gardening Homework – Class 2

1. Leaf Collection: Collect and paste five fallen leaves of different shapes or sizes in your notebook.
2. Name the Plants: Write the names of five plants.
3. Seed Collection: Collect and paste five different seeds in your notebook.
4. Gardening Tools: Draw and name five gardening tools.

Dear students,

Kindly complete your homework and submit it on time i.e.26/10/2026.

PM SHRI KENDRIYA VIDYALAYA KANKER (2026-27)

AUTUMN BREAK (15/10/26 TO 24/10/26)

HOLIDAY HOMEWORK

कक्षा- 3 हिंदी

१. पठन- प्रतिदिन एक पृष्ठ वीणा पाठ्यपुस्तक से पढ़ें।

२. लेखन-

- १ से ५० तक गिनती लिखिए। (जैसे- १-एक)
- प्र.३ दुर्गा पूजा के अवसर पर अपने अनुभव को कुछ वाक्यों में वर्णन कीजिए।(शब्द सूची -दशहरा, त्योहार, माँ ,दुर्गा पूजा, पंडाल, मंडप, सजावट, मेला, मीना बाजार, झूला, खाना, विसर्जन, परिवार, खुशियां, छुट्टी)

३. रचनात्मक कार्य- पाँच खेल का चित्र बनाकर अथवा प्रिंट निकालकर लगाइए और उनके नाम लिखिए ।

४. भाषा कार्य- इन सभी का पाँच पाँच उदाहरण लिखिए। (संज्ञा, विशेषण,क्रिया, सर्वनाम)

५. परियोजना कार्य(Project)- पाँच जोड़ा तुकवाले शब्द और पाँच जोड़ा समानार्थी शब्द का शब्द कार्ड बनाएं।

सूचना- सारा गृहकार्य A4 Size Paper में करें और उसमें अपना नाम, कक्षा और अनुक्रमांक लिखिए ।

छात्रों के लिए सामान्य निर्देश | General Guidelines for Students



प्रतिदिन एक गतिविधि पूरी करें।
Complete one activity per day.



सभी लिखित कार्य एक अलग नोटबुक में करें।
Complete all written work in a separate notebook.



गतिविधि की फोटो/चित्र नोटबुक में लगाएँ।
Paste photos/drawings in your notebook.



हर गतिविधि के साथ 1-2 पंक्तियाँ लिखें कि आपने क्या सीखा।
Write 1-2 lines about what you learned.



सभी गतिविधियाँ Term 2 में अब तक पढ़ाए गए विषयों पर आधारित हैं।
All activities should be based on the topics covered so far in Term 2.



दिन / Day	विषय / गतिविधि Topic / Activity	कार्य विवरण Activity Details
दिन 1 Day 1	पानी : एक अनमोल उपहार Water: A Precious Gift	पानी हमारे लिए क्यों जरूरी है? इसके 5 कारण लिखें और पानी की एक सुंदर बूंद का चित्र बनाएँ। Write 5 reasons why water is important and draw a beautiful water drop.
दिन 2 Day 2	बारिश का पानी कहाँ जाता है? What Happens to Rainwater	बारिश के पानी का चित्र बनाएँ और तीरों की मदद से दिखाएँ कि वह कहाँ-कहाँ जाता है (जमीन, नदी, तालाब आदि)। Draw a diagram to show where rainwater goes (ground, river, pond etc.) with arrows.
दिन 3 Day 3	पानी के स्रोत Sources of Water	पानी के 5 स्रोतों की तस्वीरें/चित्र बनाएँ और उनके नाम लिखें। Draw or paste pictures of 5 sources of water and write their names.
दिन 4 Day 4	हमारे घर तक पानी की यात्रा Journey of Water to Our Homes	चित्र बनाकर दिखाएँ कि पानी हमारे घर तक कैसे पहुँचता है (स्रोत से घर तक)। Draw a flow diagram showing the journey of water from source to our home.
दिन 5 Day 5	पानी का उपयोग Uses of Water	पानी के 5 उपयोगों के चित्र बनाएँ और नाम लिखें। Draw 5 pictures showing the uses of water and write their names.
दिन 6 Day 6	पानी बचाएँ Save Water	पानी बचाने के 5 आसान तरीके लिखें और एक सुंदर पोस्टर बनाएँ। Write 5 easy ways to save water and make a colourful "Save Water" poster.
दिन 7 Day 7	जानवरों और पौधों के लिए पानी (Water for Animals and Plants) (Birdbath)	पक्षियों के लिए एक बर्डबाथ का चित्र बनाएँ और 3 पंक्तियाँ लिखें कि हम पक्षियों और पौधों के लिए पानी कैसे उपलब्ध करा सकते हैं। Draw and colour a birdbath and write 3 lines on how we can help birds and plants with water.
दिन 8 Day 8	मेरे आसपास पानी Water Around Me	अपने आस-पास पानी वाले 3 स्थानों (जैसे तालाब, नदी, हैंडपम्प) के चित्र बनाएँ या चिपकाएँ और उनके नाम लिखें। Draw or paste pictures of 3 places where we see water around us and write their names.
दिन 9 Day 9	अच्छी और बुरी पानी की आदतें Good and Bad Water Habits	5 अच्छी पानी की आदतों पर ✓ लगाएँ और 5 गलत आदतों पर ✗ लगाएँ या अच्छा और बुरा आदतों का चित्र बनाएँ। Tick 5 good water habits and 5 bad water habits or draw one good and one bad habit.
दिन 10 Day 10	पुनरावृत्ति और नोटबुक कार्य Revision and Notebook Completion	सभी विषयों की पुनरावृत्ति करें और TWAU नोटबुक का शेष कार्य पूरा करें। Revise all topics and complete the pending TWAU notebook work.

NOTEBOOK COMPLETION (TWAU):

- Complete all pending TWAU notebook work.
- Complete written answers, drawings and map activities.
- Keep your notebook neat, clean and up to date.

Happy
Autumn Break!





AUTUMN BREAK HOLIDAY HOMEWORK

CLASS-3

SUBJECT: ENGLISH

1 Do 5 pages of handwriting practice.



2 Read one page of your book daily to your family members.



3 Draw a picture of a laddoo and write any 5 describing words for it.



4 Paste pictures of any 3 healthy snacks and write 4-5 lines about each of them.



5 Draw or paste a picture of a market and write 5 sentences describing the picture.



6 Write 5 new words daily with their English and Hindi meanings. Make one sentence using each word.



7 Creative Writing:
Imagine that you have a magical pencil. Write a short paragraph of 8-10 sentences.



Happy Holidays!



PM SHRI KENDRIYA VIDYALAYA KANKER
AUTUMN BREAK HOLIDAY HOMEWORK – 2026–27

Class: III

Subject: Mathematics – *Maths Mela*

General Instructions

- Complete all **5 activities** neatly in your homework notebook or on A4 sheets.
- Use waste and reusable materials available at home. **No purchase is required.**
- Spend about 10–15 minutes a day; do not overburden yourself.
- Take family members help for water activities and handling small objects.
- Be creative, enjoy learning and do your work yourself.

Activity 1: Fair Share

Chapter 8 – Fair Share

- Take 12 bottle caps, seeds or paper circles.
- Share them equally among 2 friends, then among 3 friends and 4 friends.
- Draw or paste your groups in your homework notebook.
- Write how many objects each friend gets in each case.

Materials: Bottle caps, seeds or paper circles, notebook.

Activity 2: My House of Hundreds

Chapter 9 – House of Hundreds-II

- Make a number using hundreds, tens and ones with paper strips or bundles of sticks.
- Example: $245 = 2 \text{ hundreds} + 4 \text{ tens} + 5 \text{ ones}$.
- Make any **three different numbers** and write their expanded forms.

Materials: Scrap paper, pencil, old newspaper or sticks.

Activity 3: Plan a Mini Class Party

Chapter 10 – Fun at Class Party!

- Imagine arranging a small party for 10 children.
- Draw 10 plates and show how you would arrange snacks equally.
- Draw or write a simple list of party items, such as 10 plates, 10 cups and 2 packets of biscuits.
- Count the items and write the total number of plates and cups.

Materials: Notebook, pencil and crayons.

Activity 4: Measure and Compare

Chapter 11 – Filling and Lifting

- Find three objects at home that are light or heavy.
- Arrange them from lightest to heaviest by carefully lifting them.
- Take two clean containers of different sizes. Estimate which holds more water.
- With parent's help, compare them using the same cup of water. Do not use glass containers.

Draw the objects and containers in your notebook.

Materials: Clean plastic containers, water and a cup.

Activity 5: Maths in My Daily Life

Chapters 12–14 – Give and Take; Time Goes On; The Surajkund Fair

Complete these three little challenges in your notebook:

1. **Give and Take:** Write any 3 addition or subtraction questions using two-digit or three-digit numbers. Solve them.
2. **Time Goes On:** Draw a clock showing the time you wake up and the time you go to bed.
3. **The Surajkund Fair:** Imagine visiting a fair with ₹100. Draw or list any 3 items you would like to buy, write their prices and calculate the total cost. Keep the total within ₹100.

Materials: Notebook, pencil and crayons.

Submission: Bring your working model or activity sheets after the holidays. Assessment will focus on understanding, participation, creativity and effort—not expensive materials or lengthy written answers.

Happy Holidays! Keep counting, sharing and smiling!

Gunjari Lal Sahu

PRT

PM SHRI Kendriya Vidyalaya Kanker

पीएम श्री केन्द्रीय विद्यालय कांकेर

शरदकालीन अवकाश गृहकार्य

कक्षा – 4

आवश्यक निर्देश

- सभी प्रश्नों को अलग कॉपी में लिखिए।
 - उत्तर स्वयं सोचकर लिखने का प्रयास कीजिए।
 - लिखावट, वर्तनी और विराम चिह्नों का ध्यान रखिए।
 - गृहकार्य व्यवस्थित एवं साफ-सुथरा होना चाहिए।
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१. कहानी पढ़िए और उत्तर दीजिए:

एक दिन चतुर खरगोश घने जंगल में घूम रहा था। उसे एक प्यासा हिरण दिखाई दिया।
खरगोश उसे नदी के पास ले गया। दोनों ने ठंडा पानी पिया और खुशी-खुशी घर लौट आए।

- कहानी से पाँच संज्ञा शब्द लिखिए।
- एक सर्वनाम शब्द लिखिए।
- चार विशेषण शब्द लिखिए।
- चार क्रिया शब्द लिखिए।
- 'खुशी' और 'ठंडा' के विलोम शब्द लिखिए।
- 'नदी' शब्द के समान अर्थ वाले शब्द लिखिए।

२. शब्दों का रूप बदलो

एक राजा अपने पुत्र और घोड़े के साथ यात्रा पर निकला। रास्ते में उसे एक शेर मिला। इस वाक्य में आए पुल्लिङ्ग शब्दों को पहचानिए और उनके स्त्रीलिङ्ग रूप लिखिए।

३. प्रत्येक समूह में ऐसा शब्द खोजिए जो बाकी शब्दों से अलग है। अलग शब्द का कारण भी लिखिए।

- लाल, पीला, मीठा, कुर्सी
- दौड़ना, खेलना, सुंदर, पढ़ना
- मैं, तुम, वह, राम
- लड़का, बच्चा, नदी, लड़की

४. . शब्दों के सही अर्थ पहचानकर वाक्य बनाइए:

- दिन और दीन
- सुत और सूत
- ओर और और
- ग्रह और गृह
- अवधि और अवधी

५. परिस्थिति पढ़िए और उचित मुहावरा लिखिए।

- रीमा अपने माता-पिता की बहुत प्यारी है।
- अमित ने अपनी गलती से अपना ही नुकसान कर लिया।
- मोहन पहले से ही परेशान था और ऊपर से उसकी साइकिल भी खराब हो गई।
- रीना परीक्षा में अच्छे अंक नहीं ला पाई, तो कहने लगी कि परीक्षा बहुत कठिन थी।
- राहुल ने कठिन सवाल हल करने के लिए बहुत मेहनत की।

६. नीचे दिए वाक्यों में उचित विराम चिह्न लगाकर दोबारा लिखिए:

- अरे तुम यहाँ कैसे आए
- वाह कितना सुंदर दृश्य है
- राम सीता और मोहन विद्यालय गए
- माँ ने कहा समय पर अपना काम पूरा करो
- क्या तुमने अपना गृहकार्य कर लिया

७. अशुद्ध वर्तनी वाले शब्दों को पहचानकर शुद्ध रूप लिखिए:

- आशिर्वाद
- परिक्षा
- विधालय
- उज्ज्वल
- स्वास्थ्य
- अवश्यक
- दिपावली

८. मेरी पठन डायरी।

अवकाश के दौरान कम-से-कम पाँच कहानियाँ पढ़िए और तालिका पूरी कीजिए।

कहानी का नाम	मुख्य पात्र	नए शब्द	कहानी से मिली सीख

PM SHRI KENDRIYA VIDYALAYA KANKER

AUTUMN BREAK HOLIDAY HOMEWORK

Session: 2026–27

Class: IV

Subject: Mathematics

Subject Teacher: Gunjari Lal Sahu, PRT

Instructions for Students

- Use waste materials and things available at home.
- Avoid lengthy written work. Parents may guide, but children should do the activities themselves.

Task 1: Make a Working Measuring Model

Chapter 8 – Weigh it, Pour it

Make a simple measuring container using a reused plastic bottle and mark approximate quantities such as 100 mL, 200 mL and 500 mL with the help of a measuring cup.

Learn and practise: Estimate and compare the capacities of two or three household containers.

Task 2: Multiplication with Bottle Caps, Seeds or Buttons

Chapter 9 – Equal Groups

Use bottle caps, seeds or buttons to make equal groups.

Learn and practise: Make arrays for multiplication tables of 2, 3, 4, 5 and 6. Say the multiplication facts orally and explain how equal groups help us multiply.

Task 3: Nature Walk and Symmetry Art

Chapters 10 and 11 – Elephants, Tigers, and Leopards; Fun with Symmetry

Observe leaves, flowers, butterflies or other natural patterns. Draw or paste any three examples in your notebook and identify symmetry wherever present.

Learn and practise: Say the names of five animals and arrange given numbers in ascending or descending order using a family-made number game.

Task 4: Make a Working Paper Clock

Chapter 12 – Ticking Clocks and Turning Calendar

Make a movable clock using waste cardboard, two paper hands and a split pin or another safe fastening method with parents help.

Learn and practise: Show five different times on the clock. Read the times aloud and calculate the duration of simple daily activities.

Task 5: My Mini Mathematics Museum

Chapters 13 and 14 – The Transport Museum; Data Handling

Create a small display using drawings or recycled materials showing any three means of transport. Ask five family members about their favourite vehicle and represent the responses using a simple tally chart or pictograph.

Learn and practise: Compare the numbers, identify the most popular vehicle and solve two simple addition or subtraction questions using your collected data.

Note: Bring your working model or activity notebook after the holidays. Neatness, effort, creativity and understanding will be appreciated rather than expensive materials or lengthy written answers.

Gunjari Lal Sahu

PRT

PM SHRI Kendriya Vidyalaya Kanker

शरदावकाश गृहकार्य | Autumn Break Holiday Homework

कक्षा 4 | Class 4

TWAU – The World Around Us

LEARN
EXPLORE
GROW
BE HEALTHY
BE HAPPY

छात्रों के लिए सामान्य निर्देश | General Guidelines for Students



प्रतिदिन एक गतिविधि पूरी करें।
Complete one activity per day.



सभी लिखित कार्य एक अलग नोटबुक में करें।
Complete all written work in a separate notebook.



गतिविधि की फोटो/चित्र नोटबुक में लगाएँ।
Paste photos/drawings in your notebook.



हर गतिविधि के साथ 1-2 पंक्तियाँ लिखें कि आपने क्या सीखा।
Write 1-2 lines about what you learned.



सभी गतिविधियाँ Term 2 में अब तक पढ़ाए गए विषयों पर आधारित हैं।

All activities should be based on the topics covered so far in Term 2.



दिन Day	विषय / गतिविधि Topic / Activity	कार्य विवरण Activity Details
दिन 1 Day 1	अनाज की यात्रा Journey of a Grain	बीज से रोटी तक अनाज की यात्रा चित्रों के साथ दिखाएँ। Show the journey of grain from seed to roti with drawings.
दिन 2 Day 2	मेरे भोजन का समय-सारणी My Food Timetable	एक दिन का स्वस्थ भोजन टाइमटेबल बनाएँ और भोजन के समय लिखें। Make a healthy food timetable for one day and write meal times.
दिन 3 Day 3	सुरक्षित और असुरक्षित स्पर्श Safe and Unsafe Touch	सुरक्षित-असुरक्षित स्पर्श पर 5 नियम लिखें और trusted adults की मदद लेना याद रखें। Write 5 safety rules and remember to seek help from a trusted adult.
दिन 4 Day 4	आराम और नींद Rest and Sleep	अच्छी नींद की आदतों पर 5 वाक्य लिखें। Write 5 sentences about healthy sleep habits.
दिन 5 Day 5	शारीरिक गतिविधियाँ Physical Activities	अपनी पसंद की 3 शारीरिक गतिविधियों के चित्र बनाएँ/चिपकाएँ और लाभ लिखें। Draw or paste 3 physical activities and write their benefits.
दिन 6 Day 6	ध्यानपूर्वक भोजन Mindful Eating	ध्यान से और धीरे-धीरे खाने की 5 अच्छी आदतें लिखें। Write 5 good habits for mindful eating.
दिन 7 Day 7	स्वस्थ या अस्वस्थ? Healthy or Unhealthy?	5 खाद्य पदार्थों को स्वस्थ/कभी-कभी खाने वाले खाद्य पदार्थों में वर्गीकृत करें। Sort 5 foods into healthy and occasional foods.
दिन 8 Day 8	मेरी दिनचर्या My Daily Routine	पढ़ाई, खेल, भोजन और नींद को शामिल करते हुए दिनचर्या बनाएँ। Make a daily routine including study, play, meals and sleep.
दिन 9 Day 9	अच्छी आदतों का कोलाज Healthy Habits Collage	हाथ धोना, साफ-सफाई, व्यायाम और स्वस्थ भोजन पर A4 आकार की शीट पर कोलाज बनाएँ। Make a collage on an A4-size sheet about handwashing, cleanliness, exercise and healthy food.
दिन 10 Day 10	पुनरावृत्ति और नोटबुक कार्य Revision and Notebook Completion	सभी विषयों की पुनरावृत्ति करें और TWAU नोटबुक का शेष कार्य पूरा करें। Revise all topics and complete pending TWAU notebook work.

NOTEBOOK COMPLETION (TWAU):

- Complete all pending TWAU notebook work.
- Complete written answers, drawings and map activities.
- Keep your notebook neat, clean and up to date.

Happy
Autumn Break!



PM SHRI KENDRIYA VIDYALAYA KANKER

SESSION 2026- 27

AUTUMN BREAK HOLIDAY HOMEWORK

1. Complete all work neatly in a small copy.
2. Make sure that your handwriting is beautiful.
3. Avoid any spelling mistakes.
4. You can decorate your work with many pictures and colours.

CLASS IV — ENGLISH

Daily Practice: Read English textbook for 30 minutes daily.

1. **Nouns and Pronouns:** Write three names of any person, place, animal and thing in a table. Make sentences using *he, she, it, they* or *we*.
2. **Adjectives:** Write five describing words along with naming words they describe. Eg- blue sky.
3. **Is/Are:** Fill in the blanks: (a) The bird ___ flying. (b) My friend ___ kind. (c) The flowers ___ beautiful. (d) We ___ ready.
4. **Adverbs:** Write five sentences using *slowly, neatly, happily, loudly* and *carefully*.
5. **Degrees of Comparison:** Write the three forms of *tall, small, fast, short* and *long*. Example: tall – taller – tallest.
6. **Creative Writing:** Write 6–8 sentences on “What did I do on Dussehra.” Handwriting needs to be clean, clear and beautiful. Focus on letter formation, spacing and neatness.
7. **Revision:** Revise chapter 7 with question- answers and book exercises.



PM SHRI KENDRIYA VIDYALAYA KANKER



AUTUMN BREAK HOLIDAY HOMEWORK

CLASS-5 SUBJECT: ENGLISH

Q1. What is the importance of water in our daily life? Describe any five ways in which we can save water at home and at school.



Q2. Write five sentences about your classroom using suitable adjectives. Underline the adjectives and circle the nouns.



Q3. Describe how playing outdoor games helps us stay healthy and active. Name two traditional games you enjoy and explain how to play one of them.



Q4. You see some children throwing wrappers and plastic bottles in the school playground. What would you do to solve this problem? Explain how you would encourage your classmates to keep the school clean.



Q5. Letter Writing: Write a letter to your friend describing how you have spent your holidays. Include your daily activities, the books you read, the games you played, and one new thing you have learned.



Q6. Imagine that you can fly like a bird for one day. Write about the places you would visit, the people you would meet, the things you would see, and how you would use this special power to help others.



Q7. Tense Practice: Write five sentences for each of the following tenses. Use different pronouns in your sentences.

a Simple Present

b Present Progressive

c Present Perfect

d Simple Past

e Past Progressive

f Past Perfect

Happy
Holidays!



PM SHRI KENDRIYA VIDYALAYA KANKER (2026-27)

AUTUMN BREAK (15/10/26 TO 24/10/26)

HOLIDAY HOMEWORK

कक्षा- 5 हिंदी

सभी कार्य A4 पेपर पर करें

- 1) अपनी हिंदी पाठ्यपुस्तक से सीखी गई कोई 10 मुहावरों को अर्थ के साथ लिखिए।
- 2) कोई 10 पहेली उत्तर सहित लिखिए।
- 3) अपनी हिंदी पाठ्यपुस्तक से सीखी गई कोई 10 शब्दों के समानार्थी शब्द लिखिए।
- 4) अपनी हिंदी पाठ्यपुस्तक से सीखी गई कोई 10 शब्दों के विलोम शब्द लिखिए।
- 5) अपने बारे में 10 वाक्य लिखिए।
- 6) दशहरा के बारे में 10 वाक्य लिखिए।
- 7) प्रतिदिन एक पेज सुलेख लिखे और लिखा हुआ अपने माता- पिता को पढ़कर सुनाए।

(सभी कार्य A4 साइज़ पेपर पर करें और उसमें अपना नाम, रोल न. लिखें-)

ANDAMAN
AND NICOBAR
ISLANDS

SUNDARBANS

WESTERN
GHATS

NORTH EAST
INDIA

छात्रों के लिए सामान्य निर्देश | General Guidelines for Students



प्रतिदिन एक गतिविधि पूरी करें।
Complete one activity per day.



सभी लिखित कार्य एक अलग नोटबुक में करें।
Complete all written work in a separate notebook.



गतिविधि की फोटो/चित्र नोटबुक में लगाएँ।
Paste photos/drawings in your notebook.



हर गतिविधि के साथ 1-2 पंक्तियों लिखें
कि आपने क्या सीखा।
Write 1-2 lines about what you learned.



सभी गतिविधियों Term 2 में अब तक पढ़ाए गए विषयों पर आधारित हैं।
All activities should be based on the topics covered so far in Term 2.



दिन / Day	विषय / गतिविधि Topic / Activity	कार्य विवरण Activity Details
दिन 1 Day 1	 अंडमान और निकोबार द्वीपसमूह Andaman and Nicobar Islands	भारत के मानचित्र पर अंडमान और निकोबार द्वीपसमूह को चिह्नित करें और इनके बारे में 5 रोचक तथ्य लिखें। Mark the islands on an outline map of India and write 5 interesting facts.
दिन 2 Day 2	 सुंदरबन Sundarbans	मैंगोव वन, रॉयल बंगाल टाइगर और यहाँ के जीवन-जंतुओं का चित्र बनाएं/चिपकाएं तथा 4 वाक्य लिखें। Draw or paste pictures of mangrove forests, the Royal Bengal Tiger and local wildlife; write 4 sentences.
दिन 3 Day 3	 पूर्वोत्तर भारत के राज्य Northeast States	पूर्वोत्तर के 8 राज्यों के नाम लिखें और भारत के मानचित्र पर इन्हें चिह्नित करें। Write the names of the eight Northeast states and mark them on a map.
दिन 4 Day 4	 पश्चिमी घाट Western Ghats	पश्चिमी घाट की पहाड़ियों, वर्षान और जैव-विविधता पर 5 वाक्य लिखें। और जिन राज्यों से पश्चिमी घाट गुजरते हैं, उन राज्यों को भारत के मानचित्र पर चिह्नित करें। Write 5 sentences about the hills, rainforests and biodiversity of the Western Ghats and locate the states through which the Western Ghats pass on an outline map of India.
दिन 5 Day 5	 रोचक तथ्य Interesting Facts	चारों स्थानों में से प्रत्येक के बारे में 2 रोचक तथ्य लिखें। Write 2 interesting facts about each of the four places.
दिन 6 Day 6	 चित्र गतिविधि Picture Activity	अपनी पसंद के किसी एक स्थान का रंगीन चित्र बनाएं या फोटो चिपकाएं। Draw or paste a colourful picture of one place of your choice.
दिन 7 Day 7	 बहुविकल्पीय प्रश्न MCQs	चारों स्थानों पर आधारित 5 MCQs बनाएं। Prepare 5 MCQs based on the four places.
दिन 8 Day 8	 मिलान करें Match the Following	स्थान और उनकी विशेषताओं के 5 मिलान वाले जोड़े बनाएं। Prepare 5 match-the-following pairs linking places with their features.
दिन 9 Day 9	 भारत की प्राकृतिक धरोहर India's Natural Heritage	चारों स्थानों को दर्शाते हुए भारत की विविधता पर चित्रों को चिपकाकर कोलाज बनाएं। Make a collage by pasting pictures depicting vibrant India on an A4-size sheet.
दिन 10 Day 10	 पुनरावृत्ति और नोटबुक कार्य Revision and Notebook Completion	सभी विषयों की पुनरावृत्ति करें और TWAU नोटबुक का शेष कार्य पूरा करें। Revise all topics and complete pending TWAU notebook work.

NOTEBOOK COMPLETION (TWAU):

- Complete all pending TWAU notebook work.
- Complete written answers, drawings and map activities.
- Keep your notebook neat, clean and up to date.

Happy
Autumn Break!

PM SHRI KENDRIYA VIDYALAYA KANKER

AUTUMN BREAK HOLIDAY HOMEWORK

Session: 2026–27

Class: V

Subject: Mathematics

Subject Teacher: Gunjari Lal Sahu, PRT

General Instructions

- Use waste materials and household items; no special purchases are required.
- Practise for 10–15 minutes a day. Avoid lengthy written work.
- Parents may help with safety, but students should perform the activities themselves.

Task 1: My Measurement Lab

Chapter 8 – Weight and Capacity

Make a simple measurement station at home.

Activity: Estimate and compare the weights of three household objects and the capacities of two containers. Verify your estimates using a weighing scale or measuring cup, if available.

Learn and practise: Compare weights and capacities, use appropriate units, and solve ten oral questions involving grams, kilograms, millilitres or litres.

Materials: Household objects, clean plastic containers, measuring cup and weighing scale.

Task 2: Coconut Farm Mathematics

Chapter 9 – Coconut Farm

Create a small coconut farm using paper drawings, bottle caps or seeds.

Activity: Arrange your paper coconuts in equal groups. Choose a number of groups and calculate the total number of coconuts. Change the number of groups and compare the results.

Learn and practise: Use multiplication and division to solve simple grouping problems based on your model.

Materials: Waste paper, pencil, crayons, bottle caps or seeds.

Task 3: Symmetry and Quilt Design

Chapters 10–11 – Symmetrical Designs; Grandmother's Quilt

Create a colourful quilt pattern on a sheet of waste paper.

Activity: Use repeated squares, triangles or other simple shapes to make a decorative pattern. Include at least one symmetrical design.

Learn and practise: Identify repeated patterns, mark a line of symmetry where applicable, and explain the rule followed in your design.

Materials: Waste paper, ruler, pencil, crayons and glue.

Task 4: Time and Animal Jumps

Chapters 12–13 – Racing Seconds; Animal Jumps

Become a timekeeper and number-pattern explorer.

Activity: With a family member, time a simple activity such as 10 jumps or 10 steps using a stopwatch or clock. Repeat once and compare the times. Then make a number-jump track on paper using equal jumps, such as 2, 5 or 10.

Learn and practise: Read time in seconds, compare two durations, and say the number sequence formed by equal jumps.

Materials: Clock or stopwatch, paper and pencil.

Safety: Perform jumps in a clear, safe space and only as comfortable. Walking or finger jumps on paper are equally acceptable.

Task 5: My Map and Picture Data

Chapters 14–15 – Maps and Locations; Data Through Pictures

Become a young mapmaker and data reporter.

Activity: Draw a simple map from your room to another familiar place in your home. Mark the route using arrows. Then ask five family members about their favourite fruit or game and represent the responses with a pictograph.

Learn and practise: Follow directions, describe the route using words such as left, right, near and far, and identify the most popular choice from your pictograph.

Materials: Paper, pencil, ruler and crayons.

Submission: Bring your working model or activity sheets after the holidays. Assessment will focus on understanding, participation, creativity and effort—not expensive materials or lengthy written answers.

Gunjari Lal Sahu

PRT

PM SHRI Kendriya Vidyalaya Kanker

Day 1 What is MS Word?

- MS Word is a word processor.
- It helps us to type, edit, save and print documents.
- We use MS Word to write letters, stories, notes and more.



Task:

- Write 5 uses of MS Word.
- What is a word processor?

Day 2 Parts of the MS Word Window



Task: Label the parts of the MS Word window using the given names.

Day 3 Menu Tabs and Groups

MS Word has different menu tabs. Each tab has groups of commands.

Tab	Main Group (Examples)
Home	Clipboard, Font, Paragraph, Styles
Insert	Pages, Tables, Illustrations
Design	Themes, Page Background
Layout	Page Setup, Arrange
View	Show, Zoom, Window

Task: 1. Write the names of any 5 menu tabs.
2. Write 2 groups in the Home tab.

Day 4 File Menu



- File menu is used to manage our document.
- We can create a new file, open, save, print and close the file.

Task: 1. Write any 4 options of File menu.
2. What is the use of Save As?

Day 5 Formatting Text

We can change the look of our text using formatting tools.



Task: 1. Type the sentence "I love my school" in MS Word.
2. Make the text bold, change the font color and align it in the center.

Day 6 Creating a New Document

We can create a new document in two ways:

- Click on File → New → Blank Document.
- Press Ctrl + N.



Task: 1. Create a new document and type your name, class and school name.
2. Save it as "MyName".

Day 7 Saving and Opening a File



- Save a file: File → Save (or press Ctrl + S).
- Open a file: File → Open (or press Ctrl + O).

Task: 1. Save the file "MyName" in your Pen Drive or computer.
2. Close the file and open it again.

Day 8 Working with Pictures

We can insert pictures, shapes and symbols in MS Word.



Task: 1. Insert a picture or clip art in your document.
2. Type a caption below it.

Day 9 Printing a Document

We can print our document using the Print option.



Task: 1. Write the steps to print a document.
2. What is the shortcut key to print? (Hint: Ctrl + P)

Day 10 Revision and Practice



Do the following in your notebook:

- Write the full form of MS Word.
- Name any 5 menu tabs.
- Write two uses of MS Word.
- Draw and label the MS Word window.
- Type a short paragraph about "My Favourite Subject" in MS Word.

Practice makes you perfect! 😊



पीएम श्री केंद्रीय विद्यालय कांकेर
शरदकालीन अवकाश गृहकार्य (2026-27)

कक्षा- VI

कक्षा 6 (Class VI) — हिंदी

प्रश्न 1. निबंध लेखन

निम्नलिखित में से किसी एक विषय पर 100-120 शब्दों में निबंध लिखिए।

1. मेरा प्रिय त्योहार 2. स्वच्छता का महत्त्व 3. महाराणा प्रताप 4. पेड़-पौधों का महत्त्व

प्रश्न 2. पत्र लेखन

अपने मित्र को दीपावली की शुभकामनाएँ देते हुए एक पत्र लिखिए।

प्रश्न 3. विशेषण की परिभाषा एवं उसके भेद उदाहरण सहित लिखिए।

विशेषण के प्रमुख भेद निम्नलिखित हैं—

1. गुणवाचक विशेषण: जो शब्द संज्ञा या सर्वनाम के गुण, दोष, रंग, आकार आदि बताएँ।
उदाहरण – सुंदर फूल, ईमानदार लड़का।

2. संख्यावाचक विशेषण: जो शब्द संज्ञा या सर्वनाम की संख्या या क्रम बताएँ।
उदाहरण – चार विद्यार्थी, पहला स्थान।

3. परिमाणवाचक विशेषण: जो शब्द किसी वस्तु की मात्रा बताएँ।
उदाहरण – थोड़ा पानी, अधिक दूध।

4. सार्वनामिक विशेषण: जब सर्वनाम शब्द संज्ञा से पहले आकर उसकी विशेषता बताए।
उदाहरण – यह पुस्तक, वह लड़का।

(घ) निम्नलिखित वाक्यों में संज्ञा, सर्वनाम एवं विशेषण शब्द पहचानकर लिखिए।

1. राम एक मेहनती विद्यार्थी है।
2. वह सुंदर फूल लेकर आया।
3. मेरी पुस्तक नई है।
4. बगीचे में रंग-बिरंगे फूल खिले हैं।
5. मोहन अच्छा लड़का है।

प्रश्न 4. विलोम शब्द

निम्नलिखित शब्दों के विलोम शब्द लिखिए।

सुख, दिन, नया, अच्छा, सत्य, लाभ, प्रकाश, मित्र, छोटा, स्वतंत्र

कक्षा 6 (Class VI) — संस्कृत

1. संस्कृत पाठ्यपुस्तक से अतिथिदेवो भव पाठ का अभ्यास कार्य पूर्ण करिए।
2. शब्दरूप लिखिए: राम, बालक, लता और फल।
3. पठ्, गम्, और खाद् धातुओं के लट् लकार के रूप लिखिए।
5. 'मम विद्यालयः', 'मम परिवारः' और 'वृक्षाः' विषयों पर पाँच-पाँच संस्कृत वाक्य लिखिए।
6. हिंदी अर्थ सहित 30 संस्कृत शब्द लिखिए।
7. निम्नलिखित संस्कृत अव्यय पद लिखकर इनका हिंदी अर्थ लिखिए।

अत्र, तत्र, सर्वत्र, कुत्र, कदा, यदा, तथा, एकदा, पुनः, किम् कथम्, किमर्थम्, बहिः, अधः, उपरि, अन्तः,

PM SHRI KENDRIYA VIDYALAYA KANKER
AUTUMN BREAK HOLIDAY HOME-WORK (SESSION 2026-27)

CLASS – 6TH

SUBJECT – MATHEMATICS

DATE : 13/10/2026

General Instructions

- Complete all questions neatly in your Mathematics notebook or on A4 sheets wherever required.
- Use colours, rulers and creative designs for the art-integrated work

Answer the following:

1. Find the perimeter of a square of side 6 cm.
2. Find the perimeter of a rectangle of length 12 cm and breadth 5 cm.
3. Write the fraction representing 3 shaded parts out of 8 equal parts.
4. A rectangular garden is 18 m long and 11 m wide. Find its perimeter and area.
5. A square playground has a side of 15 m. Find the length of fencing required to cover its boundary once.
6. The school has a rectangular garden measuring 20 m × 12 m. A square flower bed of side 4 m is made inside it.
 - i. Find the area of the entire garden.
 - ii. Find the area of the square flower bed.
 - iii. Find the area of the remaining garden outside the flower bed.

Art-Integrated Activity 1

7. Create a colourful geometric rangoli on an A4 sheet using a square or rectangular grid.

Mathematics Formula

8. Write and learn :

A. Perimeter and Area

Shape	Formula
Rectangle perimeter	$2(l + b)$
Square perimeter	$4 \times s$
Triangle perimeter	Sum of all three sides
Rectangle area	$l \times b$
Square area	$s \times s$
Triangle area	$\frac{1}{2} \times b \times h$

Holidays Homework Class VI SST

1. Difference between Direct & Indirect Democracy
2. **Organs** of Democratic Government
3. Difference between the **Tier of Local Government** at rural & urban level.
4. Population structure & type of Municipal Corporation.
5. **Qualities** of successful
 - a) Sarpanch at Gram Panchayat
 - b) Municipal Commissioner at Urban level
6. **Sources** of Income for ULBs
7. Describe the 3 types of landforms with suitable examples. Does Landform impact life of living beings or living beings impacting the landform?
8. **GAMIFIED LEARNING:**
 - a) U T U R C E T A R F S I N R
 - b) E T M N N R E V O G
 - c) I N G I D L U B
 - d) C I A P I L U M N
 - e) E Y I T E A M I L D M
 - f) Y R A R T I B R A
 - g) Y C A R C O M E D
9. **CASE STUDY:**

Imagine you are the Ward Councillor of your neighborhood. Write a short report (100–150 words) listing two major local problems (e.g., garbage management, broken streetlights) and how you plan to solve them
10. **OUTLINE ON MAP:**
 - The Great Northern Plains
 - The Deccan Plateau
 - The Himalayan Mountain Range

PM SHRI Kendriya vidyalaya kanker (C.G.)

Subject-Science

Autumn break Homework

Section A: Fill in the Blanks:-

1. The degree of hotness or coldness of an object is called its _____.
2. The SI unit of temperature is _____.
3. A clinical thermometer has a range from _____ to _____.
4. The normal temperature of a healthy human body is _____ °C or _____ °F
5. Laboratory thermometers are generally filled with either mercury or _____.

Section B: Short Answer Questions:-

1. **Why can we not rely on our sense of touch** to measure how hot or cold something is? Give an example.
2. Why does a **clinical thermometer** have a much smaller temperature range compared to a **laboratory thermometer**?
3. Why are traditional mercury thermometers being replaced by **digital thermometers** nowadays?
4. Can you use a clinical thermometer to measure the temperature of boiling milk? Why or why not?
5. List two precautions that must be taken while reading a **laboratory thermometer**.

Section C: Long Answer Questions:-

1. Differentiate between a clinical thermometer and a laboratory thermometer based on their purpose, range, and structure.
2. Explain the step-by-step process of how to correctly measure the temperature of water using a laboratory thermometer without making errors.

Section D: Multiple Choice Questions:-

1. Why is our sense of touch not a reliable way to measure how hot or cold an object is?
A. Our skin changes temperature too quickly to feel anything accurately.
B. It is subjective and depends on the previous state of our hands, making it relative rather than an absolute measure.
C. Our skin can only feel temperatures above 40 degrees Celsius.
D. Molecules in our skin stop moving when we touch cold objects.
2. What is the typical temperature range of a laboratory thermometer used in school science labs?
A. 35 degrees Celsius to 42 degrees Celsius
B. Minus 10 degrees Celsius to 110 degrees Celsius
C. 0 degrees Celsius to 50 degrees Celsius
D. Minus 50 degrees Celsius to 50 degrees Celsius
3. Which liquid is commonly used in the bulb of traditional clinical and laboratory glass thermometers?
A. Water B. Alcohol C. Mercury D. Cooking oil
4. While reading a clinical thermometer, how should the level of mercury be positioned relative to your eye?
A. Along the line of sight (level with the eye)
B. Viewed from directly above the top end

- C. Viewed from directly below the bulb
 - D. The position of the eye does not affect the reading.
5. Why is it incorrect or dangerous to use a clinical thermometer to measure the temperature of boiling water?
- A. Boiling water turns into ice when it touches glass.
 - B. The mercury will freeze instantly.
 - C. It will measure the temperature too slowly to matter.
 - D. The temperature of boiling water (100°C) far exceeds the maximum range of a clinical thermometer (42°C), which can cause the glass bulb to break.

Class 6: English (Autumn Break Homework)

- 1) Write a paragraph on “Importance of Spices in Our Daily Life” in about 100-120 words.**
- 2) Make a list of five spices and write one each health – related use.**
- 3) Write meanings of ten difficult words from the chapter “Change of Heart”.**
- 4) Write a character sketch of the main character in 80-100 words.**
- 5) Write the moral of the chapter “Change of Heart” in 50- 60 words.**
- 6) Write a paragraph on “The Importance of Kindness and Empathy in 1000-120 words.**
- 7) Write a paragraph on “How I Spent My Autumn Break” in 100-120 words.**
- 8) Write five sentences each in the Present Continuous, Past Continuous and Future Continuous.**
- 9) Write the structure and two examples each of the Simple Present, Simple Past and Simple Future**

HOME WORK FROM 15/10/2026 TO 25/10/2026

Example	Type of Data
Exam Marks	
A voice message	
School ID photo	
Your home address	
Number of students in the class	

DATA LITERACY – EXERCISE SOLUTIONS

A. MULTIPLE CHOICE QUESTIONS

1. b) Using data for decision-making
2. c) Numerical Data
3. d) Making future predictions
4. b) Video Data
5. d) Your photograph

B. FILL IN THE BLANKS

1. Data means raw facts and figures.
2. Tables arrange data in rows and columns.
3. Text data is made up of letters, words, and sentences.
4. Grouping similar kinds of data is called classification.
5. Saving data in secure systems is known as data security.

C. SHORT ANSWER QUESTIONS

1. **What is Data?**
Data is a collection of raw facts and figures that can be processed to get meaningful information.
2. **State any two important aspects of Data in daily life.**
Data helps us make decisions and identify patterns or trends.
3. **Name the four main types of Data.**
Text data, numerical data, image data, and video data.
4. **What is the difference between a table and a chart?**
A table presents data in rows and columns, while a chart displays data visually for easier comparison and understanding.
5. **Define classification and labelling in Organising Data.**
Classification means grouping similar data into categories. Labelling means giving categories or data clear names for easy identification.

D. THINK AND APPLY

1. A student measures the height of a plant every week. What type of data is being collected?
Numerical data.
2. A teacher wants to compare the marks of students clearly. Should she use a table or a bar chart? Give one reason.
A bar chart, because it makes comparing students' marks quick and clear.
3. A shopping app suggests products based on your previous searches. How is data being used in this situation?
The app analyses previous search data to identify interests and recommend related products.
4. Your desktop has many mixed files with random names. What should you do?
Classify files into folders by type or purpose and give them clear, meaningful names.

E. CLASSIFY THE FOLLOWING AS AI OR AUTOMATION

Example	Correct classification
Exam Marks	Numerical Data
A voice message	Sound Data
School ID photo	Image Data
Your home address	Text Data
Number of students in the class	Numerical Data

These examples are types of data, not AI or automation.

Chapter 1 : Data Literacy

Day 1 : What is Data?

- Q1.** What is data? Give two examples from your daily life.
Ans. Data is a collection of facts, numbers, or information that helps us understand something.
 Examples: 1. Temperature 30°C 2. Number of students in class (32)

Day 2 : Types of Data

- Q2.** Name the two types of data. Give one example of each.
Ans. 1. Numerical Data - e.g. 45, 23, 67
 2. Non-numerical Data - e.g. Name, Color, City

Day 3 : Collecting Data

- Q3.** Give two ways to collect data.
Ans. 1. Survey (asking questions)
 2. Observation (watching and recording)



Day 4 : Organising Data

- Q4.** Look at the table below. What does it show? Write the information in words.

Favourite Fruits in a Class				
Fruit	Apple	Banana	Mango	Orange
Number of Students	8	12	7	5

- Ans.** The table shows the number of students who like each fruit. 12 students like banana (the most), 8 like apple, 7 like mango and 5 like orange.

Day 5 : Reading and Interpreting Data

- Q5.** Look at the bar graph and answer the questions.



- a) On which day were the maximum books read? **Ans.** Saturday (7)
 b) On which day were the minimum books read? **Ans.** Monday (2)
 c) How many books were read on Wednesday? **Ans.** 5

Day 6 : Data in Daily Life

- Q6.** Give two real-life examples where data helps us.
Ans. 1. Weather forecast (uses temperature and rainfall data).
 2. Online shopping (uses data to show your favourite items).

Day 7 : Quick Revision

- Q7.** Fill in the blanks.
 a) Data helps us make _____ (decisions)
 b) _____ is a way to organise data. (Table)
 c) The graph that uses vertical bars is called a _____ graph. (Bar)
 d) AI can work with _____ data. (both numerical and non-numerical)

Day 8 : Short Answer

- Q8.** Why is data important? Write in 2-3 lines.
Ans. Data is important because it helps us find patterns, solve problems, and make better decisions in our daily life and in many fields like education, health, sports and weather.

Day 9 : Identify the Data

- Q9.** Which type of data is each? (Numerical / Non-numerical)
 a) 25 _____
 b) Delhi _____
 c) 78.5 _____
 d) Blue _____

Day 10 : Project / Activity

Chapter 2 : Introduction to AI

Day 1 : What is AI?

- Q1.** What is Artificial Intelligence (AI)?
Ans. AI is the ability of a computer or machine to think, learn, and make decisions like a human being.



Day 2 : Examples of AI

- Q2.** Name any three examples of AI in daily life.
Ans. 1. Voice assistant (e.g. Alexa, Google Assistant)
 2. Face unlock in mobile
 3. Chatbots in websites

Day 3 : AI in Our Life

- Q3.** How is AI useful in our daily life? Give two points.
Ans. 1. Helps in quick and easy information search.
 2. Makes work easier and faster (e.g. in mobile, games, transport).

Day 4 : Human vs Machine

- Q4.** How is AI different from a human?
Ans. AI can do many tasks very fast and does not get tired. Humans can think creatively, feel emotions and have imagination.

Day 5 : AI and Robots

- Q5.** Name any two places where robots are used with AI.
Ans. 1. Factories (to make products)
 2. Hospitals (to help in surgery and care)



Day 6 : Good and Bad Use of AI

- Q6.** Write one good use and one bad use of AI.
Ans. Good use: Helps in education and healthcare.
 Bad use: Can be misused for hacking or spreading fake news.

Day 7 : AI Around Us

- Q7.** Find and write two AI tools you may use.
Ans. 1. Google Assistant (voice search)
 2. YouTube suggestion (recommends videos)



Day 8 : Think and Answer

- Q8.** Why do you think AI is important for the future?
Ans. AI will help in solving big problems like climate change, disease, and better learning. It can make our life safer, healthier and more comfortable.

Day 9 : Fill in the Blanks

- Q9.** a) AI stands for _____
 b) Robots are used in _____ and _____
 c) AI can help in _____, _____ and _____

(Possible answers: Artificial Intelligence, factories, hospitals, education, healthcare, transport)

Day 10 : Activity / Project

- Q10.** Make a poster on "AI - A Friend for a Better Tomorrow". Write 4 uses of AI and draw a picture.

Uses of AI
 • Education

**AI - A Friend
for a Better**



PM SHRI KENDRIYA VIDYALAYA, KANKER
AUTUMN BREAK HOMEWORK

Subject: Physical & Health Education / Physical Activity Trainer

Class VI – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of daily physical activity.
3. Practise yoga and stretching regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

PM SHRI KENDRIYA VIDYALAYA KANKER

HOLIDAY HOMEWORK

SUBJECT: ART EDUCATION | CLASSES IV TO VIII

GENERAL INSTRUCTIONS

1. Students must complete **at least 5 artworks** during the holidays.
2. All artworks must be made neatly and beautifully in the students' **Art/Drawing Copy**.
3. Use appropriate colours, maintain cleanliness, and present your work creatively.
4. Complete the homework according to your respective class topics.

CLASS IV

Topics: Still Life Study • Scenery • Rangoli Design

Task: Make at least 5 artworks from the above topics in your drawing copy.

CLASS V

Topics: Still Life Study • Scenery • Rangoli Design

Task: Make at least 5 artworks from the above topics in your drawing copy.

CLASS VI

Topic: Make a Portrait – Step by Step

Task: Practise portrait drawing by following the step-by-step method. Complete at least 5 portrait artworks in your drawing copy.

CLASS VII

Topics: Portrait Study – Step by Step • Human Body Proportions

Task: Make at least 5 artworks based on the above topics in your drawing copy.

CLASS VIII

Topics: Portrait Study – Step by Step • Human Body Proportions

Task: Make at least 5 artworks based on the above topics in your drawing copy.

NOTE: All students must complete their holiday homework and submit their drawing copies after the holidays.

WISH YOU HAPPY HOLIDAYS!

PM SHRI KENDRIYA VIDYALAYA KANKER
Autumn Break Holiday Homework
(2026-27)
Subject – social science

Class- VII

Complete the notes of the story of Indian farming.

Prepare a subject enrichment file and show the following points

Farm to Table Activity

Students trace the journey of food from farm to home.

❖ **Crop Calendar Activity**

Students prepare seasonal crop charts.

❖ **Diagram Activity**

Students draw the farming cycle.

पीएम श्री केंद्रीय विद्यालय कांकेर
शरदकालीन अवकाश गृहकार्य (2026-27)

कक्षा VII | विषय: हिंदी एवं संस्कृत

विषय: हिंदी

1. हिंदी पाठ्यपुस्तक में पढ़ाए गए पाठों का पुनरावर्तन कीजिए।
2. निम्नलिखित विषयों में से किन्हीं दो पर लगभग 150 शब्दों में अनुच्छेद लिखिए:
(क) पर्यावरण संरक्षण (ख) विद्यार्थी जीवन में अनुशासन (ग) मोबाइल फोन के लाभ और हानियाँ।
3. कहानी लेखन: 'ईमानदारी का फल' शीर्षक से एक छोटी कहानी लिखिए और उससे मिलने वाली शिक्षा भी लिखिए।
4. संवाद लेखन: जल संरक्षण के विषय पर दो मित्रों के बीच 8-10 संवाद लिखिए।
5. पर्यायवाची शब्द: निम्नलिखित शब्दों के दो-दो पर्यायवाची शब्द लिखिए—
सूर्य, चंद्रमा, जल, पृथ्वी, आकाश, वायु, अग्नि, वन, पुष्प, मित्र।
6. व्याकरण अभ्यास:
विलोम शब्द: सुख, लाभ, दिन, प्रकाश, नवीन, सत्य, आशा, स्वतंत्र, उन्नति, सफल।
उपसर्ग: निम्नलिखित उपसर्गों से दो-दो शब्द बनाइए— अ, अन, सु, दु, प्र, उप, प्रति, निर्, अनु, अप।

विषय: संस्कृत

1. संस्कृत पाठ्यपुस्तक में पढ़ाए गए पाठों का पुनरावर्तन कीजिए और ईशावास्यमिदं सर्वम् पाठ का अभ्यास कार्य पूर्ण करें।
2. शब्दरूप लिखिए: राम, हरि, लता और नदी।
3. पठ्, गम् और भू धातुओं के लट्, लङ् तथा लृट् लकार में रूप लिखिए।
4. संस्कृत में 1 से 50 तक गिनती लिखिए।
5. 'मम विद्यालयः', 'पर्यावरणस्य महत्त्वम्' और 'मम दिनचर्या' विषयों पर 8-10 संस्कृत वाक्य लिखिए।
6. दस सुभाषित लिखिए तथा उनमें से किन्हीं पाँच का हिंदी अर्थ लिखिए।

AUTUMN BREAK HOLIDAY HOMEWORK

Vocational Education & Kaushal Bodh | 5 core Tasks over 10 Days

Execution Guidelines for Students (1 Task = 2 Days Pace):

- **Pacing:** Complete 1 activity every 2 days (Day A: Planning & Execution, Day B: Observation & Log Record).
- **Submission:** Maintain an A4 size "**Autumn Skill Journal**". Include photos, sketches, or real samples.
- **Safety:** Perform all practical steps under adult supervision using locally available household materials.

CLASSES 6 TO 8: KAUSHAL BODH (MIDDLE STAGE)

Task 1: Kitchen Gardening & Plant Care

Life Forms

Days 1 – 2

Sow seasonal seeds (coriander, spinach, or fenugreek) in a pot, recycled tub, or garden patch. Prepare soil with compost and record initial watering and sunlight needs.

Journal Entry: Soil preparation steps + Sketch/Photo of sown pot with seed depth notes.

Task 2: Household Appliance & Safety Audit

Machines & Materials

Days 3 – 4

Inspect 5 home appliances/switches with an adult. Check power ratings (Watts), plug conditions, wire insulation, and identify potential electrical hazards.

Journal Entry: Audit table listing appliance name, power rating (W), condition, and 2 safety rules.

Task 3: Utility Upcycling Craft

Machines & Materials

Days 5 – 6

Fabricate a functional home item (e.g., desk organizer, cloth bag from old shirt, bird feeder) using dry household waste or discarded materials.

Journal Entry: Material list, exact dimensions, step-by-step assembly note, and utility photograph.

Task 4: Fireless Culinary Skill & Nutrition

Human Services

Days 7 – 8

Prepare a healthy fireless meal (e.g., sprout salad, vegetable sandwich, fruit chaat) focusing on kitchen hygiene, knife safety, and zero food waste.

Journal Entry: Recipe card with ingredients, nutritional benefits, step-by-step method, and cost per serving.

Task 5: Artisan Interaction & Reflection

Human Services

Days 9 – 10

Interview a local skilled worker or artisan (tailor, electrician, carpenter, gardener, mason). Learn about their tools, skills, and daily routine.

Journal Entry: 4-question Q&A summary + 100-word reflection on "Dignity of Labour".

CLASS 9: VOCATIONAL EDUCATION (KAUSHAL VIKAS)

Task 1: Workplace Safety & First-Aid Poster

Safety & Compliance

Days 1 – 2

Design a clear, color-coded safety poster illustrating workshop hazard symbols, personal protective equipment (PPE), and emergency protocols for burns, cuts, or electric shock.

Journal Entry: Full-page visual safety chart with standard hazard symbol labels and First-Aid steps.

Task 2: Technical Drawing & Orthographic Projection

Technical Skill

Days 3 – 4

Select a structured household object (e.g., electrical extension box, staple machine, desk organizer). Draw its Front View, Top View, and Side View using standard dimensions.

Journal Entry: Dimensioned 3-view orthographic drawing sheet with title block and scale.

Task 3: Home Energy Audit & Power Calculation

Applied Mathematics

Days 5 – 6

Audit 3 high-usage appliances (e.g., fan, refrigerator, TV). Calculate daily energy consumption in kWh: $(\text{Power in Watts} \times \text{Hours}) / 1000$. Estimate monthly running cost.

Journal Entry: Energy audit table + power formula calculations + 3 actionable energy-saving tips.

Task 4: Product Costing & Micro-Enterprise Plan

Entrepreneurship

Days 7 – 8

Develop a mini business plan for a simple product/service (e.g., potted herbs, crafted greeting cards, mobile screen guard installation). Calculate cost break-up and selling price.

Journal Entry: Cost Sheet (Raw Materials + Labour + Packaging = Total Cost) + Profit Margin & Price.

Task 5: Digital Inventory / Maintenance Log

Digital & Service

Days 9 – 10

Perform basic non-technical maintenance (cleaning fan blades, lubricating hinges) and design a spreadsheet or manual table tracking 10 household inventory items with total valuation.

Journal Entry: Executed maintenance log sheet + tabular inventory format with unit price and sum total.

ASSESSMENT & EVALUATION RUBRIC

Criteria	Weightage	Key Assessment Indicators
Practical Execution	40%	Evidence of real hands-on task completion (photos, measurements, raw data).
Technical Accuracy	30%	Correct calculations, neat diagrams, proper labeling, and realistic costings.
Journal & Presentation	20%	Neatness, adherence to the 2-day task schedule, and complete documentation.
Reflection & Safety	10%	Demonstrated awareness of Dignity of Labour and personal safety precautions.

PM SHRI KENDRIYA VIDYALAYA KANKER
AUTUMN BREAK HOLIDAY HOME-WORK (SESSION 2026-27)

CLASS – 7TH

SUBJECT – MATHEMATICS

DATE : 13/10/2026

General Instructions

- Complete all questions neatly in your Mathematics notebook or on A4 sheets wherever required.
- Use colours, rulers and creative designs for the art-integrated work

1. Solve the following

a. $(-8) + 13$

b. $15 + (-21)$

c. $(-12) - (-7)$

d. $(-6) \times (-9)$

2. Geometric Twins

Two figures are called geometric twins in this activity when they have the same shape and size, even if one is rotated or flipped.

- Draw two rectangles of length 6 cm and breadth 3 cm. Rotate one rectangle and compare them.
- Draw two circles of radius 3 cm in different positions. Are they identical in shape and size?
- Give two examples of geometric twins that you can observe in your classroom or home.

3. Integer Operations in Real Life

- The temperature in a hill station was -4°C in the morning. It increased by 11°C . What was the new temperature?
 - A submarine is 35 m below sea level. It descends another 18 m. Represent its new position using an integer.
- 4. Draw or cut out six pairs of geometric figures from paper.**
- Include at least two pairs of triangles, two pairs of rectangles and two pairs of other shapes.
 - Rotate or flip some of the figures.
 - Match each figure with its geometric twin.

5. Art-Integrated Activity 1 — Symmetry and Indian Art

Create an Indian folk-art design inspired by Warli art or a traditional geometric hand-drawn design on A4 sheet.

Your design must include:

- At least 4 types of geometric figures.
- A repeating pattern or a line of symmetry.
- At least two pairs of geometric twins.
- A coloured border made using repeated geometric shapes.



6. Try to solve “figure it out” questions (From chapter 1) given in text book in rough note-book.

PM SHRI KENDRIYA VIDYALAYA, KANKER

AUTUMN BREAK HOMEWORK

Subject: Physical & Health Education / Physical Activity Trainer

Class VI – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of daily physical activity.
3. Practise yoga and stretching regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five points on the importance of outdoor games.
3. Practise any five yoga asanas and write their names.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VIII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of a balanced diet.
3. Practise simple exercises and yoga regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class IX – Physical Education

1. Complete all pending work in your notebook.
2. Write the rules of any one game of your choice.
3. Write five benefits of physical fitness.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class X – Physical Education

1. Complete all pending work in your notebook.
2. Write the importance of physical fitness and a balanced diet.
3. Write five safety rules to follow while playing games.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XI – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five benefits of warm-up and cool-down exercises.
3. Prepare a simple daily fitness routine.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XII – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five points on the importance of first aid in sports.
3. Write the basic steps to follow during a sports injury.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class 7: English (Autumn Break Homework)

- 1) Read the chapters “The Tunnel’ and “Conquering the Summit” from your textbook and write summary in 100 to 120 words.
- 2) Write a letter to your friend describing a special moment during the autumn break.
- 3) Write a paragraph on “Unity in Diversity” in 100 -120 words.
- 4) Write an article on "How festivals bring people together." (100-120 words)
- 5) Write five sentences on the importance of knowing directions in life.
- 6) Write five lines about what you learned from the poem “The tunnel”.
- 7) Write five sentences each in the Present Continuous, Past Continuous and Future Continuous.
- 8) Write the structure and two examples each of the Simple Present, Simple Past and Simple Future



PM SHRI KENDRIYA VIDYALAYA, KANKER (C.G.)

Class – 7 | Subject – AI & Data Literacy

10 DAY HOMEWORK (15/10/2026 to 25/10/2026)

Learn • Practice • Apply • Grow



Think
Analyse
Create

Day 1 What is AI and Data Literacy?

1. Define Artificial Intelligence (AI).
2. Define Data Literacy.
3. Write two real-life examples of AI and two examples of Data Literacy.



Application Example:

A smart assistant (like Alexa) is an example of AI.
Checking weather data before going out is an example of Data Literacy.

Day 2 Data Collection and Sources

1. What is data?
2. Name any four sources of data.
3. Why is data collection important in AI projects?



Application Example:

Weather apps collect data from sensors, satellites and user inputs to give accurate forecasts.

Day 3 Data Types and Representation

1. Name the two main types of data.
2. Give two examples of each type.
3. How is data represented in a computer?

Types of Data	
Numeric	Text
12	Riya
25	India

Application Example:

A student's age can be numeric data (e.g., 12), and name can be text data (e.g., Riya).

Day 4 Data Processing and Analysis

1. What is data processing?
2. Name two common methods to analyse data.
3. Why is analysis of data useful?

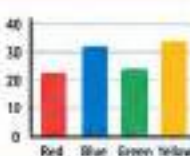


Application Example:

A school can analyse attendance data to find which class has low attendance and take action.

Day 5 Visualising Data

1. What is data visualisation?
2. Name two types of charts used to show data.
3. How does a chart help in understanding data?



Application Example:

A bar chart can be used to show the number of students in different houses.

Day 6 AI in Daily Life

1. Name any four areas where AI is used.
2. How does AI help in education?
3. Give one example of AI in healthcare.



Application Example:

AI is used in smart home devices, online learning platforms and recommendation systems.

Day 7 Ethics and Responsible Use of AI

1. What is meant by 'ethical use' of AI?
2. Name two risks of misuse of AI.
3. How can we use AI responsibly?



Application Example:

Do not use AI to copy or cheat in exams.
Always respect privacy and give credit for AI-created work.

Day 8 Working with Data – Hands On

1. What is a spreadsheet?
2. Name two popular spreadsheet tools.
3. Write one advantage of using a spreadsheet.



Application Example:

We can create a simple table in Google Sheets to track daily water intake.

Day 9 Solve a Real-Life Problem Using Data

Your school wants to know which mode of transport is used by most students to come to school.

1. What data will you collect?
2. How will you organise it?
3. Which chart will you use to show the result?



Day 10 Project / Creative Task

Create a simple AI or Data Literacy project on any one topic:

- Smart Home Assistant
- School Library Data Chart
- Daily Schedule Tracker
- Weather Data Analysis (use real data or sample data)



Real-Life Application Examples (Quick Reference)

1. **Health:** AI helps doctors detect diseases early using data from tests and scans.
2. **Education:** AI personalises learning based on student performance data.
3. **Transport:** AI helps in traffic management and suggests better routes.
4. **Environment:** Data is used to predict weather and monitor pollution levels.
5. **Home:** Smart devices use AI to control lights, fans and security.
6. **Shopping:** Online stores use data to recommend products you may like.

Remember:

- Collect data
- Use it wisely
- Respect privacy
- Make ethical choices
- Be a responsible digital citizen



— Small steps in data and AI today → A smarter tomorrow! —

PM SHRI KENDRIYA VIDYALAYA KANKER

HOLIDAY HOMEWORK

Class: VIII

Subject: Social Science

Complete the following homework during the break:

1. Part 1, Chapter 4: The Colonial Era in India

Revise and learn the complete chapter thoroughly.

2. Part 2, Chapter 1: World Geography: Some Glimpses

Write all the NCERT textbook questions and answers in your Social Science notebook.

Complete the world map work by filling in the names of all seven continents and five oceans on an outline map of the world.

Paste the completed map neatly in your Social Science notebook.

Revise and learn the complete chapter thoroughly.

Instructions:

Complete all written work neatly and accurately.

Learn both chapters thoroughly for revision after the break.

Have a happy and productive break!

AUTUMN BREAK HOLIDAY HOMEWORK

Vocational Education & Kaushal Bodh | 5 core Tasks over 10 Days

Execution Guidelines for Students (1 Task = 2 Days Pace):

- **Pacing:** Complete 1 activity every 2 days (Day A: Planning & Execution, Day B: Observation & Log Record).
- **Submission:** Maintain an A4 size "**Autumn Skill Journal**". Include photos, sketches, or real samples.
- **Safety:** Perform all practical steps under adult supervision using locally available household materials.

CLASSES 6 TO 8: KAUSHAL BODH (MIDDLE STAGE)

Task 1: Kitchen Gardening & Plant Care

Life Forms

Days 1 – 2

Sow seasonal seeds (coriander, spinach, or fenugreek) in a pot, recycled tub, or garden patch. Prepare soil with compost and record initial watering and sunlight needs.

Journal Entry: Soil preparation steps + Sketch/Photo of sown pot with seed depth notes.

Task 2: Household Appliance & Safety Audit

Machines & Materials

Days 3 – 4

Inspect 5 home appliances/switches with an adult. Check power ratings (Watts), plug conditions, wire insulation, and identify potential electrical hazards.

Journal Entry: Audit table listing appliance name, power rating (W), condition, and 2 safety rules.

Task 3: Utility Upcycling Craft

Machines & Materials

Days 5 – 6

Fabricate a functional home item (e.g., desk organizer, cloth bag from old shirt, bird feeder) using dry household waste or discarded materials.

Journal Entry: Material list, exact dimensions, step-by-step assembly note, and utility photograph.

Task 4: Fireless Culinary Skill & Nutrition

Human Services

Days 7 – 8

Prepare a healthy fireless meal (e.g., sprout salad, vegetable sandwich, fruit chaat) focusing on kitchen hygiene, knife safety, and zero food waste.

Journal Entry: Recipe card with ingredients, nutritional benefits, step-by-step method, and cost per serving.

Task 5: Artisan Interaction & Reflection

Human Services

Days 9 – 10

Interview a local skilled worker or artisan (tailor, electrician, carpenter, gardener, mason). Learn about their tools, skills, and daily routine.

Journal Entry: 4-question Q&A summary + 100-word reflection on "Dignity of Labour".

CLASS 9: VOCATIONAL EDUCATION (KAUSHAL VIKAS)

Task 1: Workplace Safety & First-Aid Poster

Safety & Compliance

Days 1 – 2

Design a clear, color-coded safety poster illustrating workshop hazard symbols, personal protective equipment (PPE), and emergency protocols for burns, cuts, or electric shock.

Journal Entry: Full-page visual safety chart with standard hazard symbol labels and First-Aid steps.

Task 2: Technical Drawing & Orthographic Projection

Technical Skill

Days 3 – 4

Select a structured household object (e.g., electrical extension box, staple machine, desk organizer). Draw its Front View, Top View, and Side View using standard dimensions.

Journal Entry: Dimensioned 3-view orthographic drawing sheet with title block and scale.

Task 3: Home Energy Audit & Power Calculation

Applied Mathematics

Days 5 – 6

Audit 3 high-usage appliances (e.g., fan, refrigerator, TV). Calculate daily energy consumption in kWh: $(\text{Power in Watts} \times \text{Hours}) / 1000$. Estimate monthly running cost.

Journal Entry: Energy audit table + power formula calculations + 3 actionable energy-saving tips.

Task 4: Product Costing & Micro-Enterprise Plan

Entrepreneurship

Days 7 – 8

Develop a mini business plan for a simple product/service (e.g., potted herbs, crafted greeting cards, mobile screen guard installation). Calculate cost break-up and selling price.

Journal Entry: Cost Sheet (Raw Materials + Labour + Packaging = Total Cost) + Profit Margin & Price.

Task 5: Digital Inventory / Maintenance Log

Digital & Service

Days 9 – 10

Perform basic non-technical maintenance (cleaning fan blades, lubricating hinges) and design a spreadsheet or manual table tracking 10 household inventory items with total valuation.

Journal Entry: Executed maintenance log sheet + tabular inventory format with unit price and sum total.

ASSESSMENT & EVALUATION RUBRIC

Criteria	Weightage	Key Assessment Indicators
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PM SHRI KENDRIYA VIDYALAYA, KANKER

AUTUMN BREAK HOMEWORK

Subject: Physical & Health Education / Physical Activity Trainer

Class VI – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of daily physical activity.
3. Practise yoga and stretching regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five points on the importance of outdoor games.
3. Practise any five yoga asanas and write their names.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VIII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of a balanced diet.
3. Practise simple exercises and yoga regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class IX – Physical Education

1. Complete all pending work in your notebook.
2. Write the rules of any one game of your choice.
3. Write five benefits of physical fitness.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class X – Physical Education

1. Complete all pending work in your notebook.
2. Write the importance of physical fitness and a balanced diet.
3. Write five safety rules to follow while playing games.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XI – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five benefits of warm-up and cool-down exercises.
3. Prepare a simple daily fitness routine.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XII – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five points on the importance of first aid in sports.
3. Write the basic steps to follow during a sports injury.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Exercise

A. Multiple Choice Questions.

1. AI helps in environmental protection by:
a) Tracking wildlife population
b) Predicting pollution levels
c) Detecting plastic waste
d) All of the above
2. No-code AI tools allow users to:
a) Program AI models using coding
b) Train AI models without coding
c) Only analyse text data
d) Replace teachers completely
3. AI can predict future health risks by analysing a patient's:
a) Favourite movies
b) Medical history and lifestyle habits
c) Social media posts
d) Travel destinations
4. Which environmental problem can AI help solve by analysing satellite images of rivers and oceans?
a) Soil degradation
b) Plastic pollution
c) Air pollution
d) Water shortage
5. An example of AI in smart homes is:
a) Self-driving cars
b) Voice-controlled appliances
c) Tracking wildlife populations
d) Predicting diseases

B. Fill in the Blanks

1. AI-powered _____ can answer health questions and remind patients to take medicines.
2. Satellites and sensors help AI detect _____ pollution in oceans and rivers.
3. AI in education can provide _____ learning tailored to each student's needs.
4. Wearable devices allow AI to perform _____ patient monitoring.
5. Platforms like _____ allow students to train AI models without coding.

C. Short Answer Questions

1. Name two ways AI helps in reducing environmental problems.

Page 58

2. How does AI assist doctors in medical diagnosis?
3. Give one example of AI application in smart homes.
4. What is the benefit of personalised learning in education?
5. Explain the role of AI in agriculture.

D. Think and Apply

1. Design a simple AI project using a no-code platform to help sort waste in your school. What steps would you follow?
2. How can AI predict and prevent water shortage in your area?
3. Suggest a way AI could help students struggling with mathematics.
4. If you were a farmer, how would you use AI to improve crop production and protect soil health?





CLASS 8 – ARTIFICIAL INTELLIGENCE

EXERCISE – COMPLETE SOLUTIONS



A. MULTIPLE CHOICE QUESTIONS

- What is the main purpose of AI?
a) To replace humans in all work
b) To help machines think and learn
c) To increase the size of computers
d) To make games more interesting
Ans: b) To help machines think and learn
- Which of the following is an example of a tracking wildlife application?
a) Google Maps b) Camera trap in a forest
c) Online shopping d) Word processor
Ans: b) Camera trap in a forest
- Which type of waste can be detected using AI and image recognition?
a) Plastic waste b) Organic food
c) Paper documents d) Wet clothes
Ans: a) Plastic waste
- Which of the following is NOT a benefit of AI in education?
a) Personalised learning b) Faster grading
c) More cheating d) Access to online resources
Ans: c) More cheating
- What is a smart home device example?
a) Smart TV b) Smart light
c) Smart speaker d) All of the above
Ans: d) All of the above

D. THINK AND APPLY

- Design a simple AI project using a no-code platform to help sort waste in your school. What steps would you follow?
Ans: Steps:
1. Choose a no-code platform (e.g., Google Teachable Machine or similar).
2. Collect images of waste (plastic, paper, metal, organic).
3. Train the model using the images.
4. Test the model with new images.
5. Deploy it as a simple app or web tool for sorting waste in school.
This will help students put waste in the right bins and keep the school clean.
- How can AI predict and prevent water shortage in your area?
Ans: AI can analyse rainfall data, river levels, and weather forecasts to predict water shortage. It can suggest water conservation methods, monitor water usage, and alert people in advance. This helps in better planning and prevents water crisis.
- Suggest a way AI could help students struggling with mathematics.
Ans: AI-based learning apps can analyse a student's strengths and weaknesses and give practice questions, step-by-step explanations, and real-time feedback.
- If you were a farmer, how would you use AI to improve crop production and protect soil health?
Ans: I would use AI to monitor soil moisture, weather forecasts, and pest attacks. AI can suggest the best time for sowing, irrigation, and use of fertilisers. It also helps in identifying soil health and prevents overuse of chemicals, keeping the soil healthy and increasing crop yield.

B. FILL IN THE BLANKS

- AI-powered _____ can answer health questions and remind patients to take medicines.
Ans: chatbots
- Satellites and sensors help AI detect _____ pollution in oceans and rivers.
Ans: plastic
- AI in education can provide _____ learning tailored to each student's needs.
Ans: personalised
- Wearable devices allow AI to perform _____ patient monitoring.
Ans: continuous
- Platforms like _____ allow students to train AI models without coding.
Ans: Google Teachable Machine

C. SHORT ANSWER QUESTIONS

- Name two ways AI helps in reducing environmental problems.
Ans: (i) Detecting and cleaning plastic waste.
(ii) Monitoring pollution and conserving natural resources.
- How does AI assist doctors in medical diagnosis?
Ans: AI analyses medical images (like X-rays, scans) and patient data to detect diseases early and accurately.
- Give one example of AI application in smart homes.
Ans: Smart lights or smart speakers that respond to voice commands.
- What is the benefit of personalised learning in education?
Ans: It helps students learn at their own pace and focus on their specific needs, improving understanding and performance.
- Explain the role of AI in agriculture.
Ans: AI helps in monitoring soil health, weather, and crop conditions, predicts yield, and helps farmers use resources efficiently, resulting in better production and less waste.

— Key Takeaways —

- AI helps solve real-world problems like pollution, health care, education, and agriculture.
- No-code platforms make AI easy to learn and use.
- AI creates smarter, safer and cleaner environments for a better future.



पीएम श्री केंद्रीय विद्यालय कांकेर
शरदकालीन अवकाश गृहकार्य (2026-27)

कक्षा 8 (Class VIII)

विषय: संस्कृत

1. संस्कृत पाठ्यपुस्तक में पढ़ाए गए पाठों का पुनरावर्तन कीजिए ।
2. शब्दरूप लिखिए: राम, मुनि, लता, नदी और फल।
3. पठ्, गम् और भू धातुओं के लट्, लङ्, लृट् तथा लोट् लकार में रूप लिखिए।
4. संस्कृत में 1 से 100 तक गिनती लिखिए।
5. 'स्वच्छतायाः महत्त्वम्', 'जलस्य संरक्षणम्' और 'अस्माकं देशः भारतम्' विषयों में से किन्हीं दो विषयों पर 10-10 संस्कृत वाक्य लिखिए।
6. पाँच सुभाषित लिखिए और उनका हिंदी अर्थ समझाइए।

PM SHRI KENDRIYA VIDYALAYA KANKER
AUTUMN BREAK HOLIDAY HOME-WORK (SESSION 2026-27)

CLASS – 8TH

SUBJECT – MATHEMATICS

DATE : 13/10/2026

General Instructions

- Complete all questions neatly in your Mathematics notebook or on A4 sheets wherever required.
- Use colours, rulers and creative designs for the art-integrated work

1.

Solve the following:

- a. Convert $\frac{3}{5}$ into a percentage.
- b. Convert 45% into a fraction in its simplest form.
- c. Find 25% of 240.
- d. Express 0.75 as a percentage.

2.

Solve the following situations.

- a. A water tank is 65% full. If its capacity is 800 litres, how much water does it contain?
- b. A student spends 30% of ₹500 on books. How much money is spent?

3.

A shopkeeper purchases a school calculator for ₹500 and sells it for ₹600.

- a. Find the profit.
- b. Calculate the profit percentage.
- c. If the calculator were sold for ₹450 instead, find the loss.
- d. Calculate the loss percentage in this case.

3. Create a colourful rangoli design on an A4 sheet using a circle or square divided into equal parts.

Your design must represent:

25% in one colour.

30% in a second colour.

20% in a third colour.

The remaining percentage in a fourth colour.

5. Design a shopping poster titled “Smart Shopping: Compare Before You Buy!”

Include three products of your choice, such as a school bag, shoes and a book set.

For each product:

- a. Write a reasonable marked price.
- b. Offer a discount percentage.
- c. Calculate the discount amount and final selling price.

Class 8: English (10 Day Autumn Break Homework)

- 1) Read the poem 'Harvest Hymn' and the lesson 'The Cherry Tree' of your textbook and write summary in 100 to 120 words.
- 2) Write a paragraph on "The Beauty of Nature and Its Importance in Our Life".
- 3) Write a paragraph on "Kindness, Generosity and Human Relationship" in 100-120 words.
- 4) Write the meanings of 10 each difficult word from both. (Harvest Hymn & The Cherry Tree')
- 5) Write five interesting facts about any one natural wonder of the world.
- 6) Write five values that we can learn from the chapter "The Cherry Tree" and explain them in one or two sentences each.
- 7) Write five sentences each in the Present Continuous, Past Continuous and Future Continuous.
- 8) Write the structure and two examples each of the Simple Present, Simple Past and Simple Future

- सभी प्रश्न करने अनिवार्य हैं।
 - दिए गए प्रत्येक कार्य को स्कैपबुक में ही करना सुनिश्चित करें।
 - अपनी स्कैपबुक को अच्छे से कवर करके लाएं।
-

1. 10 पृष्ठ सुलेख लिखना।

2. सोचो और लिखो कि जो व्यक्ति देख पाने में सक्षम नहीं है आप उन्हें निम्नलिखित स्थितियों का अनुभव कैसे करवा सकते हैं?:-

अ) वर्षा की बूँदों का

ब) धुएँ के उड़ने का

स) खेल-खेल में रोमांच और मजे का

3. आग, बाढ़ और भूकंप जैसी आपदाएं अचानक आ जाती हैं, सही जानकारी से आपदाओं की स्थिति में बचाव संभव हो सकता है-

(अगर ऐसी कोई एक आपदा आपके पास आ जाए तो आप उस समय क्या करोगी/करोगे। एक सूची और चित्र आधारित योजना तैयार करके स्कैपबुक में लिखें।)

4. कोई दो लघुकथा लिखें।

5. परीक्षा परिणाम आने के बाद दो मित्रों के मध्य संवाद लिखें। 6. निबन्ध लिखो:

1 दहेज प्रथा

2 आपका प्रिय अध्यापक।

6. पाठ्य पुस्तक मंगाने हेतु पिता जी को पत्र लिखिए।

Autumn Break Homework (2026-27) Class – 8

Note: While solving the questions, do not copy the answers directly. First, understand the questions properly, then write the answers in your own words.

Section A: Multiple-Choice Questions (12 MCQs)

Q1. Which of the following materials is attracted by a magnet?

- A. Copper B. Iron C. Aluminium foil D. Plastic

Q2. When electric current passes through a wire, which effect may be produced?

- A. Heating effect B. Magnetic effect C. Both A and B D. Neither A nor B

Q3. Which device works mainly on the heating effect of electric current?

- A. Electric iron B. Magnetic compass C. Bar magnet D. Bicycle bell without an electric circuit

Q4. What happens to the needle of a compass placed near a current-carrying wire?

- A. It always points towards the wire. B. It may deflect from its usual direction.
C. It melts. D. It loses its magnetism immediately.

Q5. A force can change:

- A. The speed of an object B. The direction of motion C. The shape of an object
D. All of the above

Q6. Which of the following is a non-contact force?

- A. Muscular force B. Frictional force C. Magnetic force D. Force applied by pushing a table

Q7. The force that opposes the relative motion between two surfaces in contact is called:

A. Gravitational force B. Frictional force C. Magnetic force D. Electrostatic force

Q8. When two equal forces act on an object in opposite directions, the net force is:

A. Equal to the sum of the forces B. Zero C. Always upward D. Always downward

Pressure exerted by a force is calculated using which formula?

A. $\text{Pressure} = \text{Force} \times \text{Area}$ B. $\text{Pressure} = \text{Area} \div \text{Force}$ C. $\text{Pressure} = \text{Force} \div \text{Area}$ D. $\text{Pressure} = \text{Mass} \times \text{Volume}$

Q10. Why does air move from one region to another?

A. Due to differences in air pressure B. Because air has no mass C. Because air cannot exert pressure D. Because all regions have equal pressure

Q11. During the daytime, a sea breeze generally blows:

A. From land to sea B. From sea to land C. From north to south only
D. From the upper atmosphere to the ground only

Q12. Which of the following is an important safety measure during a thunderstorm?

A. Stand under an isolated tall tree. B. Stay in an open field. C. Take shelter inside a substantial building. D. Stand near an electric pole.

Section B: Assertion–Reason Questions (10)

For each question, select the correct option:

- A. Both Assertion and Reason are true, and Reason correctly explains Assertion.
- B. Both Assertion and Reason are true, but Reason does not correctly explain Assertion.
- C. Assertion is true, but Reason is false.
- D. Assertion is false, but Reason is true.

Q13. Assertion: A compass needle deflects when placed near a current-carrying wire.

Reason: Electric current produces a magnetic effect around the wire.

Q14. Assertion: An electric fuse protects an electrical circuit from excessive current.

Reason: A fuse wire melts when excessive current produces sufficient heating.

Q15. Assertion: All metals are strongly attracted by a magnet.

Reason: Iron is attracted by a magnet.

Q16. Assertion: A force can change the direction of a moving object.

Reason: A force can change the state of motion of an object.

Q17. Assertion: Friction is always harmful.

Reason: Friction helps us walk without slipping.

Q18. Assertion: Magnetic force is a contact force.

Reason: A magnet can attract an iron object without touching it.

Q19. Assertion: A sharp knife cuts more easily than a blunt knife when the same force is applied.

Reason: A sharp knife exerts greater pressure because its contact area is smaller.

Q20. Assertion: Air exerts pressure.

Reason: Moving air can exert force on objects.

Q21. Assertion: During the daytime, a sea breeze usually blows from the sea towards the land.

Reason: Land generally heats up faster than the sea during the day.

Q22. Assertion: Cyclones are associated with low-pressure regions.

Reason: Air moves from high-pressure regions towards low-pressure regions.

Section C

Q23. What is the magnetic effect of electric current? Write one example of its application.

Q24. What is the heating effect of electric current? Name two appliances that work on this effect.

Q25. Define force. Write any three effects that a force can produce on an object.

Q26. Differentiate between contact forces and non-contact forces. Give two examples of each.

Q27. Define pressure and write its formula. Why do school bags with broad straps feel more comfortable than bags with narrow straps?

Q28. Explain how sea breeze is formed during the daytime.

Q29. What is a cyclone? Write any three precautions that should be followed during a cyclone.

Q30. Explain the heating and magnetic effects of electric current. Describe one application of each effect and explain the working of an electric fuse.

Autumn Break Homework (2026-27) Class – 9

Note: While solving the questions, do not copy the answers directly. First, understand the questions properly, then write the answers in your own words.

Section A: Multiple-Choice Questions (10)

Q1. Which cell organelle is known as the powerhouse of the cell?

- A. Nucleus B. Mitochondrion C. Ribosome D. Golgi apparatus

Q2. Which structure controls the movement of substances into and out of the cell?

- A. Cell wall B. Cytoplasm C. Plasma membrane D. Nucleus

Q3. Which of the following is found in plant cells but not in animal cells?

- A. Mitochondria B. Ribosomes C. Plasma membrane D. Cell wall

Q4. A plant cell is placed in a concentrated salt solution. What is most likely to happen?

- A. Water enters the cell, making it swell. B. Water moves out of the cell, causing the cell contents to shrink. C. The cell immediately divides D. The cell produces more chlorophyll.

Q5. Which plant tissue transports water and minerals from roots to other parts?

- A. Phloem B. Xylem C. Epidermis D. Parenchyma

Q6. Which tissue connects muscles to bones?

- A. Ligament B. Tendon C. Cartilage D. Areolar tissue

Q7. Which plant tissue is mainly responsible for increasing the length of roots and shoots?

- A. Apical meristem B. Sclerenchyma C. Xylem D. Cork

Q8. Which type of reproduction generally involves only one parent?

- A. Sexual reproduction B. Asexual reproduction C. Fertilisation D. Pollination

Q9. In flowering plants, fertilisation occurs when:

- A. Pollen grains are transferred to the stigma. B. The pollen grain lands on the anther.
C. The male and female gametes fuse. D. The seed begins to germinate.

Q10. Which of the following is an example of vegetative propagation?

- A. Formation of seeds in pea B. Growth of a new potato plant from a tuber
C. Fertilisation in humans D. Pollination in mustard

Section B: Assertion–Reason Questions (7)

Choose the correct option for each question.

- A. Both Assertion and Reason are true, and Reason correctly explains Assertion.
- B. Both Assertion and Reason are true, but Reason does not correctly explain Assertion.
- C. Assertion is true, but Reason is false.
- D. Assertion is false, but Reason is true.

Q11. Assertion: The plasma membrane is selectively permeable.

Reason: It allows certain substances to pass through while restricting others.

Q12. Assertion: Mitochondria are called the powerhouse of the cell.

Reason: They release energy from food during cellular respiration and make much of it available in the form of ATP.

Q13. Assertion: Plant cells do not contain mitochondria.

Reason: Chloroplasts carry out photosynthesis in plant cells.

Q14. Assertion: Xylem transports water and minerals in plants.

Reason: Phloem transports food from sources such as leaves to other parts of the plant.

Q15. Assertion: Tendons connect muscles to bones.

Reason: Ligaments connect bones to other bones at joints.

Q16. Assertion: Asexual reproduction generally produces offspring that are genetically very similar to the parent.

Reason: Asexual reproduction usually involves one parent and does not involve the fusion of gametes.

Q17. Assertion: Pollination and fertilisation are the same process.

Reason: Pollination is the transfer of pollen grains to the stigma, whereas fertilisation is the fusion of male and female gametes.

Section C: Competency-Based Questions

These questions are based on real-life situations, experiments and application of concepts.

Chapter 1: Building Blocks of Life

Q18. Case Study: Raisins in Water

A student puts dry raisins in a beaker containing water. After a few hours, the raisins become swollen. Another student puts swollen raisins in a concentrated sugar solution, and they become smaller.

Answer the following:

- (a) Why do dry raisins swell in water?
- (b) Name the process responsible for the movement of water through the selectively permeable membrane.
- (c) Why do swollen raisins become smaller in concentrated sugar solution?
- (d) What would happen if raisins were placed in pure water for a longer period, assuming the cells remain intact?

Q19. Case Study: Plant and Animal Cells

A student observes two cells under a microscope. Cell A has a cell wall, chloroplasts and a large central vacuole. Cell B has no cell wall and no chloroplasts.

Answer the following:

- (a) Identify Cell A and Cell B.
- (b) Which cell is generally more rigid because of the cell wall?
- (c) Which organelle contains chlorophyll and performs photosynthesis?
- (d) What is the function of the nucleus in both cells?

Q20. Case Study: Cell Organelles

A chemical damages the mitochondria of a cell. After some time, the cell shows a decrease in the energy available for its activities.

Answer the following:

- (a) Which cellular process is mainly affected?
- (b) Why does damage to mitochondria affect the cell's activities?
- (c) Name the energy-carrying molecule produced during cellular respiration.
- (d) Name one cell activity that requires energy.

Q21. Case Study: Transport in Plants

A gardener notices that water absorbed by the roots reaches the leaves, while food produced in the leaves is transported to growing parts of the plant.

Answer the following:

- (a) Name the tissue responsible for water transport.
- (b) Name the tissue responsible for food transport.
- (c) What are the conducting elements of xylem called?
- (d) Why is the transport of food necessary for roots that do not perform photosynthesis?

Q22. Differentiate between sexual and asexual reproduction on the basis of number of parents, gamete formation, fertilisation, genetic variation and examples.

Q23. Explain asexual reproduction in the following organisms with suitable diagrams:

- (a) Binary fission in Amoeba (b) Budding in Hydra

Q24. What is vegetative propagation? Explain its different methods with five suitable examples. Write any two advantages of vegetative propagation.

Q25. Explain sexual reproduction in flowering plants. Describe the roles of the anther, stigma, pollen tube, ovule and fertilisation.

Q26. Describe the process of sexual reproduction in humans. Explain the roles of male and female gametes and the formation of a zygote.

Kendriya vidyalaya kanker

Subject- Chemistry

Autumn vacation Homework

Very Short & Short Answer Questions (2 Marks)

1. **Name the subatomic particle** that has a positive charge. Who discovered it?
2. **What are canal rays?** Mention their nature and charge.
3. An atom has an atomic number Z of 9. Write its **electronic configuration** and identify its **valence shell**.
4. **Why are inert gases** chemically unreactive and assigned a valency of zero?
5. If an atom contains **one proton and one electron**, will it carry any net charge? Explain briefly.

Long Answer & Analytical Questions (3 Marks)

6. State the basic postulates of **Bohr's model of an atom**. How did it overcome the major limitation of Rutherford's nuclear model?
7. Draw a neat, labeled sketch showing the distribution of electrons in a **Sodium Na atom** and a **Sodium Na⁺**
8. Define Isotopes and Isobars. Give any two important medical or industrial applications of isotopes

PM SHRI KENDRIYA VIDYALAYA KANKER
Autumn Break Holiday Homework
(2026-27)
Subject – Geography

ClassIX

Important Questions for Practice

1. Explain the three major movements of ocean water.
2. Analyse the influence of warm and cold ocean currents on climate.
3. Describe the importance of marine resources for human livelihoods.
4. Explain the relationship between oceans, climate and natural disasters.
5. Differentiate between cyclones and tsunamis.
6. Describe the major features of ocean relief with a labelled diagram.
7. Explain the importance of UNCLOS, SOLAS and MARPOL.
8. Why is international cooperation essential for ocean conservation?
9. Suggest five measures to ensure the sustainable use of marine resources.
10. Differentiate between territorial waters and the Exclusive Economic Zone.

History

Complete the following homework during the break:

1. Chapter 5 – State and Society (Up to 1300 CE)

Read the complete chapter carefully.

Learn the entire chapter thoroughly, including important concepts, key terms, historical developments and examples given in the textbook.

2. Chapter 7 – Elections

Write all the NCERT textbook questions and answers in your Social Science notebook.

The important questions and NCERT questions have already been shared with you. You may refer to the shared material for help in completing your written work.

Revise and learn the complete chapter thoroughly.

Instructions:

Complete all written work neatly and accurately.

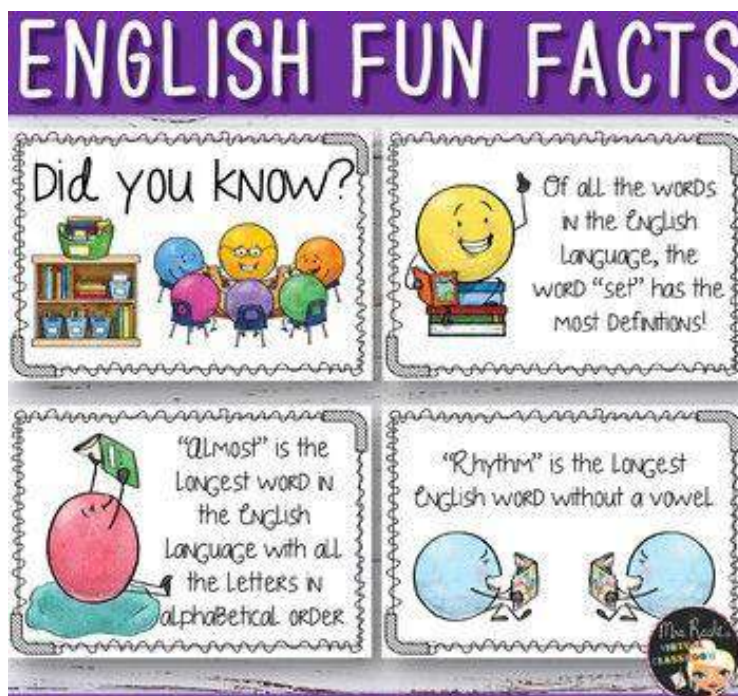
Learn both chapters thoroughly for revision after the break.

HOLIDAY HOMEWORK

ENGLISH • CLASS IX

Student's Name	
Class / Section	
Roll Number	

FUN FACTS



Instructions

- Complete one day's assignment at a time and write neatly in your English notebook, unless a task specifically requires a separate sheet.
- The literature task is to be completed for 30 minutes every day. Use the NCERT textbook Kaveri to support your answers with accurate details.
- Write translations in natural English. Check tense, subject–verb agreement, word order, spelling and punctuation.
- Make the poster on an A4 sheet. Keep it visually attractive, brief and purposeful.
- For literature answers, use your own words and refer to the text rather than guessing details.

8-Day Overview

Day	Main Assignment	Literature (30 min)
1	Prepositions	Bharat Our Land
2	Tense-based paragraph translation I	Canvas of Soil
3	Tense-based paragraph translation II	Vitamin-M
4	Passive Voice	Gifts of Grace: Honouring Our Vocations
5	Narration	Revise Bharat Our Land and Canvas of Soil
6	Poster Making	Revise Vitamin-M
7	Letter to the Editor	Revise Gifts of Grace
8	Grammar and Word Puzzle	Revision + Fun Time

A. Fill in the blanks with suitable prepositions.

1. The students were asked to assemble _____ the school auditorium.
2. The train arrived _____ the station twenty minutes late.
3. She has been preparing for the examination _____ Monday.
4. The teacher divided the class _____ four groups.
5. The villagers protested _____ the construction of the factory.
6. The child was fascinated _____ the colours of the rainbow.
7. The principal congratulated the students _____ their performance.
8. He prefers reading books _____ watching television.
9. The old man has been suffering _____ a serious illness.
10. The keys were hidden _____ a pile of newspapers.
11. The committee consists _____ five members.
12. The students are looking forward _____ the holidays.

B. Correct the errors in the use of prepositions.

1. She is good in Mathematics.
2. He has been absent since two days.
3. The teacher explained me the rule.
4. I prefer tea than coffee.
5. He is senior than me.

Literature – Bharat Our Land (30 minutes)

1. Read the poem aloud and then silently. Write its central idea in 60–80 words.

2. The poem celebrates India's natural grandeur and intellectual and spiritual heritage. Identify two ideas or images from the poem that express this pride.

3. Explain how knowledge and self-belief contribute to the poem's message.

DAY 2 – TENSE-BASED PARAGRAPH TRANSLATION I **Literature:** Canvas of Soil

A. Translate the following Hindi paragraph into English. Pay attention to the simple present, present continuous, present perfect and present perfect continuous tenses.

रवि प्रतिदिन सुबह जल्दी उठता है। वह सबसे पहले अपने पौधों को पानी देता है और फिर पढ़ने बैठ जाता है। इन दिनों वह अपनी परीक्षा की तैयारी कर रहा है। उसने अपनी पढ़ाई के लिए एक समय-सारणी भी बनाई है। वह पिछले दो महीनों से नियमित रूप से अभ्यास कर रहा है। उसके माता-पिता उसकी मेहनत से खुश हैं। रवि का मानना है कि सफलता उन्हीं लोगों को मिलती है जो निरंतर प्रयास करते हैं।

B. Translate the following sentences into English.

1. बच्चे मैदान में क्रिकेट खेल रहे हैं।

2. मैं अपना गृहकार्य पूरा कर चुका हूँ।

3. मैं किताबें पढ़ता हूँ और मेरी बहन पियानो बजाती है।

4. वह अच्छी अंग्रेज़ी बोलती है, इसलिए हर कोई उसे पसंद करता है।

5. क्या तुमने कभी ताजमहल देखा है?

Literature – Canvas of Soil (30 minutes)

1. Read the poem and write its central idea in 60–80 words.

3. Identify two images from the poem that help you imagine a garden. Explain what each image suggests.

4. In 3–4 sentences, explain how the poem encourages readers to notice beauty in nature and everyday life.

DAY 3 – TENSE-BASED PARAGRAPH TRANSLATION II Literature: Vitamin-M

A. Translate the following Hindi paragraph into English. Pay attention to the simple past, past continuous, past perfect and future forms.

पिछले रविवार को जब मैं बाजार जा रहा था, तब मैंने सड़क के किनारे एक घायल पिल्ले को देखा। कुछ लोग उसके पास से गुजर रहे थे, लेकिन कोई उसकी सहायता नहीं कर रहा था। मैंने अपनी साइकिल रोकी और उसे पानी पिलाया। मेरे मित्र ने पशु चिकित्सक को फोन किया था, इसलिए डॉक्टर कुछ ही देर में वहाँ पहुँच गए। उन्होंने पिल्ले का उपचार किया। मैं उसे घर ले जाना चाहता था, लेकिन पहले उसके मालिक का पता लगाने का निर्णय लिया। मुझे विश्वास है कि वह जल्द ही स्वस्थ हो जाएगा।

B. Translate the following sentences into English.

1. जब मैं पहुँचा, तब बैठक शुरू हो चुकी थी।
2. वह कल इस समय अपनी परीक्षा दे रहा होगा।
3. बारिश शुरू होने से पहले हम घर पहुँच गए थे।
4. अगले महीने हमारा विद्यालय एक विज्ञान प्रदर्शनी आयोजित करेगा।
5. यदि तुम नियमित अभ्यास करोगे, तो तुम बेहतर प्रदर्शन करोगे।

Literature – Vitamin-M (30 minutes)

1. Read the story and write a summary in 80–100 words.

2. Describe the relationship between the boy and his grandfather, using two relevant details from the story.

3. Identify one moment that combines humour with concern or empathy. Explain its importance.

DAY 4 – PASSIVE VOICE / Literature: Gifts of Grace: Honouring Our Vocations

A. Change the following sentences into the passive voice.

1. The students planted fifty saplings in the school garden.
2. The committee will announce the results tomorrow.
3. The teacher is explaining the poem.
4. Someone has stolen my bicycle.
5. The workers were repairing the bridge.
6. People speak Hindi in many parts of India.
7. The principal had approved the proposal.
8. Do not waste drinking water.
9. Who wrote this report?
10. They must follow the safety instructions.
11. The school is organising a cleanliness campaign.
12. Did the police catch the thief?

B. Change the following sentences into the active voice.

1. The road was blocked by fallen trees.
2. The assignments have been checked by the teacher.
3. The match will be watched by thousands of people.
4. The rules must be followed by everyone.
5. The room was being decorated by the students.

Literature – Gifts of Grace: Honouring Our Vocations (30 minutes)

1. The poem presents several vocations, including those of carpenters, electricians, boatmen and shoemakers. Choose any three and explain how each contributes to society.

2. Why do you think the poem begins and ends with the idea of Bharat celebrating its varied vocations? What effect does this repetition create?

A. Change the following sentences into indirect speech.

1. Riya said, “I am preparing for my examinations.” _____
2. The teacher said to the students, “Submit your assignments tomorrow.” _____
3. Mohan said, “I have completed my project.” _____
4. She said to me, “Do you know the way to the library?” _____
5. The old man said, “I have been waiting here for an hour.” _____
6. The mother said to her son, “Do not waste your time.” _____
7. He said, “What a beautiful painting this is!” _____
8. The teacher said, “The Earth revolves around the Sun.” _____
9. Anita said to Rahul, “Why did you miss the meeting yesterday?” _____
10. The doctor said to the patient, “Take this medicine twice a day.” _____
11. He said, “I will help you with the assignment.” _____
12. She said, “May you succeed in life!” _____

B. Change the following sentences into direct speech.

1. The teacher advised the students to revise their lessons regularly. _____
2. He asked me whether I had seen his notebook. _____
3. The mother exclaimed with joy that her daughter had won the competition. _____
4. The coach urged the players to maintain discipline. _____
5. Rohan asked his friend why he was looking worried. _____

Literature – Revision: Bharat Our Land and Canvas of Soil (30 minutes)

1. Spend 15 minutes revising each poem.
2. For each poem, write its central idea and identify two images or expressions that support it.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. Prepare two short-answer questions of your own from each poem and answer them in your notebooks in own words.

Prepare a colourful, well-organised poster on ANY TWO of the following topics. Use an A4 sheet.

Choose one topic

OPTION 1: Design a poster, emphasizing the importance of cleanliness and mosquito control to prevent the spread of dengue on behalf of the Department of Health & Family Welfare of Government of NCT of Delhi..

OPTION 2: SAY NO TO SINGLE-USE PLASTIC – Highlight the harmful effects of plastic and encourage eco-friendly alternatives on behalf of People’s Welfare Society, Goa.

OPTION 3: BE SMART, STAY SAFE ONLINE – Promote responsible internet use, privacy and protection from online fraud on behalf of Cyber Security Cell, North Delhi.

Poster requirements

- Include a suitable heading, slogan and relevant visuals.
- Keep the message brief, clear and persuasive. Aim for a maximum of 50 words.
- Use attractive lettering, proportionate spacing and correct spelling.
- Mention an issuing organisation, such as Eco Club, PM SHRI KV Kanker, where appropriate.
- Submit the poster separately from your notebook.

Literature – Vitamin-M (30 minutes)

1. Re-read the story and find any 5 unfamiliar words, find their meanings and use them in sentences of your own.

- i. _____
- ii. _____
- iii. _____
- iv. _____
- v. _____

2. Write five important details from the story and explain why each matters.

3. How does the story encourage empathy towards elderly people?

4. Write one inferential question about the boy’s or grandfather’s behaviour and answer it using evidence from the story.

Write a letter to the editor of a national daily in 120–150 words on the following topic:

1. You are concerned about loudspeakers, unnecessary honking, construction noise and late-night celebrations in your locality. Write a letter highlighting the problems caused by noise pollution and suggesting practical measures to control it.
2. You are alarmed by the growing addiction to **junk food and electronic gadgets** among teenagers, leading to health hazards like obesity and eye strain. Write a letter to the editor of a national daily highlighting these risks and suggesting the promotion of outdoor sports. Sign as Poorva/Paras.

Your letter must include

- Sender's address and date
- Editor's designation and newspaper address
- A suitable subject line and formal salutation
- The problem and its effects on residents
- Practical suggestions for authorities and the public
- A formal closing and your name

Remember: Use a formal tone, organise your ideas into paragraphs, avoid repetition and use appropriate linking words.

- ✚ **The Students' Council of your school has organized an excursion to Ajanta and Ellora for the students of classes XI and XII during winter break. As the President of the Council, write a notice in not more than 50 words telling the students about this excursion and inviting their names for joining it.**

Day 8 – Fun Time

A. Fill in the blanks with suitable determiners.

1. There isn't _____ milk left in the refrigerator.
2. _____ students who participated in the competition received certificates.
3. I have read _____ books you gave me last week.
4. She has very _____ patience with people who are dishonest.
5. _____ of the two sisters is a talented musician.
6. We need _____ information before making a final decision.
7. He waited for _____ hour outside the office.
8. _____ student must bring their identity card to the examination hall.

B. Identify and correct the error in each sentence.

9. I have much friends in my new school.
10. Neither the two answers is correct.
11. She did not make some mistakes in the assignment.
12. Every students must submit the project by Monday.

C. Choose the correct option.

13. There are _____ apples in the basket, so we can make a pie.
 (a) little (b) a little (c) a few (d) much
14. _____ of the information provided in the report was useful.
 (a) Many (b) Several (c) Much (d) Few
15. I have visited the museum _____ times, but I still find it fascinating.
 (a) much (b) several (c) little (d) every
16. Identify the underlined clause and state whether it is a noun clause, an adjective clause or an adverb clause.

- ☐ I believe that she will win the competition.
- ☐ The boy who won the race is my neighbour.
- ☐ We stayed indoors because it was raining heavily.
- ☐ What he said surprised everyone.
- ☐ You may leave when the bell rings.

ENGLISH CROSSWORD

Choose the correct options and fill up the crossword puzzle!



Down

1. COVID-19 has affected/effected the entire world greatly.
2. The warranty/guarantee of this product expires at the end of this year.
3. Ben is laying/lying on the bed.
4. Fadzli love/loves/loved having ice-cream with french fries.
9. Xiao Ming arrived at/to school twenty minutes earlier than expected.
10. The Primary School Leaving Examinations is happening in two weeks' time/times.

Across

3. The triplets like/likes eating apples.
5. Who/whom does this bag of flowers belong to?
6. Sharique and me/I will be helping Mrs Tan bring the books down to the teacher's staff room.
8. Jenny has a dance class between 10 am to/and 11 am.
Our little sister was enrolled in a kindergarten/kindergarden this year.

17. _____

शरदकालीन अवकाश गृहकार्य (पूर्ण एवं विस्तृत ड्राफ्ट)

कक्षा: 9वीं

विषय: हिंदी (सीबीएसई पाठ्यक्रम)

समय: शरदकालीन अवकाश

खंड 'क' : अपठित बोध (Comprehension)

प्रश्न 1. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए:

"सच्चा अनुशासन वही है जो भीतर से आता है। बाहरी दबाव या डर से पैदा हुआ अनुशासन केवल कुछ समय के लिए ही टिक सकता है। जब कोई विद्यार्थी स्वयं अपनी दिनचर्या, पढ़ाई और आचरण के प्रति सचेत हो जाता है, तो वह सफलता की राह पर चल पड़ता है। वर्तमान समय में तकनीक और सोशल मीडिया के युग में विद्यार्थियों के सामने भटकाव बहुत अधिक हैं। ऐसे में आत्म-अनुशासन ही एकमात्र ऐसा अस्त्र है जो युवा पीढ़ी को उनके लक्ष्यों से भटकने से बचा सकता है। समय का सदुपयोग करना और अपने बड़ों का आदर करना भी अनुशासन का ही एक मुख्य हिस्सा है।"

- * (i) सच्चा अनुशासन किसे कहा गया है और क्यों?
- * (ii) वर्तमान युग में विद्यार्थियों के सामने सबसे बड़ी चुनौती क्या है?
- * (iii) गद्यांश से 'सफलता' और 'आदर' शब्द के विलोम शब्द ढूँढ़कर लिखिए।

खंड 'ख' : व्यावहारिक व्याकरण (Grammar & Extra Practice)

प्रश्न 2. उपसर्ग और प्रत्यय (Prefix & Suffix) [अतिरिक्त अभ्यास]:

* निम्नलिखित शब्दों में से उपसर्ग, मूल शब्द और प्रत्यय अलग करके तालिका पूरी कीजिए:

शब्द	उपसर्ग	मूल शब्द	प्रत्यय
अमानवीय	अ	मानव	ईय
दुर्बलता		बल	
परतंत्रता पर			ता
सुसज्जित		सज	इत
अधार्मिक		धर्म	
निर्भयता		भय	

प्रश्न 3. अर्थ के आधार पर वाक्य भेद [अतिरिक्त अभ्यास]:

* निर्देशानुसार वाक्य परिवर्तन कीजिए:

- "राम बाज़ार जा रहा है।" (→ निषेधवाचक वाक्य में बदलें)
- "तुम चुपचाप बैठो।" (→ आज्ञावाचक वाक्य में बदलें)

- "आज बहुत तेज़ धूप है।" (→ विस्मयादिबोधक वाक्य में बदलें)
- "शायद आज वर्षा होगी।" (→ विधानवाचक वाक्य में बदलें)
- "वह कल स्कूल नहीं आया था।" (→ प्रश्नवाचक वाक्य में बदलें)

खंड 'ग' : पाठ्यपुस्तक आधारित कार्य (Literature Section)

प्रश्न 4. क्षितिज (गद्य और पद्य भाग) के आधार पर उत्तर लिखिए:

- * (क) 'दो बैलों की कथा' (प्रेमचंद): झूरी के साले 'गया' के घर जाकर हीरा और मोती ने विद्रोह क्यों किया? उनके इस व्यवहार से पशुओं के किन स्वाभिमान संबंधी गुणों का पता चलता है?
- * (ख) निबंध लेखन के विषय में ए जी गार्डनर एवं लेखक के विचारों में क्या अंतर है ?
- * (ग) "आखिर वह भी बोलता प्राणी है"। क्या आप मानते हैं कि पक्षियों में भी संवेदना होती है ? लिखिए।
- (घ) कल्पना कीजिए कि आप जनक की सभा में उपस्थित एक राजा हैं। परशुराम जी के आगमन से लेकर उनके जाने तक की कथा अपने शब्दों में लिखिए।
- (ङ) भारती जय विजय करे कविता का भावार्थ अपने शब्दों में लिखिए।

खंड 'घ' : रचनात्मक लेखन (Creative Writing & Formal Letters)

प्रश्न 5. अनुच्छेद लेखन (Paragraph Writing - 120-150 शब्द):

* विषय: "विद्यार्थी जीवन में समय का महत्व"

- संकेत बिंदु: भूमिका → समय ही धन है → खोया हुआ समय वापस नहीं आता → विद्यार्थियों के लिए समय नियोजन

(Time Management) क्यों जरूरी है? → उपसंहार।

प्रश्न 6. संवाद लेखन (Dialogue Writing):

* दो मित्रों (अमित और साहिल) के बीच "बढ़ते हुए वायु प्रदूषण और हमारे कर्तव्य" विषय पर एक जागरूक संवाद (8-10 पंक्तियों में) तैयार कीजिए।

प्रश्न 7. औपचारिक पत्र लेखन (Formal Letter Writing - विकल्प सहित):

* पत्र (विषय-1): अपने क्षेत्र में नियमित रूप से हो रही बिजली की कटौती की समस्या की ओर ध्यान आकर्षित करते हुए विद्युत बोर्ड के अधिकारी को एक शिकायत पत्र लिखिए।

(अथवा)

* पत्र (विषय-2): विद्यालय के प्रधानाचार्य को अपनी आर्थिक स्थिति का वर्णन करते हुए 'शिक्षण शुल्क मुक्ति' (फीस माफ़ी) के लिए एक प्रार्थना पत्र लिखिए।

खंड 'ड' : आंतरिक परियोजना कार्य (Project Work)

* गतिविधि (Activity): अपनी पाठ्यपुस्तक गंगा के पाठ “दो बैलों की कथा” का माइंड मैप (Mind Map) या फ्लोचार्ट (Flow Chart) ए-4 (A4) साइज़ शीट पर बनाइए।

TOPIC:

1. लेखक का परिचय
2. कहानी के मुख्य पात्रों का वर्णन
3. कहानी के मुख्य पड़ाव
4. बैलों के गुण
5. पाठ का मुख्य उद्देश्य
6. पाठ में आए नैतिक मूल्यों का वर्णन

इसमें मुख्य पात्रों के नाम, कहानी का मुख्य उद्देश्य और उससे मिलने वाली सीख को सुंदर रंगों का उपयोग करके दर्शाइए।

PM SHRI KENDRIYA VIDYALAYA KANKER

HOLIDAY HOME WORK

1. Expand using suitable identity: $(\frac{1}{x} + \frac{1}{y})^2$.
2. Factorise: $16y^2 - 24y + 9$.
3. Fill the blanks: $s^2 - 11s + 24 = (\dots)(\dots)$.
4. Factorise: $4x^2 + 9y^2 + 36z^2 + 12xy + 36yz + 24xz$.
5. Simplify: $(2x - 7)(2x + 7)$.
6. Draw $\triangle ABC$ with $AB = 5\text{ cm}$, $\angle A = 100^\circ$ and $AC = 4\text{ cm}$. Draw the circumcircle of $\triangle ABC$. Is the centre inside or outside the triangle?
7. Show that the triangle formed by a chord and the centre of the circle is isosceles.
8. Find the length of the chord of a circle where the radius is 7 cm and perpendicular distance is 6 cm.
9. An arc of a circle subtends an angle of 70° at the centre. What is the measure of the angle subtended by the arc at a point on the circle?
10. ABCD is a cyclic quadrilateral inscribed in a circle. If $\angle A$ measures 75° , what is the measure of $\angle C$? If $\angle B$ measures 110° , what is the measure of $\angle D$?
11. The perimeter of a circle is 44 cm. What is its radius?
12. If the diameter of a car tyre is 56 cm, then: (i) How far does the car need to travel for the tyre to complete one revolution? (ii) How many revolutions does the tyre make if the car travels 10 km?
13. Find the area of a triangle, given that its sides are 8 cm and 11 cm long, and its perimeter is 32 cm.
14. The sides of a triangular plot are in the ratio 3: 5: 7; its perimeter is 300 m. Find its area.
15. The length of the minute hand of a clock is 7 cm. Find the area swept by the minute hand in 10 minutes.

Complete the activity No. 3, 4 & 5.

PM SHRI KENDRIYA VIDYALAYA, KANKER

AUTUMN BREAK HOMEWORK

Subject: Physical & Health Education / Physical Activity Trainer

Class VI – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of daily physical activity.
3. Practise yoga and stretching regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five points on the importance of outdoor games.
3. Practise any five yoga asanas and write their names.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VIII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of a balanced diet.
3. Practise simple exercises and yoga regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class IX – Physical Education

1. Complete all pending work in your notebook.
2. Write the rules of any one game of your choice.
3. Write five benefits of physical fitness.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class X – Physical Education

1. Complete all pending work in your notebook.
2. Write the importance of physical fitness and a balanced diet.
3. Write five safety rules to follow while playing games.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XI – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five benefits of warm-up and cool-down exercises.
3. Prepare a simple daily fitness routine.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XII – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five points on the importance of first aid in sports.
3. Write the basic steps to follow during a sports injury.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

AUTUMN BREAK HOLIDAY HOMEWORK

Vocational Education & Kaushal Bodh | 5 core Tasks over 10 Days

Execution Guidelines for Students (1 Task = 2 Days Pace):

- **Pacing:** Complete 1 activity every 2 days (Day A: Planning & Execution, Day B: Observation & Log Record).
- **Submission:** Maintain an A4 size "**Autumn Skill Journal**". Include photos, sketches, or real samples.
- **Safety:** Perform all practical steps under adult supervision using locally available household materials.

CLASSES 6 TO 8: KAUSHAL BODH (MIDDLE STAGE)

Task 1: Kitchen Gardening & Plant Care

Life Forms

Days 1 – 2

Sow seasonal seeds (coriander, spinach, or fenugreek) in a pot, recycled tub, or garden patch. Prepare soil with compost and record initial watering and sunlight needs.

Journal Entry: Soil preparation steps + Sketch/Photo of sown pot with seed depth notes.

Task 2: Household Appliance & Safety Audit

Machines & Materials

Days 3 – 4

Inspect 5 home appliances/switches with an adult. Check power ratings (Watts), plug conditions, wire insulation, and identify potential electrical hazards.

Journal Entry: Audit table listing appliance name, power rating (W), condition, and 2 safety rules.

Task 3: Utility Upcycling Craft

Machines & Materials

Days 5 – 6

Fabricate a functional home item (e.g., desk organizer, cloth bag from old shirt, bird feeder) using dry household waste or discarded materials.

Journal Entry: Material list, exact dimensions, step-by-step assembly note, and utility photograph.

Task 4: Fireless Culinary Skill & Nutrition

Human Services

Days 7 – 8

Prepare a healthy fireless meal (e.g., sprout salad, vegetable sandwich, fruit chaat) focusing on kitchen hygiene, knife safety, and zero food waste.

Journal Entry: Recipe card with ingredients, nutritional benefits, step-by-step method, and cost per serving.

Task 5: Artisan Interaction & Reflection

Human Services

Days 9 – 10

Interview a local skilled worker or artisan (tailor, electrician, carpenter, gardener, mason). Learn about their tools, skills, and daily routine.

Journal Entry: 4-question Q&A summary + 100-word reflection on "Dignity of Labour".

CLASS 9: VOCATIONAL EDUCATION (KAUSHAL VIKAS)

Task 1: Workplace Safety & First-Aid Poster

Safety & Compliance

Days 1 – 2

Design a clear, color-coded safety poster illustrating workshop hazard symbols, personal protective equipment (PPE), and emergency protocols for burns, cuts, or electric shock.

Journal Entry: Full-page visual safety chart with standard hazard symbol labels and First-Aid steps.

Task 2: Technical Drawing & Orthographic Projection

Technical Skill

Days 3 – 4

Select a structured household object (e.g., electrical extension box, staple machine, desk organizer). Draw its Front View, Top View, and Side View using standard dimensions.

Journal Entry: Dimensioned 3-view orthographic drawing sheet with title block and scale.

Task 3: Home Energy Audit & Power Calculation

Applied Mathematics

Days 5 – 6

Audit 3 high-usage appliances (e.g., fan, refrigerator, TV). Calculate daily energy consumption in kWh: $(\text{Power in Watts} \times \text{Hours}) / 1000$. Estimate monthly running cost.

Journal Entry: Energy audit table + power formula calculations + 3 actionable energy-saving tips.

Task 4: Product Costing & Micro-Enterprise Plan

Entrepreneurship

Days 7 – 8

Develop a mini business plan for a simple product/service (e.g., potted herbs, crafted greeting cards, mobile screen guard installation). Calculate cost break-up and selling price.

Journal Entry: Cost Sheet (Raw Materials + Labour + Packaging = Total Cost) + Profit Margin & Price.

Task 5: Digital Inventory / Maintenance Log

Digital & Service

Days 9 – 10

Perform basic non-technical maintenance (cleaning fan blades, lubricating hinges) and design a spreadsheet or manual table tracking 10 household inventory items with total valuation.

Journal Entry: Executed maintenance log sheet + tabular inventory format with unit price and sum total.

ASSESSMENT & EVALUATION RUBRIC

Criteria	Weightage	Key Assessment Indicators
Practical Execution	40%	Evidence of real hands-on task completion (photos, measurements, raw data).
Technical Accuracy	30%	Correct calculations, neat diagrams, proper labeling, and realistic costings.
Journal & Presentation	20%	Neatness, adherence to the 2-day task schedule, and complete documentation.
Reflection & Safety	10%	Demonstrated awareness of Dignity of Labour and personal safety precautions.

पीएम श्री केंद्रीय विद्यालय कांगेर
शरदकालीन अवकाश गृहकार्य (2026-27)

CLASS IX (कक्षा 9) | विषय: संस्कृतम्

पाठ्यपुस्तक: इरावती

अ. पाठ्यपुस्तक — इरावती

1. 'इरावती' में विद्यालय में पढ़ाए गए सभी पाठों का पुनरावर्तन कीजिए।
2. प्रत्येक पढ़ाए गए पाठ से 10 कठिन संस्कृत शब्द चुनकर उनके हिंदी अर्थ लिखिए।
3. पढ़ाए गए पाठों में आए पाँच सुभाषित/महत्त्वपूर्ण वाक्य लिखिए तथा उनके हिंदी अर्थ लिखिए।

आ. संस्कृत व्याकरण

5. शब्दरूप लिखिए: राम, , लता, नदी और फल।
6. धातुरूप लिखिए: पठ्, गम्, और लिख् — लट्, लङ् तथा लृट् लकार में।
7. संस्कृत में 1 से 50 तक संख्या-शब्द लिखिए।
8. पाँच-पाँच उदाहरण लिखिए: संधि, उपसर्ग और प्रत्यय।
9. संस्कृत में कालबोधक अव्ययपद हिंदी अर्थ सहित लिखिए।

इ. रचनात्मक लेखन

10. 'मम विद्यालयः' विषय पर संस्कृत में 10 वाक्य लिखिए।
11. अपने दैनिक जीवन से संबंधित 10 हिंदी वाक्यों का संस्कृत में अनुवाद कीजिए।

निर्देश: उपरोक्त सभी कार्य संस्कृत की कॉपी में सुंदर एवं सुव्यवस्थित लिखावट में कीजिए।

ई. परियोजना कार्य (Project Work)

12. 'संस्कृतभाषायाः महत्त्वम्' विषय पर एक आकर्षक चार्ट/स्क्रैपबुक तैयार कीजिए। इसमें संस्कृत का महत्त्व, पाँच संस्कृत सूक्तियाँ और उनके हिंदी अर्थ शामिल कीजिए।
13. भारत की किसी एक प्राचीन शैक्षिक/सांस्कृतिक परंपरा पर चित्र सहित एक पृष्ठ की जानकारी लिखिए।

सामान्य निर्देश

- परियोजना कार्य A 4 साइज़ पेपर में स्वयं करें और आवश्यकतानुसार चित्रों/रंगों का प्रयोग करें।

Class 10: English (Autumn Break Homework)

1. Read the following lessons from 'First Flight' and 'The Footprints without Feet' and prepare summary of each.
First Flight- "The Sermon at Benares" The Proposal and "Anne Gregory"
The Footprints without Feet- "The Necklace" and "**Bholi**"
2. Go through the sample of English provided by CBSE 2026-27 and solve the writing section and the Literature part in your notebook.
3. You are Rohan/Riya, a resident of 12, Mall Road, Shimla. You are deeply concerned about the increasing use of single-use plastics in your city despite the official ban. Write a letter to the Editor of *The Tribune* highlighting the environmental hazards it causes and suggesting practical ways the community can cooperate to ensure a plastic-free city.
4. You are Vikram/Sonia, residing at 45, Gandhi Nagar, Raipur. You recently purchased a 1.5-ton split air conditioner from M/s Electronic World, G.E. Road, Raipur. Within a week of installation, the compressor started making a loud noise, and the cooling stopped working. Write a letter to the Store Manager complaining about the defective product and requesting an immediate replacement under warranty.
5. You are Malini/Manav, the Librarian of Holy Child Academy, Indore. Write a letter to M/s Oxford University Press, Daryaganj, New Delhi, placing an order for reference books, fiction novels, and encyclopedias for the school library. Mention the specific titles, authors, and quantities needed, and ask for secure packaging.

पीएम श्री केन्द्रीय विद्यालय, कांकेर
शरदावकाश गृहकार्य
कक्षा X विषय: हिन्दी

सभी प्रश्न करने अनिवार्य हैं।

दिए गए प्रत्येक कार्य को गृहकार्य पुस्तिका में ही करना सुनिश्चित करें।

अपनी गृहकार्य पुस्तिका को अच्छे से कवर करके लाएं।

1. पाठ - "साना-साना हाथ जोड़ि" पढ़िए। इसमें यात्रा-वर्णन की विशेषताओं को लिखिए। अपने जीवन की किसी छोटी यात्रा का संक्षिप्त यात्रा-वृत्तांत लिखिए (200 शब्दों में)।
2. पाठ- कोई 3 सूचना लिखकर लाइए।
3. कोई 3 स्ववृत्त लिखकर लाएं।
4. अलंकार परिचय (उपमा, रूपक, उतप्रेक्षा, मानवीकरण, अतिशयोक्ति) की परिभाषा और पाँच-पाँच उदाहरण लिखिए।
5. कर्तृवाच्य, कर्मवाच्य और भाववाच्य की परिभाषा लिखिए। प्रत्येक के 3-3 उदाहरण बनाइए।
6. रचना के आधार पर वाक्य भेद के आधार पर सरल वाक्य, संयुक्त वाक्य एवं मिश्र वाक्य की परिभाषा लिखते हुए प्रत्येक के 5-5 उदाहरण भी लिखिए।
7. 1. निम्न विषयों पर अनुच्छेद लिखिए :-
संकेत बिंदु :-
ii. स्वच्छ भारत अभियान सफाई की स्थिति पहले और अब
अभियान का उद्देश्य
विद्यार्थियों की भूमिका
"जहाँ स्वच्छता, वहाँ स्वास्थ्य"
8. अपनी विषय की कॉपी पूरी करके लेकर आयें। अवकाश पश्चात कॉपी की जांच की जाएगी।

9. दिए गए विषय पर पोर्टफोलियो तैयार करें।

* पोर्टफोलियो टॉपिक :

"सोशल मीडिया और युवा पीढ़ी"

पोर्टफोलियो से जुड़े प्रश्न :

- 1) सोशल मीडिया ने आपके जीवन में क्या सकारात्मक प्रभाव डाले हैं?
 - 2) सोशल मीडिया के नकारात्मक पहलुओं के बारे में अपने विचार लिखिए।
 - 3) यदि सोशल मीडिया न होता तो विद्यार्थी जीवन में क्या अंतर होता?
 - 4) किसी एक सोशल मीडिया प्लेटफॉर्म का वर्णन कीजिए और बताइए कि यह आपके लिए किस प्रकार उपयोगी है।
 - 5) "सोशल मीडिया: मित्र या शत्रु?" विषय पर लगभग 150 शब्दों का निबंध लिखिए।
 - 6) सोशल मीडिया पर गलत सूचनाओं से बचने के लिए छात्र क्या उपाय अपना सकते हैं?
 - 7) अपने अनुभव के आधार पर सोशल मीडिया के कारण पढ़ाई पर पड़ने वाले प्रभाव का वर्णन कीजिए।
 - 8) सोशल मीडिया के जिम्मेदार उपयोग के लिए पाँच सुझाव लिखिए।
- (A4 साइज़ पेपर में) (कोबरा फाइल में कम से कम 15 पेजों में यह कार्य करें।)

PM SHRI KENDRIYA VIDYALAYA KANKER
AUTUMN BREAK HOLIDAY HOME-WORK (SESSION 2026-27)

CLASS – 10TH

SUBJECT – MATHEMATICS

DATE : 13/10/2026

1. Solve the Sample question paper (Math-Basic 2026-27) in separate sheet and attach it in your portfolio.
2. Solve the PYQ sent in whats-app group and attach it also in your portfolio.
3. Solve the questions from chapter 12 and 13 in your notebook and do practice for Monthly test.
4. Write the following activities in your Activity notebook.
 - a. To verify Basic Proportionality Theorem (Thales theorem).
 - b. To find the number of tangents from a point to a circle.
 - c. To find the height of a building using a clinometer

PM SHRI KENDRIYA VIDYALAYA KANKER

Autumn Break Holiday Homework

(2026-27)

Subject – Geography

CLASS X

1. Make a project on Consumer Rights.
2. Make a separate file of map work.

ography	Resources and Development	Identify Major Soil Types				
	Water Resources	Locating and Labeling: <table><tr><td> • Salal • Bhakra Nangal • Tehri • Rana Pratap Sagar </td><td> • Sardar Sarovar • Hirakund • Nagarjun Sagar • Tungabhadra </td></tr></table>			• Salal • Bhakra Nangal • Tehri • Rana Pratap Sagar	• Sardar Sarovar • Hirakund • Nagarjun Sagar • Tungabhadra
• Salal • Bhakra Nangal • Tehri • Rana Pratap Sagar	• Sardar Sarovar • Hirakund • Nagarjun Sagar • Tungabhadra					
	Agriculture	Identify: • Major areas of Rice and Wheat • Largest/Major producer states of Sugarcane, Tea, Coffee, • Rubber, Cotton and Jute				
	Minerals and Energy Resources	Identify: <table><tr><td>Iron Ore Mines Mayurbhanj Durg Bailadila Bellary Kudremukh</td><td>Coal Mines Raniganj Bokaro Talcher Neyveli</td><td>Oil Fields Digboi Naharkatia Mumbai High Bassien Kalol Ankaleshwar</td></tr></table>	Iron Ore Mines Mayurbhanj Durg Bailadila Bellary Kudremukh	Coal Mines Raniganj Bokaro Talcher Neyveli	Oil Fields Digboi Naharkatia Mumbai High Bassien Kalol Ankaleshwar	
Iron Ore Mines Mayurbhanj Durg Bailadila Bellary Kudremukh	Coal Mines Raniganj Bokaro Talcher Neyveli	Oil Fields Digboi Naharkatia Mumbai High Bassien Kalol Ankaleshwar				
		Locate and label: Power Plants <table><tr><td>Thermal • Namrup • Singrauli • Ramagundam </td><td>Nuclear • Narora • Kakrapara • Tarapur • Kalpakkam </td></tr></table>			Thermal • Namrup • Singrauli • Ramagundam	Nuclear • Narora • Kakrapara • Tarapur • Kalpakkam
Thermal • Namrup • Singrauli • Ramagundam	Nuclear • Narora • Kakrapara • Tarapur • Kalpakkam					

Manufacturing Industries	• Manufacturing Industries (Locating and labeling only) • Cotton textile Industries: a. Mumbai, b. Indore, c. Surat, d. Kanpur, e. Coimbatore • Iron and Steel Plants: a. Durgapur, b. Bokaro, c. Jamshedpur, d. Bhilai, e. Vijayanagar, f. Salem
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History

1. History Project Work Prepare the History project on Chapter 4 – The Age of Industrialisation.

AUTUMN BREAK HOMEWORK (SESSION: 2026-27)

SUBJECT: BIOLOGY (CLASS X)

Note: While solving the questions, do not copy the answers directly. First, understand the questions properly, then write the answers in your own words.

Section A: MCQs (12 Questions)

Q1. Which of the following is the site of photosynthesis in plant cells?

- (a) Mitochondria (b) Chloroplast (c) Nucleus (d) Ribosome

Q2. Which enzyme present in saliva helps digest starch?

- (a) Pepsin (b) Trypsin (c) Salivary amylase (d) Lipase

Q3. Which blood vessel carries oxygenated blood from the lungs to the heart?

- (a) Pulmonary artery (b) Pulmonary vein (c) Vena cava (d) Aorta

Q4. Which part of the nephron is mainly responsible for the filtration of blood?

- (a) Collecting duct (b) Glomerulus (c) Ureter (d) Renal pelvis

Q5. Which part of the brain maintains posture and balance?

- (a) Cerebrum (b) Medulla (c) Cerebellum (d) Hypothalamus

Q6. Which hormone regulates blood sugar levels?

- (a) Thyroxine (b) Insulin (c) Adrenaline (d) Testosterone

Q7. The bending of a plant shoot towards light is called:

- (a) Geotropism (b) Hydrotropism (c) Phototropism (d) Chemotropism

Q8. Which plant hormone promotes cell elongation in shoots?

(a) Auxin (b) Absciscic acid (c) Ethylene (d) Cytokinin

Q9. Binary fission is commonly observed in:

(a) Hydra (b) Amoeba (c) Rhizopus (d) Spirogyra

Q10. Which structure develops into a seed after fertilisation in flowering plants?

(a) Ovary (b) Ovule (c) Stigma (d) Anther

Q11. Which contraceptive method also helps reduce the risk of sexually transmitted infections?

(a) Oral contraceptive pills (b) Copper-T (c) Condom (d) Surgical method

Q12. The transfer of pollen grains from anther to stigma is called:

(a) Fertilisation (b) Germination (c) Pollination (d) Implantation

Section B: Assertion–Reason (10 Questions)

Choose the correct option:

(a) Both Assertion and Reason are true, and Reason correctly explains Assertion.
(b) Both Assertion and Reason are true, but Reason does not correctly explain Assertion.
(c) Assertion is true, but Reason is false.
(d) Assertion is false, but Reason is true.

Q1. Assertion: Arteries have thick and elastic walls.

Reason: Blood flows through arteries under relatively high pressure.

Q2. Assertion: Plants do not require a transport system because they do not move.

Reason: Plants transport water, minerals and food through specialised tissues.

Q3. Assertion: The small intestine is the main site of absorption of digested food.

Reason: The small intestine has numerous villi that increase the surface area for absorption.

Q4. Assertion: Reflex actions are generally rapid and automatic.

Reason: Reflex actions can be coordinated through the spinal cord without waiting for conscious processing by the brain.

Q5. Assertion: Insulin helps lower blood glucose levels.

Reason: Insulin is secreted by the thyroid gland.

Q6. Assertion: Auxin can cause a shoot to bend towards light.

Reason: Unequal distribution of auxin causes differential growth on the two sides of the shoot.

Q7. Assertion: Sexual reproduction produces variations among offspring.

Reason: Sexual reproduction involves genetic material from two parents in most cases.

Q8. Assertion: Amoeba reproduces by multiple fission under all environmental conditions.

Reason: Under unfavourable conditions, some Amoeba form a protective cyst in which multiple fission may occur.

Q9. Assertion: Fertilisation in flowering plants occurs in the ovary.

Reason: The male gamete fuses with the egg cell inside the ovule.

Q10. Assertion: Menstruation occurs when fertilisation does not take place.

Reason: The thickened uterine lining breaks down and is discharged along with blood and tissue.

Section C: Short-Answer Questions (10 Questions)

Q1. What is the difference between autotrophic and heterotrophic nutrition?

Q2. Why is the small intestine longer in herbivores than in carnivores?

Q3. Differentiate between aerobic and anaerobic respiration.

Q4. What is double circulation in humans?

Q5. What is a reflex action? Give one example.

Q6. Differentiate between nervous control and hormonal control.

Q7. What is phototropism? Explain the role of auxin.

Q8. Differentiate between binary fission and budding.

Q9. What is the difference between pollination and fertilisation?

Q10. What is the role of the placenta in human reproduction?

Section D: Long-Answer Questions (5 Questions)

Q1. Explain the process of nutrition in human beings.

Q2. Describe the structure and functioning of a nephron.

Q3. Explain how a nerve impulse travels through a neuron and produces a response.

Q4. Explain sexual reproduction in flowering plants.

Q5. Explain the different methods of contraception and their importance.

PM SHRI KENDRIYA VIDYALAYA KANKER CHHATTISGARH

SESSION 2026 -27

CLASS - X

SUBJECT - ARTIFICIAL INTELLIGENCE (CODE - 417)

(PRACTICAL FILE)

EXPERIMENT - 01

Aim - Add the elements of two lists.

Program

```
list1 = [10, 20, 30, 40]
list2 = [1, 2, 3, 4]
result = []
for i in range(len(list1)):
    result.append(list1[i] + list2[i])
print("First List:", list1)
print("Second List:", list2)
print("Sum of Lists:", result)
list1 = [10, 20, 30, 40]
list2 = [1, 2, 3, 4]
result = []
for i in range(len(list1)):
    result.append(list1[i] + list2[i])
```

Output:

```
print("First List:", list1)
print("Second List:", list2)
print("Sum of Lists:", result)
```

EXPERIMENT - 02

Aim - Calculate mean, median and mode using NumPy

Source Code:-

```
import numpy as np
from statistics import mode
data = np.array([10, 20, 20, 30, 40])
print("Data:", data)
print("Mean:", np.mean(data))
print("Median:", np.median(data))
print("Mode:", mode(data))
```

Output:

```
Data: [10 20 20 30 40]
Mean: 24.0
Median: 20.0
Mode: 20
```

Remember:

- Mean = sum of values / number of values.
- Median = middle value after sorting.
- Mode = most frequently occurring value.

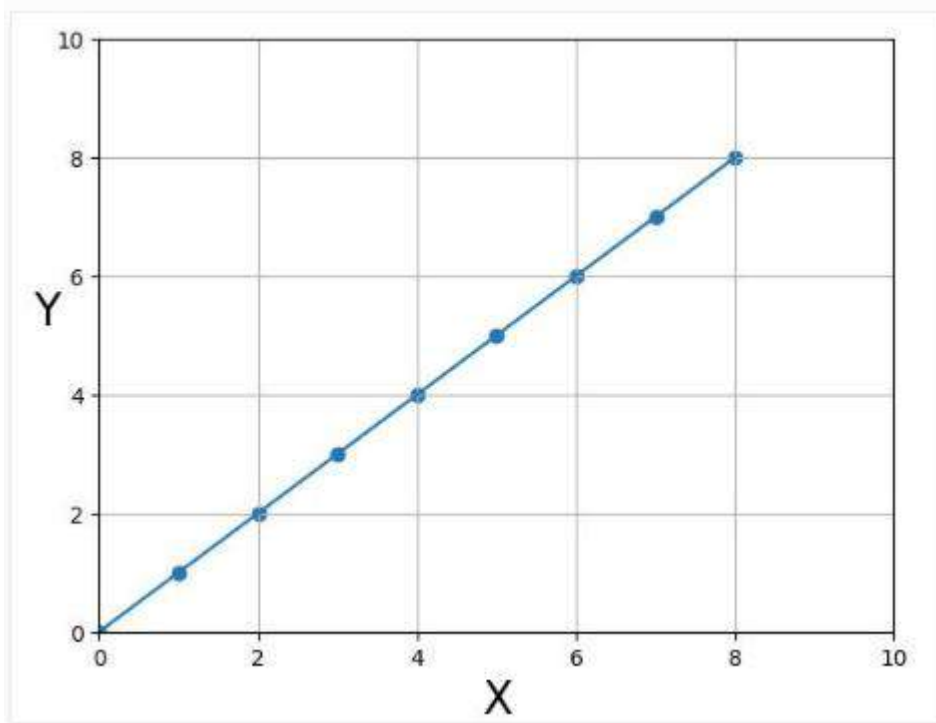
Experiment - 03

Aim - Display a line chart from (2, 5) to (9, 10)

Source Code-

```
x = [2, 9]
y = [5, 10]
plt.plot(x, y, marker='o')
plt.title("Line Chart")
plt.xlabel("X-axis")
plt.ylabel("Y-axis")
plt.grid(True)
plt.show()
```

Output:



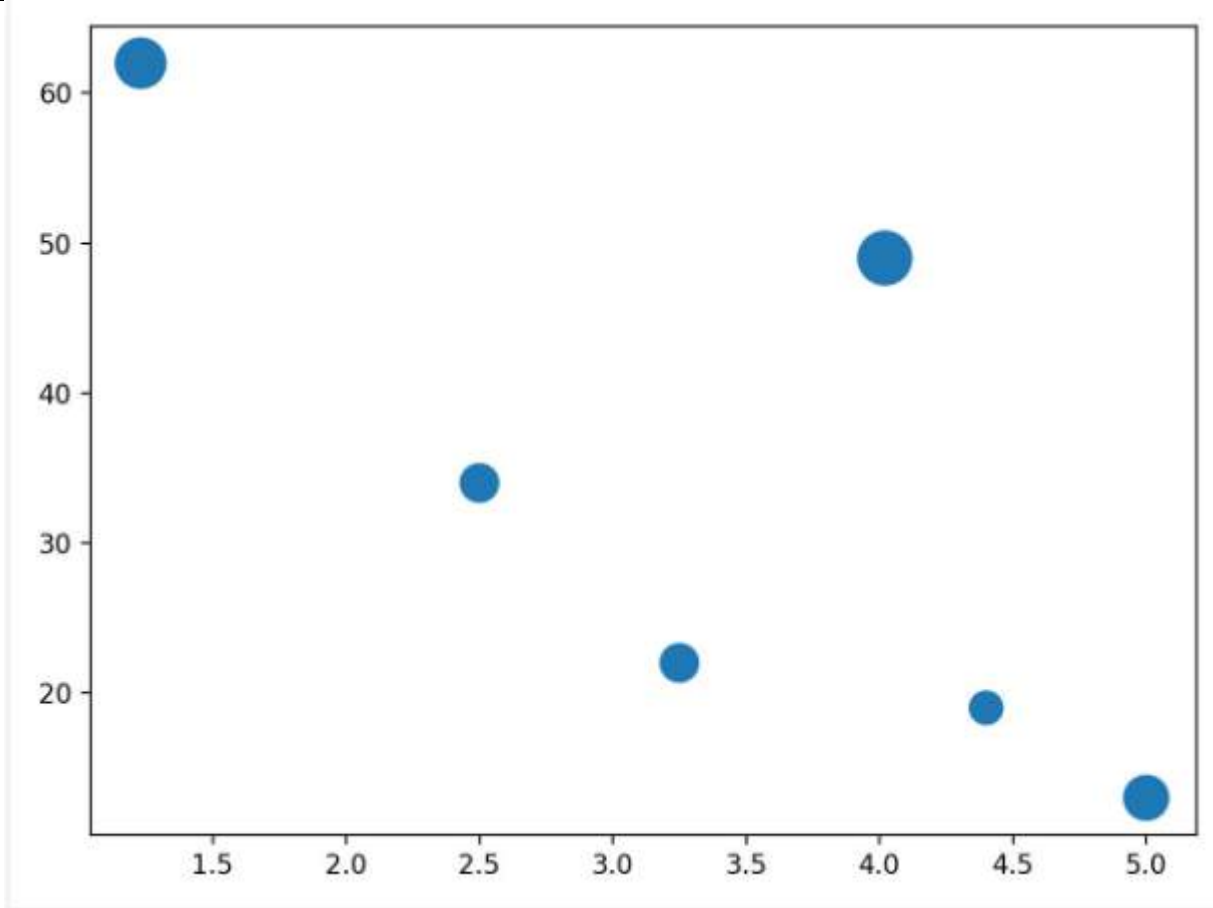
Experiment - 04

Aim - Display a scatter chart for the given points.

Source Code:-

```
Points: (2,5), (9,10), (8,3), (5,7), (6,18)
import matplotlib.pyplot as plt
x = [2, 9, 8, 5, 6]
y = [5, 10, 3, 7, 18]
plt.scatter(x, y, color='blue', marker='o')
plt.title("Scatter Chart")
plt.xlabel("X-axis")
plt.ylabel("Y-axis")
plt.grid(True)
plt.show()
```

Output:



Experiment - 05

Aim - Read a CSV file and display 10 rows.

Source Code-

```
import pandas as pd
df = pd.read_csv("student.csv")
print(df.head(10))
```

Example CSV file: student.csv

Roll, Name, Marks

```
1, Aman, 85
2, Riya, 90
3, Ravi, 78
4, Neha, 88
5, Arun, 76
6, Simran, 92
7, Mohan, 81
8, Pooja, 87
9, Rahul, 79
10, Anita, 95
11, Karan, 83
```

Output: -

	Roll	Name	Marks
0	1	Aman	85
1	2	Riya	90
2	3	Ravi	78
3	4	Neha	88
4	5	Arun	76
5	6	Simran	92
6	7	Mohan	81
7	8	Pooja	87
8	9	Rahul	79
9	10	Anita	95

head(10) displays the first 10 data rows, excluding the column headings.

Experiment - 06

Aim - Read a CSV file and display its information

```
import pandas as pd
df = pd.read_csv("student.csv")
print(df.info())
```

Output:

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 11 entries, 0 to 10
Data columns (total 3 columns):
 #   Column  Non-Null Count  Dtype
---  -
 0   Roll    11 non-null     int64
 1   Name    11 non-null     object
 2   Marks   11 non-null     int64

dtypes: int64(2), object(1)
memory usage: ...
None
```

Note: The memory-usage value may vary. `df.info()` displays the DataFrame summary itself, so `print(df.info())` additionally prints None. To avoid that extra line, write:

```
df.info()
```

Experiment - 07

Aim - Read an image and display it using Python

Source Code-

```
import matplotlib.pyplot as plt
import matplotlib.image as mpimg
img = mpimg.imread("flower.jpg")
plt.imshow(img)
plt.axis("off")
plt.title("Image Display")
plt.show()
```

Output:-



पीएम श्री केंद्रीय विद्यालय कांगेर

शरदकालीन अवकाश गृहकार्य (2026-27)

CLASS X (कक्षा 10) | विषय: संस्कृतम्

1. संस्कृत मणिका पाठ्यपुस्तक में पढ़ाए गए पाठों का पुनरावर्तन कीजिए ।
2. परियोजना कार्य - खिलेन्द्र – संधि , जितेंद्र – अन्वय , निवेदिता – प्रत्यय , प्रेरणा – समास , यजेष्ठ – अव्यय

सामान्य निर्देश

- परियोजना कार्य A 4 साइज़ पेपर में स्वयं करें और आवश्यकतानुसार चित्रों/रंगों का प्रयोग करें।

Autumn Break Homework

XI English

JOKES FOR STUDENTS

Because laughter = Better grades (maybe 😊)

- 1 Why did the student eat his homework?
Because the teacher said it was a **piece of cake**!



- 2 What's a student's favourite type of train?
A "study" train!



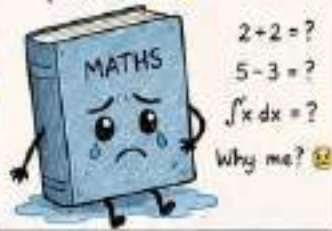
- 3 Why don't students ever play hide and seek?
Because good luck hiding when your books are **huge**! 😊



- 4 What do you call a teacher who loves talking?
A "lecturer"! 😊



- 5 Why was the math book sad?
Because it had too many problems. 😊



- 6 How do students stay cool during exams?
They sit next to the "fan" (their notes)! 😊



- 7 Why did the pen break up with the pencil?
Because it felt like they had no "point" in the relationship! 😊



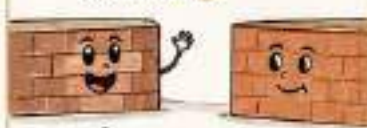
- 8 What do you call a student who doesn't study?
A "graduate"... eventually! 😊



- 9 Why are students always so calm?
Because they have a lot of "exams" practice! 😊



- 10 What did one wall say to the other wall?
I'll meet you at the "corner"! 😊



STUDY HARD,
LAUGH HARDER!
THAT'S THE FORMULA 😊

- 11 Why did the student bring a ladder to school?
Because they heard the grades were on the "next level"! 😊



ALL THE BEST,
FUTURE TOPPER! ☆😊

- 12 Last one! Why do students love backpacks?
Because they carry everything... except their stress! 😊



I carry books,
not worries!

You've got this! ☆😊





Day 1

The Word Detective

Find five interesting English words from a newspaper, book, magazine or everyday surroundings.

- Write the meaning and one original sentence for each.
- Add a synonym or antonym.
- Draw a small symbol or sketch to represent one word.

Learning outcome: Vocabulary, contextual learning and sentence construction.



Day 2

Rewrite the Story!

Choose either *The Portrait of a Lady* or *The Adventure* from Hornbill.

- Write an alternative ending in 120–150 words.
- Keep the main characters recognisable.
- Explain in two sentences why you chose this ending.

Learning outcome: Reading comprehension, imagination and narrative writing.



Day 3

A Chapter in Six Frames

Turn a scene from *We're Not Afraid to Die... if We Can All Be Together* or *The Summer of the Beautiful White Horse* into a six-frame comic strip.

- Include captions and dialogue.
- Use at least three expressions from the chapter.
- Give your comic an interesting title.

Learning outcome: Summarising, dialogue writing and visual storytelling.



Day 4

Step into Someone Else's Shoes

Imagine you are the grandmother from *The Portrait of a Lady* or the narrator from *The Summer of the Beautiful White Horse*.

Write a diary entry of 150–180 words about a memorable incident from that character's perspective.

Include feelings, inner conflict and one question the character wishes they could answer.

Learning outcome: Diary writing, empathy, character analysis and expression.



Day 5

Words That Can Change the World

Create a poster on one of these themes:

- "The Earth Is Not Our Inheritance Alone"
- "Kindness Is a Language Everyone Understands"
- "Read More, Scroll Less"

Include a slogan, a visual element and a short persuasive message of 40–50 words.

Learning outcome: Persuasive language, concise writing and visual communication.



Day 6

Grammar Escape Challenge

Create your own mini grammar challenge containing:

- Five sentences with errors in tenses, subject–verb agreement or clauses.
- Correct answers with brief explanations.
- Three scrambled sentences for a classmate to rearrange.

Learning outcome: Grammar accuracy, editing and peer learning.



Day 7

Stories from Real Life

Interview a grandparent, parent, neighbour or another adult on the topic: *"How has life changed over the years?"*

- Ask five thoughtful questions.
- Record the answers in English.
- Write a 100-word reflection on what surprised or inspired you.

Learning outcome: Question formation, listening, reporting and real-world communication.



Day 8

My Mini English Magazine

Compile your favourite work from the previous seven days into a mini magazine.

Add:

- A cover page and an original title.
- Your favourite new word and quote.
- A short book or story review (80–100 words).
- One final reflection: "What I discovered about myself through English."

Learning outcome: Editing, presentation, reflection and creative ownership.

Bonus Activity



3. The Literary Mystery

Write three clues about a character, setting or event from the prescribed textbook. Keep the answers hidden so classmates can solve the mystery when school reopens.

- 1) यदि चंपा पढ़ी- लिखी होती तो कवि से कैसी बातें करती ?
- 2) “यहाँ दरख्तों के साये में धूप लगती है” यह वाक्य अलग-अलग परिस्थितियों में अलग-अलग अर्थ दे सकता है। कुछ परिस्थितियों की कल्पना कीजिए एवं लिखिए।
- 3) इस दौर में समाचार मीडिया बाजार को हड़पने के लिए अधिकाधिक लोगों का मनोरंजन तो कर रहा है, लेकिन जनता के मूल सरोकार को दरकिनार करता जा रहा है। विचार कीजिए।

परियोजना कार्य-

- 1) कबीर दास के जीवन चरित्र, रचनाओं और पदों को लिखते हुए उनका साहित्यिक परिचय भी दीजिए।
- 2) मुंशी प्रेमचंद की रचनाओं का उल्लेख करते हुए उनका साहित्यिक परिचय लिखिए।
- 3) मीरा के जीवन चरित्र का उल्लेख करते हुए उनकी रचनाओं तथा पदों के बारे में लिखिए।
- 4) 10 महान चित्रपट गायक/ गायिकाओं के बारे में लिखिए।



Class 11 – Computer Science

Unit 1 & 2 – Important Questions with Python Programs

10 Days Home Work (With Solutions)

Learn
Practice
Improve
Succeed



Unit 1: Computer Systems and Organisation | Unit 2: Data Handling Using Python

Day 1 – Unit 1: Computer Systems and Organisation

1. Short Answer Questions

- What is a computer system? Explain its main components.
- Differentiate between hardware and software with examples.
- What is the role of the CPU in a computer system?
- What is an operating system? Name any two.

2. Python Program

Write a program to print the following pattern:

```
1
1 2
1 2 3
1 2 3 4 5
```

Solution (Python Code)

```
for i in range(1, 6):
    for j in range(1, i+1):
        print(j, end=" ")
    print()
```

Output:

```
1
1 2
1 2 3
1 2 3 4 5
```

Day 2 – Unit 1: Computer Systems and Organisation

1. Short Answer Questions

- What is the difference between RAM and ROM?
- Explain the function of ALU and CU.
- What is a bus in computer architecture?
- What is the difference between primary and secondary memory?

2. Python Program

Write a program to find the sum of first n natural numbers using a loop.

Solution (Python Code)

```
n = int(input("Enter n: "))
sum_n = 0
for i in range(1, n+1):
    sum_n += i
print("Sum of first", n, "numbers is:", sum_n)
```

Output (for n = 5):

```
Enter n: 5
Sum of first 5 numbers is: 15
```

Day 3 – Unit 1: Computer Systems and Organisation

1. Short Answer Questions

- What is a compiler? How is it different from an interpreter?
- What is the purpose of a device driver?
- Differentiate between system software and application software with examples.
- What is a file system?

2. Python Program

Write a program to find the factorial of a number using a for loop.

Solution (Python Code)

```
n = int(input("Enter a number: "))
fact = 1
for i in range(1, n+1):
    fact *= i
print("Factorial of", n, "is:", fact)
```

Output (for n = 5):

```
Enter a number: 5
Factorial of 5 is: 120
```

Day 4 – Unit 1: Computer Systems and Organisation

1. Short Answer Questions

- What is a cache memory? Why is it used?
- What is a network? Name two types of networks.
- What is the difference between wired and wireless networks?
- What is the role of an input device and output device?

2. Python Program

Write a program to check whether a number is prime or not.

Solution (Python Code)

```
n = int(input("Enter a number: "))
if n > 1:
    for i in range(2, n):
        if n % i == 0:
            print(n, "is not prime")
            break
    else:
        print(n, "is prime")
else:
    print(n, "is not prime")
```

Output (for n = 17):

```
Enter a number: 17
17 is prime
```

Day 5 – Unit 2: Data Handling Using Python

1. Short Answer Questions

- What are Python's data types?
- Differentiate between mutable and immutable data types with examples.
- What is a list? How is it different from a tuple?
- What is a dictionary? Give an example.

2. Python Program

Write a program to accept 5 numbers from the user and display their average.

Solution (Python Code)

```
n = int(input("Enter number of values: "))
sum_num = 0
for i in range(n):
    num = float(input("Enter number (1-10): "))
    sum_num += num
avg = sum_num / n
print("Average is:", avg)
```

Output (for 5 numbers: 10 20 30 40 50):

```
Enter number of values: 5
Enter number 1: 10
Enter number 2: 20
Enter number 3: 30
Enter number 4: 40
Enter number 5: 50
Average is: 30.0
```

Day 6 – Unit 2: Data Handling Using Python

1. Short Answer Questions

- What is a string? How is it different from a list?
- What are slicing and indexing in Python?
- What is a set? Give one use of a set.
- What is a function? Write its advantages.

2. Python Program

Write a program to find the largest number from a list of numbers.

Solution (Python Code)

```
n = int(input("Enter number of elements: "))
num = []
for i in range(n):
    num.append(float(input("Enter number: ")))
max_num = num[0]
for num in num[1:]:
    if num > max_num:
        max_num = num
print("Largest number is:", max_num)
```

Output (for 5 numbers: 12 45 23 78 60):

```
Enter number of elements: 5
Enter number: 12
Enter number: 45
Enter number: 23
Enter number: 78
Enter number: 60
Largest number is: 78
```

Day 7 – Unit 2: Data Handling Using Python

1. Short Answer Questions

- What is a file in Python? What are the types of files?
- Explain the open() function and its modes.
- What is exception handling? Why is it important?
- What is a module? Give an example of a built-in module.

2. Python Program

Write a program to read a text file and count the number of lines in it.

Solution (Python Code)

```
filename = "sample.txt"
try:
    with open(filename, "r") as f:
        lines = f.readlines()
        print("Total lines:", len(lines))
except FileNotFoundError:
    print("File not found!")
```

Output (if file has 5 lines):

```
Total lines: 5
```

Day 8 – Unit 2: Data Handling Using Python

1. Short Answer Questions

- What is a tuple? How is it different from a list?
- What is a dictionary? How do we access values in a dictionary?
- What is a lambda function?
- What is the purpose of the range() function?

2. Python Program

Write a program to create a dictionary of 5 students with their marks and display the student with highest marks.

Solution (Python Code)

```
marks = {"Anam": 78, "Ravi": 92, "Neha": 85, "Shah": 67, "Rooja": 90}
max_student = max(marks, key=marks.get)
print("Highest marks obtained by:", max_student, ":", marks[max_student], "%")
```

Output:

```
Highest marks obtained by: Ravi (92)
```

Day 9 – Unit 2: Data Handling Using Python

1. Short Answer Questions

- What is a list comprehension?
- What is a class in Python? (basic idea)
- What is the difference between read() and readline()?
- What is the use of the with statement in file handling?

2. Python Program

Write a program to find the sum of squares of first n natural numbers.

Solution (Python Code)

```
n = int(input("Enter n: "))
sum_sq = 0
for i in range(1, n+1):
    sum_sq += i**2
print("Sum of squares of first", n, "numbers is:", sum_sq)
```

Output (for n = 5):

```
Enter n: 5
Sum of squares of first 5 numbers is: 55
```

Day 10 – Unit 1 & 2 (Revision + Mixed Questions)

1. Short Answer Questions

- What is the difference between logic gates and CPU?
- What is a variable? Give rules for naming variables in Python.
- What is a loop? Name two types.
- What is a list comprehension? Give one example.

2. Python Program

Write a program to input a number and display its multiplication table (1 to 10).

Solution (Python Code)

```
n = int(input("Enter a number: "))
for i in range(1, 11):
    print(n, "x", i, "=", n*i)
```

Output (for n = 7):

```
Enter a number: 7
7 x 1 = 7
7 x 2 = 14
...
7 x 10 = 70
```

Important Topics to Remember

- Computer system components: CPU, ALU, CU, Memory, I/O
- Operating system, Compiler vs Interpreter, Device driver
- Data types, Lists, Tuple, Dictionary, Set, Functions, File handling
- Loops, Conditional statements, Exception handling
- Modules and basic file operations

Python Tips

- Use proper indentation (4 spaces)
- Give meaningful variable names
- Use comments for better understanding
- Practice writing and debugging code
- Try different input values and check output

Small Steps
Every Day
Lead to
Big Results



KENDRIYA VIDYALAYA SANGATHAN, RAIPUR REGION
HALF YEARLY EXAMINATION
MATHEMATICS – XI (SUB. CODE 041)

Time allowed: 3 hours

Maximum Marks : 80

General Instructions:

1. This Question paper contains - **five sections** A, B, C, D and E. Each section is compulsory. However, there are internal choices in some questions.
2. **Section A** has **18 MCQ's and 02** Assertion-Reason based questions of 1 mark each.
3. **Section B** has 5 **Very Short Answer (VSA)-type** questions of 2 marks each.
4. **Section C** has 6 **Short Answer (SA)-type** questions of 3 marks each.
5. **Section D** has 4 **Long Answer (LA)-type** questions of 5 marks each.
6. **Section E** has 3 source based/case based/passage based/integrated units of assessment (4 marks each) with sub parts.

SECTION –A

(Multiple Choice Questions)

Each question carries 1 mark

Q1. If A and B are two sets, then $A \cap (A \cup B)'$ equal

- (A) A (B) B (C) $\emptyset$ (D) $A \cap B$

Q2. The value of $(i^{4k} + i^{4k+1} + i^{4k+2} + i^{4k+3})$

- (A) 0 (B) 1 (C) 2 (D) 3

Q3. The set $\{x \in R: 1 \leq x < 2\}$ can be written as:

- (A) $[1, 2]$ (B) $(1, 2]$ (C) $[1, 2)$ (D) $(1, 2)$

Q4. Let $A = \{x: x \in R, x > 4\}$ and $B = \{x: x \in R, x < 5\}$, then $A \cap B$ is equal to

- (A) $(4, 5]$ (B) $(4, 5)$ (C) $[4, 5]$ (D) $[4, 5)$

Q5. The two lines $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ are perpendicular to each other if

- (a) $a_1b_1 - a_2b_1 = 0$ (b) $a_1b_1 - a_2b_2 = 0$ (c) $a_1^2b_2 + b_1^2a_2 = 0$ (d) $a_1a_2 + b_1b_2 = 0$

Q6. The domain and range of the function f defined by $f(x) = \sqrt{x-1}$ is given by

- (A) Domain = $(1, \infty)$, Range = $(0, \infty)$ (B) Domain = $[1, \infty)$ Range = $(0, \infty)$
(C) Domain = $[1, \infty)$ Range = $[0, \infty)$ (D) Domain = $(1, \infty)$ Range = $[0, \infty)$

Q7 If: $(3x + 5, -2) = (4x + 3, y + x)$, then which of the following is correct:

- (A) $x = 1, y = 2$ (B) $y = -4, x = 2$ (C) $x = y$ (D) $y + x = 2$

Q8. Slope of a line which cuts off intercepts of equal lengths on the axes is

- (A) -1 (B) 0 (C) 2 (D) $\sqrt{3}$

- Q9. The greatest value of $\sin x \cos x$ is
 (A) 1 (B) 2 (C) $\frac{1}{2}$ (D) $\frac{1}{\sqrt{2}}$
- Q10. If $\frac{-2}{7}$, x , $\frac{-7}{2}$ are in GP, then value of x is
 (A) 1 (B) -1 (C) ± 1 (D) 0
- Q11. Which of the following is not correct?
 (A) $\sin \theta = -\frac{1}{5}$ (B) $\cos \theta = 1$ (C) $\sec \theta = \frac{1}{2}$ (D) $\tan \theta = 20$
- Q12. If $a + ib = c + id$, then which of the following is correct:
 (A) $a^2 + c^2 = 0$ (B) $b^2 + c^2 = 0$ (C) $b^2 + d^2 = 0$ (D) $a^2 + b^2 = c^2 + d^2$
- Q13. If $x < 5$, then which of the following inequality is correct
 (A) $-x < -5$ (B) $-x > -5$ (C) $-x \leq -5$ (D) $-x \geq -5$
- Q14. The solution set of the inequality $4x + 3 < 6x + 7$ is
 (A) $x \in [2, \infty)$ (B) $x \in (-\infty, -2)$ (C) $x \in (-2, \infty)$ (D) none of these.
- Q15. In how many ways can a bowler take four wickets in a single 6-ball over?
 (A) 6 (B) 15 (C) 22 (D) 30
- Q16. The total number of terms in the expansion of $(x^2 - 2x + 1)^6$ is
 (A) 12 (B) 13 (C) 7 (D) none of these.
- Q17. If 21 points are lie on the circle, number of chords can drawn
 (A) 120 (B) 210 (C) 441 (D) 400
- Q18. If $n_{C_9} = n_{C_8}$, then value of n is
 (A) 20 (B) 25 (C) 17 (D) 1

ASSERTION-REASON BASED QUESTIONS

In the following questions, a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

- (A) Both A and R are true and R is the correct explanation of A.
 (B) Both A and R are true but R is not the correct explanation of A.
 (C) A is true but R is false.
 (D) A is false but R is true.

- Q19. Assertion (A): $\tan A = \cot B$, then $A + B = 90^\circ$
 Reason (R): $\sin A \cdot \sec A = 0$

- Q20. Assertion (A): Product of five consecutive natural numbers is divisible by 4!.
Reason (R): Product of n consecutive natural numbers is divisible by (n + 1) !

SECTION B

(This section comprises of very short answer type-questions (VSA) of 2 marks each)

Q21. Let R be the relation from A to A given by $R = \{ (x,y) : y = 1 + x \}$,where $A = \{1,2,3,4,5,6\}$.

- (a) Represent the relation using arrow diagram
(b) Write codomain and range of relation R

Q22. Draw the graph of real function $f(x) = |x|$ Also write the domain and range of the function $f(x)$

OR

If $f(x) = x + 1$ and $g(x) = 2x - 3$ be the two real functions then find (i) $[f(x)]^2 g(x)$

$$(ii) f(x) - 3 [g(x)]^2$$

Q23. Find the value of $\tan(15^\circ) + \cot(15^\circ)$

Q24. Solve the inequality ; $x + \frac{x}{2} + \frac{x}{3} < 11$, $x \in Z$

Q25. Line passing through points (-2 , 6) and (4 , 8) is perpendicular to the line through the points (8,12) and (x , 24) . Find the value of x

OR

Find the distance of the point (-1 , 1) from the line $12(x + 6) - 5(y - 2) = 0$

SECTION C

(This section comprises of short answer type-questions (SA) of 3 marks each)

Q26. Draw the Venn diagrams for non empty sets A and B:

$$(i) A \cup (B \cap C) \quad (ii) (A \cup B) \cap C \quad (iii) (A \cup C) \cap B$$

Q27. Find $(a + b)^4 - (a - b)^4$, hence evaluate $(\sqrt{3} + \sqrt{2})^4 - (\sqrt{3} - \sqrt{2})^4$

Q28. If three lines $3x + y - 2 = 0$, $2x - y = 3$ and $kx + 2y = 3$ are concurrent , find the value of k

Q29. If $(x - iy)(3 + 5i)$ is conjugate of $-6 - 24i$, find the real numbers x and y

OR

$$\text{If } (x + iy)^3 = u + iv, \text{ then show that } \frac{u}{x} + \frac{v}{y} = 4(x^2 - y^2)$$

Q30. How many words, with or without meaning, each of two vowels and 3 consonants can be formed from the letters of the word DAUGHTER?

OR

If ${}^5P_r = 6 \times {}^5P_{r-1}$, find the value of r

Q31. Find the sum to n terms of the sequence; 8, 88, 888, 8888,...

OR

How many terms of the sequence $3, \frac{3}{2}, \frac{3}{4}, \dots$ are needed to give the sum $\frac{3069}{512}$?

SECTION D

(This section comprises of long answer type-questions (LA) of 5 marks each)

Q32. (i) The minute hand of a watch is 1.5 cm long. How tip move in 40 minutes? (2 Marks)

(Use $\pi = 3.14$).

(ii) Prove that $\sin 3x - \sin x + \sin 2x - \sin x = 4 \cos \frac{x}{2} \sin x \cos \frac{3x}{2}$ (3 Marks)

OR

If $\tan x = \frac{3}{4}$, $\pi < x < \frac{3\pi}{2}$ find the values of $\sin \frac{x}{2}$, $\cos \frac{x}{2}$, $\tan \frac{x}{2}$

Q33. (a) The sum of two numbers a and b is six times their geometric mean, show that

$$a : b = (3 + 2\sqrt{2}) : (3 - 2\sqrt{2})$$

OR

(a) If a and b are the roots of $x^2 - 3x + p = 0$ and c, d are roots of $x^2 - 12x + q = 0$,

Where a, b, c, d are in GP. Prove that $(q + p) : (q - p) = 17 : 15$

Q34. If A(2, 3), B(4, -1) and C(1, 2) be the vertices of triangle ABC, Find the

equations of altitude and median through vertex A

Q35. If $A = \{1, 2, 4, 5\}$, $B = \{2, 3, 5, 6\}$ and $C = \{4, 5, 6, 7\}$ verify,

(a) $A \times (B \cap C) = (A \times B) \cap (A \times C)$

(b) $(A - B) \times C = (A \times B) - (A \times C)$

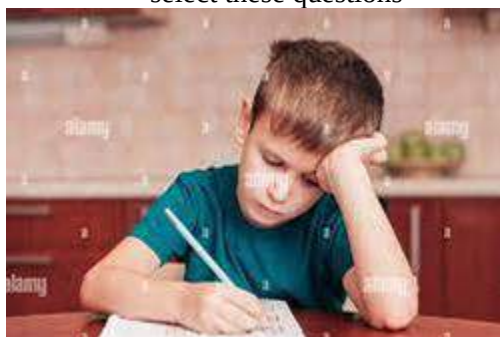
SECTION E

This section comprises of 3 case-study/passage-based questions of 4 marks each with sub-parts. First two case study questions have three sub-parts (i), (ii), (iii) of marks 1, 1, 2 respectively. The third case study question has two sub-parts of two marks each.)

Q36. Ashish is writing examination. He is reading question paper during reading time. He reads instructions carefully. While reading instructions, he observed that the question paper consists of 15 questions divided in to two parts - part I containing 8 questions and part II containing 7 questions

Read the text carefully and answer the questions:

(i) If Ashish is required to attempt 8 questions in all selecting 3 from part-I, then in how many ways can he select these questions



(ii) If Ashish is required to attempt 8 questions in all selecting 4 from part I and 4 from part II, then in how many ways can he select these questions

(iii) If Ashish is required to attempt 8 questions in all selecting 6 from one section and remaining from another section, then in how many ways can he select these questions

OR

If Ashish is required to attempt 8 questions in all selecting at least 3 from each part, then in how many ways can he select these question

Q37. Read the text carefully and answer the questions:

A sequence of non-zero numbers is said to be a geometric progression, if the ratio of each term, except the first one, by its preceding term is always constant. Rahul being a plant lover decides to open a nursery and he bought a few plants with pots. He wants to place pots in such a way that the number of pots in the first row is 2, in the second row is 4 and in the third row is 8 and so on



- (i) Represent the above information in form of sequence, name the sequence .
- (ii) find the constant multiple by which the number of pots is increasing in every row
- (iii) If Rahul wants to place 510 pots in total, find then the total number of rows formed in this arrangement?

OR

Find the total number of pots up to 10th row.

Q38. An intelligence quotient (IQ) is a total score derived from a set of standardized tests or subtests designed to assess human intelligence. The abbreviation "IQ" was coined by the psychologist William Stern for the German term Intelligence quotient, his term for a scoring method for intelligence tests at University of Breslau he advocated in a 1912 book. Manjula is a Psychology student and now a days she is learning about Intelligence Quotient (IQ). She calculates the result as follows:

$$\text{Intelligence Quotient} = \frac{\text{Mental age} \times 100}{\text{Chronological age}}$$



- (a) What could be the range of mental age if a group of children with chronological age of 15 years have the IQ range as $90 \leq IQ \leq 150$?
- (b) What could be the range of IQ if a group of children with age of 12 years have the mental age ?

AUTUMN BREAK HOMEWORK (SESSION: 2026-27)

SUBJECT: BIOLOGY (CLASS XI)

Note: **While solving the questions, do not copy the answers directly. First, understand the questions properly, then write the answers in your own words.**

SECTION A: MULTIPLE CHOICE QUESTIONS (12 MCQs)

Q1. Roots that arise from parts of the plant other than the radicle are called adventitious roots. In which of the following plants do we observe adventitious roots modified for mechanical support by arising from lower stem nodes?

- A) Carrot
- B) Sweet Potato
- C) Maize
- D) Banyan Tree

Q2. A student observes a transverse section of a plant stem under a microscope and identifies a large number of scattered vascular bundles, each surrounded by a sclerenchymatous bundle sheath. Phloem parenchyma is absent. This tissue sample belongs to a:

- A) Dicotyledonous stem
- B) Monocotyledonous stem
- C) Dicotyledonous root
- D) Monocotyledonous root

Q3. When a plant stem undergoes secondary growth, which of the following tissues is correctly cut off by the vascular cambium towards the inner side and outer side respectively?

- A) Secondary phloem inside, Secondary xylem outside
- B) Secondary xylem inside, Secondary phloem outside
- C) Primary xylem inside, Secondary phloem outside
- D) Phelloderm inside, Phellem outside

Q4. Which type of epithelial tissue lines the inner surface of hollow organs like fallopian tubes and bronchioles to move particles or mucus in a specific direction?

- A) Simple Squamous Epithelium
- B) Ciliated Epithelium

- C) Cuboidal Brush-border Epithelium
- D) Stratified Squamous Epithelium

Q5. Tendons and Ligaments are examples of which broad category of tissues?

- A) Loose Connective Tissue
- B) Dense Regular Connective Tissue
- C) Dense Irregular Connective Tissue
- D) Specialized Connective Tissue

Q6. In a standard flower of the Fabaceae family (like pea), the corolla consists of five petals arranged in a specific pattern. The largest petal is called:

- A) Standard (Vexillum)
 - B) Wings (Alae)
 - C) Keel (Carina)
 - D) Corona
-

Q7. When an inhibitor closely resembles the substrate in its molecular structure and inhibits the activity of the enzyme, it is known as a competitive inhibitor. What is a classic textbook example of this?

- A) Inhibition of cytochrome oxidase by cyanide
- B) Inhibition of succinic dehydrogenase by malonate
- C) Inhibition of hexokinase by glucose-6-phosphate
- D) Activation of pepsinogen by HCl

Q8. Polysaccharides are long chains of sugars. Chitin, which forms the exoskeleton of arthropods, is a:

- A) Homopolymer of D-glucose
- B) Heteropolymer of glucose and fructose
- C) Homopolymer of N-acetylglucosamine
- D) Homopolymer of amino acids

Q9. Amino acids show a property where their structure changes at different pH levels due to the ionizable nature of $(-\text{NH}_2)$ and $(-\text{COOH})$ groups. The form that carries both positive and negative charges with a net charge of zero is called:

- A) Acidic form
- B) Basic form

- C) Zwitterionic form
- D) Amphoteric ion

Q10. Which of the following cell organelles is correctly matched with its primary cellular function?

- A) Smooth Endoplasmic Reticulum – Synthesis of proteins
- B) Golgi apparatus – Packaging and sorting of materials
- C) Lysosomes – Generation of ATP energy
- D) Mitochondria – Intracellular digestion

Q11. Mitochondria and Chloroplasts are called semi-autonomous organelles because they contain:

- A) Only 80S ribosomes and linear DNA
- B) 70S ribosomes and circular DNA
- C) Only RNA and proteins
- D) Neither DNA nor ribosomes

Q12. During which specific sub-stage of Prophase I of Meiosis does the process of crossing over (exchange of genetic material) occur between non-sister chromatids?

- A) Zygotene
- B) Pachytene
- C) Diplotene
- D) Diakinesis

SECTION B: ASSERTION-REASON QUESTIONS (10 ARQs)

*Directions: Choose **A** (R explains A), **B** (R does not explain A), **C** (A is true, R is false), or **D** (A is false, R is true).*

Q13.

- **Assertion (A):** In plants like [*Opuntia*](#) (Cactus), the stem becomes flattened, green, and performs photosynthesis.
- **Reason (R):** Leaves in these plants are modified into spines to reduce water loss through transpiration.

Q14.

- **Assertion (A):** Xylem transport in plants is described as endarch in stems.

- **Reason (R):** In endarch xylem, the protoxylem (older xylem) lies towards the center/pith and metaxylem lies towards the periphery.

Q15.

- **Assertion (A):** Monocot leaves do not show differentiation into palisade and spongy parenchyma.
- **Reason (R):** Monocot leaves generally have parallel venation and are isobilateral.

Q16.

- **Assertion (A):** Bone tissue is hard and non-pliable in nature.
- **Reason (R):** The matrix of bone is rich in calcium salts and collagen fibers.

Q17.

- **Assertion (A):** Epithelial tissues have a large amount of extracellular matrix between the cells.
- **Reason (R):** Epithelial tissue forms the protective outer covering and inner lining of body organs.

Q18.

- **Assertion (A):** Lipids are strictly not polymers, yet they are found in the acid-insoluble pool during tissue analysis.
- **Reason (R):** When tissue is ground, cell membranes break into pieces and lipids form vesicles that do not dissolve in acid.

Q19.

- **Assertion (A):** Enzymes lower the activation energy of a chemical reaction to speed it up.
- **Reason (R):** Enzymes are highly specific for their substrates due to the presence of an active site.

Q20.

- **Assertion (A):** The fluid mosaic model describes the cell membrane as a dynamic structure.
- **Reason (R):** Lipids and proteins can move laterally within the lipid bilayer, which is called membrane fluidity.

Q21.

- **Assertion (A):** Interphase is called the resting phase of the cell cycle.
- **Reason (R):** During interphase, the cell is metabolically inactive and does not prepare for division.

Q22.

- **Assertion (A):** Meiosis II is called an equational division.
 - **Reason (R):** The number of chromosomes remains the same in daughter cells as it was at the beginning of Meiosis II.
-

SECTION C: SUBJECTIVE QUESTIONS (10 Questions)

Q23. What is a Phylloclade? Give one example. How does it help plants survive in dry (desert) conditions?

Q24. State three major anatomical differences between a Dicot Stem and a Monocot Stem.

Q25. Explain the structure and function of standard annual rings (Spring wood and Autumn wood) found in dicot trees.

Q26. Differentiate between a Tendon and a Ligament based on their structure and connecting function.

Q27. Where is Simple Cuboidal Brush-border Epithelium located in the human body, and what is its main physiological function?

Q28. Define Activation Energy. How do enzymes affect activation energy to convert substrates into products?

Q29. Differentiate between Primary and Secondary Metabolites with two examples of each.

Q30. What is the difference between a Nucleoside and a Nucleotide? Name the bond that links two nucleotides in a DNA strand.

Q31. Briefly explain the Fluid Mosaic Model of the cell membrane proposed by Singer and Nicolson. Why is membrane fluidity important?

Q32. Describe the main events that occur during the **Anaphase** stage of Mitosis. How does the chromosome behavior differ from Metaphase?

Roll No.	Project Topic
1.	To study the method of purification of water
2.	To compare foaming capacity of Soap.
3.	To study the change in foaming capacity of soap by adding Sodium carbonate.
4.	To determine acidity or alkalinity in various sample of tea leaves.
5.	To Compare rate of evaporation of water, acetone and diethyl ether.
6.	To study the effect of acid and bases on tensile strength.
7.	To determine the PH value of different juices of fruits and vegetables and acidity or alkalinity.

8.

To detect the presence of carbohydrates, fat, protein in the given food materials like milk, apple, grapes and potatoes.

9.

To find out the amount of casein in different samples of milk.

10.

To compare the presence of oxalate ions in different stages of ripening of guava.

11.

To check the quality of water-bodies of your area.

12.

Concentration terms.

13.

Discovering of sub-atomic particles.

14.

Spectrum.

15.

Hybridization.

16. Periodic trends.
17. Molecular orbital theory.
18. Hydrocarbons.
19. Photoelectric theory.
20. Thermodynamics and Laws of thermodynamics.
21. Redox reaction.
22. checking the bacteria Contamination in drinking water by Sulphide ion.
23. Role of chemistry in fertilizers and agriculture.
24. Chemistry of fuels and alternative energy sources.
25. To determine the PH value of different juices of fruits and vegetables and acidity or alkalinity.
26. chemistry behind fireworks and colour.

27

27 Thermodynamics and Spontaneity.

28 Hydrolysis

29 Indicators.

30 Laws of chemical combination.

31. Hydrogen spectrum.

32. chemistry in medical science.

33. Valance bond theory and
VSEPR theory.

PM SHRI KENDRIYA VIDYALAYA, KANKER

AUTUMN BREAK HOMEWORK

Subject: Physical & Health Education / Physical Activity Trainer

Class VI – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of daily physical activity.
3. Practise yoga and stretching regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five points on the importance of outdoor games.
3. Practise any five yoga asanas and write their names.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VIII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of a balanced diet.
3. Practise simple exercises and yoga regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class IX – Physical Education

1. Complete all pending work in your notebook.
2. Write the rules of any one game of your choice.
3. Write five benefits of physical fitness.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class X – Physical Education

1. Complete all pending work in your notebook.
2. Write the importance of physical fitness and a balanced diet.
3. Write five safety rules to follow while playing games.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XI – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five benefits of warm-up and cool-down exercises.
3. Prepare a simple daily fitness routine.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XII – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five points on the importance of first aid in sports.
3. Write the basic steps to follow during a sports injury.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

PM SHRI KENDRIYA VIDYALAYA KANKER

HOLIDAY HOMEWORK

Class: XI

Subject: HISTORY

1. Revision and Learning

Revise and learn the first four chapters of your History syllabus, which have already been taught and revised in class:

- Writing and City Life
- An Empire Across Three Continents
- Nomadic Empires
- The Three Orders

Learn all four chapters thoroughly, including important concepts, key terms, personalities, events and dates.

2. History Project Work

Complete the project work on the topic assigned to you individually.

Prepare the project neatly and systematically, following the instructions given. Submit the completed project work after the break.

Instructions:

Complete all assigned work sincerely and neatly.

Give special attention to answer-writing practice and time management.

Make the best use of the break for revision and examination preparation.

Best wishes for your Half-yearly Examination!

Autumn Break Homework XI English





Day 1

The Word Detective

Find five interesting English words from a newspaper, book, magazine or everyday surroundings.

- Write the meaning and one original sentence for each.
- Add a synonym or antonym.
- Draw a small symbol or sketch to represent one word.

Learning outcome: Vocabulary, contextual learning and sentence construction.



Day 2

Rewrite the Story!

Choose either *The Portrait of a Lady* or *The Adventure* from Hornbill.

- Write an alternative ending in 120–150 words.
- Keep the main characters recognisable.
- Explain in two sentences why you chose this ending.

Learning outcome: Reading comprehension, imagination and narrative writing.



Day 3

A Chapter in Six Frames

Turn a scene from *We're Not Afraid to Die... if We Can All Be Together* or *The Summer of the Beautiful White Horse* into a six-frame comic strip.

- Include captions and dialogue.
- Use at least three expressions from the chapter.
- Give your comic an interesting title.

Learning outcome: Summarising, dialogue writing and visual storytelling.



Day 4

Step into Someone Else's Shoes

Imagine you are the grandmother from *The Portrait of a Lady* or the narrator from *The Summer of the Beautiful White Horse*.

Write a diary entry of 150–180 words about a memorable incident from that character's perspective.

Include feelings, inner conflict and one question the character wishes they could answer.

Learning outcome: Diary writing, empathy, character analysis and expression.



Day 5

Words That Can Change the World

Create a poster on one of these themes:

- "The Earth Is Not Our Inheritance Alone"
- "Kindness Is a Language Everyone Understands"
- "Read More, Scroll Less"

Include a slogan, a visual element and a short persuasive message of 40–50 words.

Learning outcome: Persuasive language, concise writing and visual communication.



Day 6

Grammar Escape Challenge

Create your own mini grammar challenge containing:

- Five sentences with errors in tenses, subject–verb agreement or clauses.
- Correct answers with brief explanations.
- Three scrambled sentences for a classmate to rearrange.

Learning outcome: Grammar accuracy, editing and peer learning.



Day 7

Stories from Real Life

Interview a grandparent, parent, neighbour or another adult on the topic: *"How has life changed over the years?"*

- Ask five thoughtful questions.
- Record the answers in English.
- Write a 100-word reflection on what surprised or inspired you.

Learning outcome: Question formation, listening, reporting and real-world communication.



Day 8

My Mini English Magazine

Compile your favourite work from the previous seven days into a mini magazine.

Add:

- A cover page and an original title.
- Your favourite new word and quote.
- A short book or story review (80–100 words).
- One final reflection: *"What I discovered about myself through English."*

Learning outcome: Editing, presentation, reflection and creative ownership.

Bonus Activity



3. The Literary Mystery

Write three clues about a character, setting or event from the prescribed textbook. Keep the answers hidden so classmates can solve the mystery when school reopens.

Subject: Physical & Health Education / Physical Activity Trainer

Class XI – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five benefits of warm-up and cool-down exercises.
3. Prepare a simple daily fitness routine.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Subject – Geography

CLASS-XI

1. Complete Chapters 1,2 and 3 of Practical Work in the practical file.
2. Complete all pending classwork and homework in the notebook.
3. Make a separate file of map work as per the CBSE course structure.
4. Prepare a PowerPoint presentation/ project on any topic of Natural Hazards.
5. Write the factors that affect the climate of India, including latitude, altitude, and the presence of mountains and water bodies.

हिंदी

कक्षा - 11 वीं

- 1) यदि चंपा पढ़ी- लिखी होती तो कवि से कैसी बातें करती ?
- 2) "यहाँ दरख्तों के साये में धूप लगती है" यह वाक्य अलग-अलग परिस्थितियों में अलग-अलग अर्थ दे सकता है। कुछ परिस्थितियों की कल्पना कीजिए एवं लिखिए।
- 3) इस दौर में समाचार मीडिया बाजार को हड़पने के लिए अधिकाधिक लोगों का मनोरंजन तो कर रहा है, लेकिन जनता के मूल सरोकार को दरकिनारा करता जा रहा है। विचार कीजिए।

परियोजना कार्य-

- 1) कबीर दास के जीवन चरित्र, रचनाओं और पदों को लिखते हुए उनका साहित्यिक परिचय भी दीजिए।
- 2) मुंशी प्रेमचंद की रचनाओं का उल्लेख करते हुए उनका साहित्यिक परिचय लिखिए।
- 3) मीरा के जीवन चरित्र का उल्लेख करते हुए उनकी रचनाओं तथा पदों के बारे में लिखिए।
- 4) 10 महान चित्रपट गायक/ गायिकाओं के बारे में लिखिए।

Holidays Homework Class XI B Economics

1. TWO Samples Question Paper PDF class 11

a) ([Autumn Break](#)) [Class XI Economics 2019-20.pdf](#)

click on the following link if the pdf icon is not accessible

<https://drive.google.com/file/d/1tzhB2->

[K6YAwydHiz5vz8j9WBSdFlQnru/view?usp=sharing](https://drive.google.com/file/d/1tzhB2-K6YAwydHiz5vz8j9WBSdFlQnru/view?usp=sharing)

b) ([Autumn Break](#)) [Class XI Economics 2025-26.pdf](#)

click on the following link if the pdf icon is not accessible

<https://drive.google.com/file/d/19meKI3BF53X5eSdxqkM1e3pWZtHzh->

[i2/view?usp=sharing](https://drive.google.com/file/d/19meKI3BF53X5eSdxqkM1e3pWZtHzh-i2/view?usp=sharing)

2. A4 sheet of Formula

a. Revenue , Cost, Utility (all three method in comparative way AR
AC AU, MR MC MU & so on)

b. Mean Median Mode

3. Project work on individually (as part of self-directed learning on topic mentioned in guidelines)

NOTE: ALL SHOULD BE WRITTEN ON PLAIN A4 SHEETS (using single side only)

HAPPY HOLIDAYS..!

PM SHRI KENDRIYA VIDYALAYA, KANKER

AUTUMN BREAK HOMEWORK

Subject: Physical & Health Education / Physical Activity Trainer

Class VI – Khel Yatra

1. Complete all pending work in your notebook.
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4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five points on the importance of outdoor games.
3. Practise any five yoga asanas and write their names.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class VIII – Khel Yatra

1. Complete all pending work in your notebook.
2. Write five benefits of a balanced diet.
3. Practise simple exercises and yoga regularly.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class IX – Physical Education

1. Complete all pending work in your notebook.
2. Write the rules of any one game of your choice.
3. Write five benefits of physical fitness.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class X – Physical Education

1. Complete all pending work in your notebook.
2. Write the importance of physical fitness and a balanced diet.
3. Write five safety rules to follow while playing games.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XI – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five benefits of warm-up and cool-down exercises.
3. Prepare a simple daily fitness routine.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Class XII – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five points on the importance of first aid in sports.
3. Write the basic steps to follow during a sports injury.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

Autumn Break Homework (2026-27) Class – 12

Subject - Biology

Note: While solving the questions, do not copy the answers directly. First, understand the questions properly, then write the answers in your own words.

Section A: MCQs ($12 \times 1 = 12$ marks)

Choose the correct option.

1. In a cross between a heterozygous tall pea plant (Tt) and a dwarf pea plant (tt), the phenotypic ratio of the offspring will be:
(A) 3:1 (B) 1:1 (C) 1:2:1 (D) All tall
2. A colour-blind man marries a woman who is a carrier for colour blindness. What is the probability that their son will be colour-blind?
(A) 0% (B) 25% (C) 50% (D) 100%
3. In a DNA molecule, adenine constitutes 20% of the total bases. What percentage of the bases will be guanine?
(A) 20% (B) 30% (C) 40% (D) 60%
4. During DNA replication, which enzyme joins the Okazaki fragments on the lagging strand?
(A) DNA polymerase (B) DNA ligase (C) Helicase (D) RNA polymerase
5. In the lac operon of E. coli, the presence of lactose leads to the expression of structural genes because:
(A) Lactose destroys the operator. (B) The repressor is prevented from binding to the operator. (C) RNA polymerase is destroyed. (D) The regulator gene becomes inactive permanently.
6. Which of the following pairs represents analogous organs?

- (A) Forelimbs of humans and whales (B) Wings of butterflies and birds
(C) Thorn of Bougainvillea and tendril of Cucurbita (D) Forelimbs of bats and humans

7. The introduction of a functional gene into a patient's cells to correct a genetic defect is called:

- (A) Gene cloning (B) Gene therapy (C) Hybridisation (D) Tissue culture

8. Bt cotton protects itself against certain insect pests because it produces:

- (A) Human insulin (B) Cry proteins (C) Interferons (D) Restriction enzymes

9. In recombinant DNA technology, the function of the origin of replication (ori) in a cloning vector is to:

- (A) Cut foreign DNA (B) Initiate replication of the vector (C) Join DNA fragments (D) Produce antibodies

10. Which enzyme is used to synthesise complementary DNA (cDNA) from an RNA template?

- (A) DNA ligase (B) Restriction endonuclease (C) Reverse transcriptase
(D) DNA helicase

11. The first clinical gene therapy trial for a human genetic disorder was conducted to treat:

- (A) Haemophilia (B) ADA deficiency (C) Sickle-cell anaemia (D) Thalassaemia

12. The production of human insulin using genetically engineered bacteria demonstrates the application of:

- (A) Ecological succession (B) Recombinant DNA technology (C) Artificial selection only (D) Natural selection

Section B: Assertion–Reason Questions (10 × 1 = 10 marks)

Choose the correct option for each question:

- **(A) Both Assertion and Reason are true, and Reason is the correct explanation of Assertion.**
- **(B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.**
- **(C) Assertion is true, but Reason is false.**
- **(D) Assertion is false, but Reason is true.**

1. Assertion: In a monohybrid cross between two heterozygous pea plants, the phenotypic ratio is 3:1.

Reason: The two alleles of a gene segregate during gamete formation.

2. Assertion: DNA replication is called semiconservative replication.

Reason: Each daughter DNA molecule contains one parental strand and one newly synthesised strand.

3. Assertion: All mutations are harmful to an organism.

Reason: Mutations introduce genetic variations that may be beneficial, harmful, or neutral.

4. Assertion: Homologous organs provide evidence for divergent evolution.

Reason: Homologous organs have a common origin but may perform different functions.

5. Assertion: The genetic code is degenerate.

Reason: More than one codon can code for the same amino acid.

6. Assertion: Restriction endonucleases are essential tools in recombinant DNA technology.

Reason: They recognise specific DNA sequences and cut DNA at or near these sites.

7. Assertion: Bt toxin is active in the bacterium *Bacillus thuringiensis*.

Reason: The Bt protoxin becomes active under the alkaline conditions of the insect gut.

8. Assertion: The first-generation offspring produced by a cross between two genetically different pure lines are generally uniform for the studied trait.

Reason: Dominance can determine the phenotype of the heterozygous offspring.

9. Assertion: RNA interference can be used to protect plants against certain nematodes.

Reason: Double-stranded RNA can trigger the silencing of a complementary target mRNA.

10. Assertion: The use of genetically engineered microorganisms can improve the production of medicines.

Reason: Recombinant DNA technology allows the introduction and expression of selected genes in suitable host organisms.

Section C: Short-Answer Questions (5 × 2/3 marks)

Answer each question in approximately 50–80 words, according to the marks assigned.

1. (2 marks) A heterozygous tall pea plant is crossed with a dwarf pea plant. Using a suitable genetic cross, determine the genotypic and phenotypic ratios of the offspring.

2. (3 marks) Differentiate between DNA replication and transcription on the basis of template usage, product formed, and enzyme involved.

3. (3 marks) Explain the role of restriction endonucleases, DNA ligase, and a cloning vector in recombinant DNA technology.

4. (2 marks) Differentiate between homologous and analogous organs. Give one suitable example of each and explain their evolutionary significance.

5. (3 marks) A child is diagnosed with ADA deficiency. Explain the genetic basis of the disorder and how gene therapy can help treat it.

Section D: Long-Answer and Competency-Based Questions (7 questions)

Answer in detail. Draw labelled diagrams, genetic crosses, or flowcharts wherever required.

Q1. Mendelian genetics and inheritance (5 marks)

In pea plants, tallness (T) is dominant over dwarfness (t), while round seeds (R) are dominant over wrinkled seeds (r). Two plants heterozygous for both traits are crossed.

Answer the following:

- (a) Write the genotypes of the parents. (1)
- (b) State the types of gametes produced by each parent. (1)
- (c) Using the principles of independent assortment, determine the expected phenotypic ratio of the offspring. (2)
- (d) What is the probability of obtaining a dwarf plant with wrinkled seeds? (1)

Q2. Molecular basis of inheritance (5 marks)

A researcher studies a DNA segment that acts as a template for RNA synthesis. A mutation changes one nucleotide in the coding region of the gene.

- (a) Explain the basic mechanism of transcription in eukaryotes. (2)
- (b) Differentiate between the template strand and coding strand of DNA. (1)
- (c) Explain how a single nucleotide substitution may change the protein produced. (1)
- (d) Why do some mutations fail to change the amino acid sequence of a protein? (1)

Q3. Evolution and natural selection (5 marks)

A population of insects is exposed repeatedly to an insecticide. Initially, most insects are susceptible, but after several generations, the population contains a higher proportion of resistant insects.

- (a) Explain this observation using the theory of natural selection. (2)
- (b) How can genetic variation arise in the population? (1)
- (c) Explain why the insecticide does not necessarily cause a directed mutation in every insect. (1)
- (d) State one way in which this example demonstrates evolution. (1)

Q4. Recombinant DNA technology (5 marks)

A biotechnology laboratory wants to produce a human protein using genetically engineered *E. coli*.

- (a) Explain the steps involved in isolating the desired gene and the vector DNA. (1)
- (b) Describe the role of restriction enzymes and DNA ligase in forming recombinant DNA. (2)
- (c) Explain the importance of the origin of replication and selectable marker in a cloning vector. (1)
- (d) Why must transformed bacterial cells be identified and selected? (1)

Q5. Biotechnology in agriculture (5 marks)

A farmer grows Bt cotton to reduce damage caused by certain insect pests.

- (a) Name the bacterium from which Bt toxin genes are obtained. (1)
- (b) Explain how Cry proteins act against susceptible insects. (2)
- (c) Why is the toxin produced by the bacterium initially present as an inactive protoxin? (1)

(d) State one advantage and one limitation of using Bt cotton. (1)

Q6. Gene therapy and human health (5 marks)

A child is diagnosed with adenosine deaminase (ADA) deficiency, a genetic disorder that affects immune function.

(a) Explain the genetic cause of ADA deficiency. (1)

(b) Describe the basic steps of gene therapy for ADA deficiency. (2)

(c) Why may repeated introduction of functional ADA genes into lymphocytes be necessary? (1)

(d) Explain why gene therapy does not automatically guarantee a permanent cure. (1)

Q7. Integrated competency-based question: DNA, biotechnology and evolution (5 marks)

A scientist compares a gene from two closely related species and finds that their DNA sequences differ at a few nucleotide positions. The scientist also uses recombinant DNA technology to introduce a functional version of the gene into bacterial cells to study its protein product.

Answer the following:

(a) What can similarities in DNA sequences indicate about the evolutionary relationship between the two species? (1)

(b) How can nucleotide substitutions contribute to genetic variation? (1)

(c) Which enzyme can be used to synthesise cDNA from the gene's mRNA? (1)

(d) Explain the role of a suitable vector in transferring the gene into bacterial cells. (1)

(e) Why must the scientist verify that the introduced gene is expressed correctly? (1)

Important board-exam preparation priorities

Revise these NCERT topics especially carefully:

- **Mendelian inheritance, test cross, dihybrid cross and pedigree analysis**
- **DNA replication, transcription, genetic code and lac operon**
- **Evidence for evolution, natural selection, homologous and analogous organs**
- **Tools and steps of recombinant DNA technology**
- **Cloning vectors, selectable markers, restriction enzymes and DNA ligase**
- **Bt cotton, RNA interference, ADA deficiency and recombinant insulin**

AUTUMN BREAK HOLIDAY HOMEWORK

Subject: Chemistry | Class: 12 'A'

No.	TOPIC
1	To compare the presence of oxalate ions in different stages of ripening of guava.
2	To estimate the amount of casein in different samples of milk.
3	To study digestion of starch by saliva.
4	Effect of pH and temperature on digestion of starch by saliva.
5	Detection of adulteration in food stuffs. Fats, oil, butter, sugar, turmeric powder, chilli powder and pepper.
6	To compare the presence of oxalate ions in different stages of ripening of guava.
7	To estimate the amount of casein in different samples of milk.
8	To study digestion of starch by saliva.
9	Effect of pH and temperature on digestion of starch by saliva.
10	Detection of adulteration in food stuffs. Fats, oil, butter, sugar, turmeric powder, chilli powder and pepper.
11	To compare the presence of oxalate ions in different stages of ripening of guava.
12	To estimate the amount of casein in different samples of milk.
13	To study digestion of starch by saliva.
14	Effect of pH and temperature on digestion of starch by saliva.
15	Detection of adulteration in food stuffs. Fats, oil, butter, sugar, turmeric powder, chilli powder and pepper.
16	To compare the presence of oxalate ions in different stages of ripening of guava.
17	To estimate the amount of casein in different samples of milk.
18	To study digestion of starch by saliva.
19	Effect of pH and temperature on digestion of starch by saliva.

SUBJECT: MATHEMATICS**MAX. MARKS: 80****General Instructions:**

1. This Question paper contains - five sections A, B, C, D and E. Each section is compulsory.

However, there are internal choices in some questions.

2. Section A has 18 MCQ's and 02 Assertion-Reason based questions of 1 mark each.

3. Section B has 5 Very Short Answer (VSA)-type questions of 2 marks each.

4. Section C has 6 Short Answer (SA)-type questions of 3 marks each.

5. Section D has 4 Long Answer (LA)-type questions of 5 marks each.

6. Section E has 3 source based/case based/passage based/integrated units of assessment (4 marks each) with sub parts.

SECTION - A		
Q. NO.	QUESTION	MARKS
1	If $\begin{bmatrix} 2x+y & 5x-7 \\ 4x & 4x \end{bmatrix} = \begin{bmatrix} 7 & y \\ 7y-13 & x+6 \end{bmatrix}$ then the value of $x+y$ is (a) 4 (b) 5 (c) 6 (d) 7	1
2	If matrix $A = \begin{bmatrix} 3 & -3 \\ -3 & 3 \end{bmatrix}$ and $A^2 = \lambda A$, then the value of λ is (a) 0 (b) 3 (c) 5 (d) 6	1
3	If $\begin{vmatrix} 2x & 8 \\ 5 & x \end{vmatrix} = \begin{vmatrix} 6 & 7 \\ -2 & 3 \end{vmatrix}$ then the value(s) of x is/are (a) 3 (b) ± 3 (c) ± 6 (d) 6	1
4	If A is a square matrix of order 3 and $ A = 5$, then $ adj A $ is (a) 5 (b) 25 (c) 125 (d) $\frac{1}{5}$	1
5	If A and B are square matrices of the same order 3, such that $ A = 2$ and $AB = 2I$, then the value of $ B $ is (a) 4 (b) 2 (c) 8 (d) 1	1
6	The value of k , for which the following function $f(x) = \begin{cases} \frac{(x+3)^2-36}{x-3} & \text{if } x \neq 3 \\ k & \text{if } x = 3 \end{cases}$ is continuous at $x = 3$ is (a) 3 (b) 6 (c) 9 (d) 12	1
7	If $x = 2at, y = at^2$, where a is a constant, then $\frac{d^2y}{dx^2}$ at $x = \frac{1}{2}$ is (a) $\frac{1}{2a}$ (b) 1 (c) $2a$ (d) none of these	1
8	$\int \frac{dx}{\sin^2 x \cos^2 x}$ is equal to (a) $\tan x + \cot x + c$ (b) $\tan x - \cot x + c$ (c) $\tan x \cot x + c$ (d) $\tan x - \cot 2x + c$	1
9	If $\int_0^a \frac{dx}{1+4x^2} = \frac{\pi}{8}$, then the value of a is (a) $\frac{1}{8}$ (b) $\frac{1}{4}$ (c) 1 (d) $\frac{1}{2}$	1

10	The degree of the differential equation $[1 + (\frac{dy}{dx})^2]^{\frac{3}{2}} = \frac{d^2y}{dx^2}$ is (a) 4 (b) $\frac{3}{2}$ (c) not defined (d) 2	1
11	The integrating factor of the differential equation $x \frac{dy}{dx} + 2y = x^2$ is (a) x (b) x^2 (c) $\frac{2}{x}$ (d) $\sqrt{x}$	1
12	The angle between two vectors $\vec{a}$ and $\vec{b}$ with magnitude $\sqrt{3}$ and 4 respectively and $\vec{a} \cdot \vec{b} = 2\sqrt{3}$ is (a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$ (c) $\frac{\pi}{2}$ (d) $\frac{5\pi}{2}$	1
13	Let $\vec{a}$ and $\vec{b}$ be two unit vectors and θ is the angle between them. Then $\vec{a} + \vec{b}$ is a unit vector if (a) $\theta = \frac{\pi}{6}$ (b) $\theta = \frac{\pi}{3}$ (c) $\theta = \frac{\pi}{2}$ (d) $\theta = \frac{2\pi}{3}$	1
14	The projection of $\vec{a} = \lambda\hat{i} + \hat{j} + 4\hat{k}$ on $\vec{b} = 2\hat{i} + 6\hat{j} + 3\hat{k}$ is 4 units, then λ is -- (a) 3 (b) 4 (c) 5 (d) 6	1
15	If a line makes angles α, β and γ with the axes respectively, then $\cos 2\alpha + \cos 2\beta + \cos 2\gamma$ is (a) 2 (b) -2 (c) 1 (d) -1	1
16	The solution set of the inequality $2x + y \leq 5$ is (a) half plane that contains the origin (b) open half plane not containing the origin (c) whole xy -plane except the points lying on the line $2x + y = 5$ (d) none of these	1
17	The maximum value of $Z = 4x + 2y$ subjected to the constraints $2x + 3y \leq 18$; $x + y \leq 8$; $x \geq 0$ and $y \geq 0$ is whose corner points are $(0, 0)$, $(0, 6)$, $(8, 0)$ and $(6, 2)$ (a) 36 (b) 40 (c) 28 (d) 32	1
18	$\tan^{-1}\sqrt{3} - \sec^{-1}(-2)$ is equal to (a) π (b) $-\frac{\pi}{3}$ (c) $\frac{\pi}{3}$ (d) $\frac{2\pi}{3}$	1

ASSERTION-REASON BASED QUESTIONS

In the following questions, a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

- (a) Both A and R are true and R is the correct explanation of A.
 (b) Both A and R are true but R is not the correct explanation of A.
 (c) A is true but R is false.
 (d) A is false but R is true.

19	Assertion (A): The value of $\sin [\sin^{-1}(-\frac{\sqrt{3}}{2}) + \cos^{-1}(-\frac{\sqrt{3}}{2})]$ is 1 Reason (R): $\sin^{-1}(-x) = -\sin^{-1}x$ and $\cos^{-1}(-x) = x$.	C	1
20	Assertion (A): The points $(1, 2, 3)$, $(-2, 3, 4)$ and $(7, 0, 1)$ are collinear Reason (R): If a line makes angles $\frac{\pi}{2}$, $\frac{3\pi}{4}$ and $\frac{\pi}{4}$ with X, Y and Z axes respectively, then its direction cosines are 0 , $\frac{-1}{\sqrt{2}}$ and $\frac{1}{\sqrt{2}}$.	B	1

Section-B		
21	State whether the function $f: \mathbb{R} \rightarrow \mathbb{R}$ defined by $f(x) = 1 + x^2$ is one-one, onto or bijective OR Show that the modulus function $f: \mathbb{R} \rightarrow \mathbb{R}$ given by $f(x) = x$ is neither one-one nor onto.	2
22	If $x^y + y^x = a^b$, then find $\frac{dy}{dx}$.	2
23	The volume of a cube is increasing at the rate of $8 \text{ cm}^3/\text{sec}$. How fast is the surface area increasing when the length of an edge is 12 cm?	2
24	Show the function f given by $f(x) = x^3 - 3x^2 + 4x, x \in \mathbb{R}$ is strictly increasing on $\mathbb{R}$.	2
25	The scalar product of the vector $\hat{i} + \hat{j} + \hat{k}$ with the unit vector along the sum of vectors $2\hat{i} + 4\hat{j} - 5\hat{k}$ and $\lambda\hat{i} + 2\hat{j} + 3\hat{k}$ is equal to 1, find the value of λ. OR If $\vec{a}, \vec{b}, \vec{c}$ are three unit vectors such that $\vec{a} + \vec{b} + \vec{c} = 0$ then find the value of $\vec{a} \cdot \vec{c} + \vec{b} \cdot \vec{c} + \vec{a} \cdot \vec{b}$.	2
Section-C		
26	Find: $\int_0^{\frac{\pi}{2}} \frac{x \sin x \cos x}{\sin^4 x + \cos^4 x} dx$	3
27	Find: $\int \frac{(x^2+1)}{(x-1)^2(x+3)} dx$	3
28	Evaluate: $\int_0^{\frac{\pi}{4}} \log(1 + \tan x) dx$ OR Evaluate: $\int_{\frac{\pi}{4}}^{\frac{\pi}{2}} \frac{dx}{1 + \sqrt{\tan x}}$	3
29	Find the particular solution of the differential equation satisfying the given conditions: $(1 + x^2) \frac{dy}{dx} + 2xy = \frac{1}{(1+x^2)}$; $y=0$ when $x=0$. OR Solve: $x dy - y dx = \sqrt{x^2 + y^2} dx$	3
30	Solve the following Linear Programming Problem graphically: Maximize $Z = 3x + 2y$ subject to $x + 2y \leq 10, 3x + y \leq 15, x \geq 0, y \geq 0$.	3
31	Find $\frac{dy}{dx}$ if $x = a(\cos t + t \sin t)$ & $y = a(\sin t - t \cos t)$. OR If $y = (\tan^{-1} x)^2$, show that $(x^2 + 1)^2 y_2 + 2x(x^2 + 1) y_1 = 2$	3
Section-D		
32	Find the area of the region: $\{(x, y) : x^2 + y^2 \leq 1 \leq x + y\}$	5
33	Let $f: \mathbb{N} \rightarrow \mathbb{N}$ (set of natural numbers) defined by $f(n) = \begin{cases} n+1, & n \text{ is odd} \\ n-1, & n \text{ is even} \end{cases}$ State whether f is one-one and onto. Justify your answer	5

	OR Show that the relation R in the set $A = \{x \in \mathbb{Z} : 0 \leq x \leq 12\}$ is given by $R = \{(a, b) : a - b \text{ is a multiple of } 3\}$ is an equivalence relation. Find the set of all elements related to 1.																									
34	Find the shortest distance between the lines whose vector equations are $\vec{r} = (1 - 2t)\hat{i} + (1 - t)\hat{j} + t\hat{k}$ and $\vec{r} = (2 + 3s)\hat{i} + (1 - 5s)\hat{j} + (2s - 1)\hat{k}$ OR Find the vector equation of the line passing through the point $(1, 2, -4)$ and perpendicular to the lines $\frac{x-8}{3} = \frac{y+19}{-16} = \frac{z-10}{7}$ and $\frac{x-15}{3} = \frac{y-29}{8} = \frac{z-5}{-5}$.	5																								
35	Using matrix method, solve the following system of equations for x, y and z $\frac{2}{x} + \frac{3}{y} + \frac{10}{z} = 4; \quad \frac{4}{x} - \frac{6}{y} + \frac{5}{z} = 1; \quad \frac{6}{x} + \frac{9}{y} - \frac{20}{z} = 2$	5																								
	Section-E																									
36	Two farmers Ramakrishnan and Gurucharan Singh cultivates only three varieties of rice namely Basmati, Permal and Naura. The sale (in Rupees) of these varieties of rice by both the farmers in the month of September and October are given by the following matrices A & B September sales in (Rupees) <table style="margin: auto;"> <tr> <th></th> <th>Basmati</th> <th>Permal</th> <th>Naura</th> </tr> <tr> <td>A = $\frac{\text{Ramakrishnan}}{\text{Gurucharan}}$</td> <td>10000</td> <td>20000</td> <td>30000</td> </tr> <tr> <td></td> <td>50000</td> <td>30000</td> <td>10000</td> </tr> </table> October sales in (Rupees) <table style="margin: auto;"> <tr> <th></th> <th>Basmati</th> <th>Permal</th> <th>Naura</th> </tr> <tr> <td>B = $\frac{\text{Ramakrishnan}}{\text{Gurucharan}}$</td> <td>5000</td> <td>10000</td> <td>6000</td> </tr> <tr> <td></td> <td>20000</td> <td>10000</td> <td>10000</td> </tr> </table> i) Find the combined sales in September and October for each farmer in each variety. ii) Find the decrease in sales from September to October iii) If both farmers receive 2% profit on gross sales, compute the profit for each farmer and for each variety sold in October. OR Find the value of $A^t B$		Basmati	Permal	Naura	A = $\frac{\text{Ramakrishnan}}{\text{Gurucharan}}$	10000	20000	30000		50000	30000	10000		Basmati	Permal	Naura	B = $\frac{\text{Ramakrishnan}}{\text{Gurucharan}}$	5000	10000	6000		20000	10000	10000	1 1 2
	Basmati	Permal	Naura																							
A = $\frac{\text{Ramakrishnan}}{\text{Gurucharan}}$	10000	20000	30000																							
	50000	30000	10000																							
	Basmati	Permal	Naura																							
B = $\frac{\text{Ramakrishnan}}{\text{Gurucharan}}$	5000	10000	6000																							
	20000	10000	10000																							

37		
	$P(x) = -5x^2 + 125x + 37500$ is the total profit function of a company, where x is the production of a company.	
	i) What will be the production when the profit is maximum & What will be the maximum profit?	2
	ii) In which interval the profit is strictly increasing? OR What will be the profit of the company when the production is 2 units?	2
38	A student plots four points on a 3D plane such that the four points form a parallelogram. He plots A (3, -1, 2), B (1, 2, -4) and C (-1, 1, 2)	
	i) Find the coordinates of the fourth vertex	1
	ii) Find the two adjacent sides of parallelogram in vector form.	1
	iii) Find area of the Parallelogram using vector form of two adjacent sides. OR Find the unit vector along the diagonal AC	2

*****END*****

PROJECT WORK SESSION 2026-27 CLASS 12

1. Mendelian Inheritance and Genetic Disorders

Chapter: Principles of Inheritance and Variation

Study Mendel's experiments, inheritance patterns, and disorders such as haemophilia, sickle-cell anaemia and thalassemia. **SANA**

2. DNA Fingerprinting and Its Applications

Chapter: Molecular Basis of Inheritance

Explain the principle of DNA fingerprinting and its use in forensic investigations, identification and parentage testing. **TUSHAR**

3. PCR and Its Applications in Medicine

Chapter: Biotechnology — Principles and Processes

Explain the steps of polymerase chain reaction (PCR), its components, and applications in disease diagnosis and research. **ADITYA**

4. Genetically Modified Crops: Bt Cotton

Chapter: Biotechnology and Its Applications

Explain the role of *Bacillus thuringiensis*, Cry proteins, insect resistance and the advantages and limitations of Bt cotton. **KRITIKA**

5. Human Reproduction and Fertilisation

Chapter: Human Reproduction

Describe gametogenesis, fertilisation, implantation and embryonic development using labelled diagrams. **VEERPRATAP**

6. Reproductive Health and Family Planning

Chapter: Reproductive Health

Discuss contraceptive methods, sexually transmitted infections, infertility and assisted reproductive technologies. **LISHA**

7. Human Immune System and Vaccination

Chapter: Human Health and Disease

Explain innate and acquired immunity, antibodies, vaccination and immunological memory. **MAHAK**

8. Antibiotic Resistance in Bacteria

Chapter: Human Health and Disease

Explore how antibiotic resistance develops, why it is a public-health concern, and how responsible antibiotic use helps. **KHUSHBU**

9. Ecosystem and Energy Flow

Chapter: Ecosystem

Study food chains, food webs, ecological pyramids, energy transfer and nutrient cycling. **JHAMANDEEP**

10. Biodiversity Conservation in India

Chapter: Biodiversity and Conservation

Discuss biodiversity hotspots, endangered species, in-situ and ex-situ conservation, and conservation efforts in Chhattisgarh. **POORVANSHI**

11. Sewage Treatment and the Role of Microbes

Chapter: Microbes in Human Welfare

Explain primary and secondary sewage treatment, activated sludge, BOD and the role of microorganisms. **ANGILINA**

12. Recombinant DNA Technology and Its Applications

Chapter: Biotechnology — Principles and Processes

Describe restriction enzymes, cloning vectors, insertion of foreign DNA, transformation and production of useful biological products. **SAKSHI**

DBMS & MYSQL

What is a Constraint in MySQL?

A constraint is a rule applied to a table or its columns to maintain the accuracy, validity, and integrity of data in a database.

Example: A student's roll number should be unique, and their name should not be empty.

2. Types of Constraints in MySQL.

Constraint	Meaning	Purpose
NOT NULL	Value cannot be NULL	Makes a column compulsory
UNIQUE	Values must be unique	Prevents duplicate values
PRIMARY KEY	Uniquely identifies each row	No duplicate or NULL key values
FOREIGN KEY	Links two tables	Maintains referential integrity
CHECK	Value must satisfy a condition	Validates data
DEFAULT	Supplies a default value	Uses a preset value if none is provided

3. SQL programs with constraints

Example 1: NOT NULL, UNIQUE, and PRIMARY KEY

```
CREATE DATABASE School;  
USE School;
```

```
CREATE TABLE Student (  
    RollNo INT PRIMARY KEY,  
    Name VARCHAR(30) NOT NULL,  
    Email VARCHAR(50) UNIQUE,  
    Marks INT  
);
```

Explanation:

- RollNo INT PRIMARY KEY — each student has a unique roll number.
- Name VARCHAR(30) NOT NULL — the name cannot be NULL.
- Email VARCHAR(50) UNIQUE — duplicate email values are not allowed.
- Marks INT — stores integer marks.

Example 2: Inserting records

```
INSERT INTO Student  
VALUES (1, 'Aman', 'aman@gmail.com', 85);
```

```
INSERT INTO Student  
VALUES (2, 'Riya', 'riya@gmail.com', 92);
```

To display the records:

```
SELECT * FROM Student;
```

Example 3: DEFAULT and CHECK in MySQL

```
CREATE TABLE Employee (  
    EmpID INT PRIMARY KEY,  
    Name VARCHAR(30) NOT NULL,  
    City VARCHAR(20) DEFAULT 'Kanker',  
    Salary INT CHECK (Salary >= 0)  
);
```

- DEFAULT 'Kanker' — supplies Kanker if no city is specified.
- CHECK (Salary >= 0) — requires salary to be non-negative when the constraint is enforced.

Example 4: FOREIGN KEY

```
CREATE TABLE Department (  
    DeptID INT PRIMARY KEY,  
    DeptName VARCHAR(30)  
);
```

```
CREATE TABLE Student2 (  
    RollNo INT PRIMARY KEY,  
    Name VARCHAR(30),  
    DeptID INT,  
    FOREIGN KEY (DeptID)  
        REFERENCES Department(DeptID)  
);
```

Here, DeptID in Student2 refers to DeptID in Department. A non-NULL department ID must match an existing department.

4. Important exam questions

1. What is a constraint in MySQL?
2. Differentiate between UNIQUE and PRIMARY KEY.
3. What is the purpose of NOT NULL?
4. Write an SQL command to create a Student table with a primary key and a NOT NULL constraint.
5. What is a foreign key? Explain with an example.
6. What is the difference between DEFAULT and CHECK?



1. Data Definition Language (DDL)

Used to create, modify and delete the structure of the database and tables.

Syntax:

- **CREATE** – create new object
- **ALTER** – modify existing object
- **DROP** – delete object
- **TRUNCATE** – remove all records (faster than DELETE)

Examples:

1. Create database

```
CREATE DATABASE school;
```

Output: Query OK, 1 row affected

2. Create table

```
CREATE TABLE student(
  id INT PRIMARY KEY,
  name VARCHAR(50),
  marks INT
);
```

Output: Query OK, 0 rows affected

3. Alter table

```
ALTER TABLE student
```

```
ADD age INT;
```

Output: Query OK, 0 rows affected

4. Drop table

```
DROP TABLE student;
```

Output: Query OK, 0 rows affected

5. Truncate table

```
TRUNCATE TABLE student;
```

Output: Query OK, 0 rows affected

2. Data Manipulation Language (DML)

Used to insert, update, delete and retrieve data from a table.

Syntax:

- **INSERT INTO** – add new records
- **UPDATE** – modify existing records
- **DELETE** – remove records (with condition)
- **SELECT** – fetch data from table

Examples:

1. Insert data

```
INSERT INTO student(id, name, marks)
VALUES (1, 'Anan', 80);
```

Output: Query OK, 1 row affected

2. Update data

```
UPDATE student
SET marks = 90
WHERE id = 1;
```

Output: Query OK, 1 row affected

3. Delete data

```
DELETE FROM student
WHERE id = 1;
```

Output: Query OK, 1 row affected

4. Select data

```
SELECT * FROM student;
```

Output: (data displayed in table)

3. Data Query Language (DQL)

Used to query and retrieve data from the database.

Syntax:

```
SELECT column1, column2, ... FROM table_name
[WHERE condition];
```

Examples:

1. Select all records

```
SELECT * FROM student;
```

Output: (all rows and columns)

2. Select specific columns

```
SELECT name, marks FROM student;
```

Output:

name	marks
Anan	90
Neha	78

4. Filtering Data (WHERE Clause)

Used to extract only those records that satisfy a condition.

Syntax:

```
SELECT column1, column2 FROM table_name
WHERE condition;
```

Examples:

1. Marks greater than 80

```
SELECT * FROM student
WHERE marks > 80;
```

Output: (rows with marks > 80)

2. Name starts with 'A'

```
SELECT * FROM student
WHERE name LIKE 'A%';
```

Output: (names starting with A)

5. Sorting Data (ORDER BY Clause)

Used to arrange the result set in ascending or descending order.

Syntax:

```
SELECT column1, column2 FROM table_name
ORDER BY column_name [ASC | DESC];
```

Examples:

1. Sort by marks (descending)

```
SELECT name, marks FROM student
ORDER BY marks DESC;
```

Output:

name	marks
Anan	90
Riya	85
Neha	78

2. Sort by name (ascending)

```
SELECT * FROM student
ORDER BY name ASC;
```

Output:

id	name	marks
1	Anan	90
2	Neha	78
3	Riya	85

6. Grouping Data (GROUP BY Clause)

Used to group rows that have the same values in specified column(s).

Syntax:

```
SELECT column1, aggregate_function(column2)
FROM table_name
GROUP BY column1;
```

Examples:

1. Count number of students in each class

```
SELECT class, COUNT(*) AS total
FROM student
GROUP BY class;
```

Output:

class	total
X	5
XII	7

2. Find average marks by class

```
SELECT class, AVG(marks) AS avg_marks
FROM student
GROUP BY class;
```

Output:

class	avg_marks
X	80.5
XII	78.2

7. Joining Tables (JOIN)

Used to combine data from two or more tables.

Syntax:

```
SELECT column1
FROM table1 JOIN table2
ON table1.column = table2.column;
```

Examples:

1. Inner Join (matching records)

```
SELECT s.name, c.class
FROM student s JOIN class c
ON s.class_id = c.id;
```

Output:

name	class
Anan	X
Neha	X

2. Left Join (all from left table)

```
SELECT s.name, c.class
FROM student s LEFT JOIN class c
ON s.class_id = c.id;
```

Output:

name	class
Anan	X
Neha	X
Riya	NULL

8. Subqueries

A subquery is a query within another query.

Syntax:

```
SELECT column1 FROM table1
WHERE column2 IN (SELECT column2
FROM table2
WHERE condition);
```

Example:

Find students who scored more than average marks.

```
SELECT name FROM student
WHERE marks > (SELECT avg(marks) FROM student);
```

Output:

name
Anan
Riya

9. Using Functions

MySQL provides built-in functions for data manipulation and calculation.

Syntax:

```
SELECT function_name(column)
FROM table_name;
```

Examples:

1. Count of students

```
SELECT COUNT(*) FROM student;
```

Output: 5

2. Maximum marks

```
SELECT MAX(marks) FROM student;
```

Output: 90

3. Current date

```
SELECT CURDATE();
```

Output: 2023-09-29

10. Other Useful Queries

1. Rename column (alias)

```
SELECT name AS StudentName FROM student;
```

2. Distinct values

```
SELECT DISTINCT class FROM student;
```

3. Limit result

```
SELECT * FROM student LIMIT 3;
```

4. Pattern matching

```
SELECT * FROM student
WHERE name LIKE '%A%';
```

Output (example):

name	class
Anan	X
Neha	X
Riya	XII



- DDL changes structure.
- DML changes data.
- DQL retrieves data.
- WHERE filters.
- ORDER BY sorts.
- GROUP BY groups.
- JOIN combines tables.

SQL = Structure + Data
= Better Decisions





MySQL Data Types with Examples



Store Data
in the Right
Format!

Class 12 | CBSE Computer Science

What are Data Types in MySQL?

Data types define the kind of value a column can hold in a table. They help MySQL to:

- Store data in an appropriate format.
- Save memory and improve performance.
- Validate the data entered into the database.



Key Points

- MySQL supports a variety of data types for different kinds of data.
- Each column in a table has a data type.
- Incorrect data type can lead to errors or loss of data.
- BOOLEAN is an alias for TINYINT(1) (1 = TRUE, 0 = FALSE).

Types of Data Types in MySQL

Category	Data Type	Description / Use	Example (with value)
Numeric Types (Whole numbers, decimals, etc.)	INT	Stores whole numbers (-2^{31} to $2^{31}-1$)	age INT → 18
	DECIMAL(p,s)	Stores exact decimal values	salary DECIMAL(10,2) → 25000.50
	FLOAT	Stores approximate decimal values	percentage FLOAT → 87.5
	DOUBLE	Stores larger decimal values	distance DOUBLE → 12345.678
String Types (Text / Character data)	CHAR(n)	Fixed-length string	gender CHAR(1) → 'M'
	VARCHAR(n)	Variable-length string	name VARCHAR(50) → 'Aman'
	TEXT	Long text (up to 65,535 characters)	address TEXT → 'Raipur, CG'
Date & Time Types (Date, time and datetime)	DATE	Stores date (YYYY-MM-DD)	dob DATE → '2010-05-15'
	TIME	Stores time (HH:MM:SS)	login_time TIME → '14:30:00'
	DATETIME	Stores date and time	created_at DATETIME → '2026-10-08 14:30:00'
	YEAR	Stores year (1901–2155)	joining_year YEAR → 2026
Boolean Type (True / False)	BOOLEAN	Stores TRUE or FALSE (alias of TINYINT(1))	passed BOOLEAN → TRUE (or 1)/ FALSE (or 0)

Example: Creating a Table with Different Data Types

```
CREATE TABLE Student (  
  RollNo INT,  
  Name VARCHAR(50),  
  Marks DECIMAL(5,2),  
  Gender CHAR(1),  
  DOB DATE,  
  Passed BOOLEAN  
);
```

Table: Student

RollNo	Name	Marks	Gender	DOB	Passed
101	Rahul	87.50	M	2010-05-15	1
102	Priya	92.00	F	2011-08-22	0

Example: Inserting Data into the Table

```
INSERT INTO Student  
VALUES (101, 'Rahul', 87.50, 'M', '2010-05-15', TRUE);
```



Remember

In MySQL, BOOLEAN is an alias for TINYINT(1), where 1 represents TRUE and 0 represents FALSE.



Right Data Type → Better Storage → Better Performance

Learn
MySQL

COMPUTER NETWORK

1. What is a Computer Network?

A computer network is a group of interconnected computers and devices that communicate and share data, resources, and services.

Advantages

- Sharing files, printers, and internet connections.
- Fast communication and collaboration.
- Centralized data storage and management.
- Reduced cost of sharing resources.
-

2. Types of Networks

PAN – Personal Area Network

Covers a very small area around an individual.

Example: Bluetooth connection between a phone and earbuds.

LAN – Local Area Network

Covers a limited area such as a home, school, or office.

Example: Computers connected in a school laboratory.

MAN – Metropolitan Area Network

Connects networks across a city or metropolitan area.

Example: A network linking branches across a city.

WAN – Wide Area Network

Covers a large geographical area, such as countries or continents.

Example: The Internet.

3. Network Topologies

A topology is the physical or logical arrangement of devices in a network.

Bus Topology

All devices share a single backbone cable.

- Simple and economical.
- Backbone failure can disrupt the entire network.

Star Topology

All devices connect to a central hub or switch.

- Easy to manage and troubleshoot.
- Central device failure affects the network.

Ring Topology

Each device connects to two neighboring devices.

- Forms a closed loop.
- A break can disrupt a basic single-ring network.

Mesh Topology

Devices have multiple interconnections.

- High reliability and redundancy.
- Expensive and complex cabling.

Tree Topology

Devices are arranged in a hierarchical structure.

- Suitable for expanding large networks.
- Failure of an important upper-level link can affect a branch.

4. Network Devices

Device	Main function
Modem	Modulates and demodulates signals; terminology depends on the technology
Hub	Sends incoming data to all its ports
Switch	Forwards frames within a LAN using MAC addresses
Router	Forwards packets between networks using IP addresses
Repeater	Regenerates or retimes signals to extend a network
Gateway	Connects networks using different protocols or architectures
NIC	Enables a computer to connect to a network
Access Point	Allows wireless devices to connect to a network

- Exam trick: Switch → MAC address; Router → IP address.
-

5. Transmission Media

A. Guided / Wired Media

- Twisted Pair Cable: Common in LANs; inexpensive and easy to install.
- Coaxial Cable: Has a central conductor and shielding.
- Optical Fibre: Transmits data using light; supports high bandwidth over long distances.

B. Unguided / Wireless Media

- Radio Waves: Used in Wi-Fi and radio communication.
- Microwaves: Used in point-to-point links and satellite communication.
- Infrared: Used for short-range, generally line-of-sight communication

6. Network Protocols

- A protocol is a set of rules governing communication between devices.

Protocol	Full form / purpose
HTTP	Hypertext Transfer Protocol — transfers web resources
HTTPS	Secure HTTP — encrypted web communication
FTP	File Transfer Protocol — file transfer
SMTP	Simple Mail Transfer Protocol — sends email
POP3	Post Office Protocol version 3 — retrieves email, typically by downloading it
IMAP	Internet Message Access Protocol — accesses and synchronizes email
TCP	Transmission Control Protocol — reliable, ordered data delivery
IP	Internet Protocol — addressing and routing packets
DNS	Domain Name System — translates domain names into IP addresses
VoIP	Voice over Internet Protocol — voice communication over IP networks

7. IP Address vs MAC Address

IP Address	MAC Address
Logical address	Hardware/network interface address
Used for routing packets	Used for delivery within a local network
May change	Usually assigned to the network interface
Example: 192.168.1.10	Example: 00:1A:2B:3C:4D:5E

IPv4: 32 bits (e.g., 192.168.1.10)

IPv6: 128 bits (e.g., 2001:db8::1)

8. Data Transmission Modes

Simplex

Data flows in one direction only.

Example: Traditional broadcast radio.

Half-Duplex

Data flows in both directions, but not simultaneously.

Example: Walkie-talkie communication.

Full-Duplex

Data flows in both directions simultaneously.

Example: Telephone conversation.

9. Important Networking Terms

- Bandwidth: Maximum data-carrying capacity of a connection per unit time, commonly measured in bps.
- Data transfer rate: Actual rate at which data is transferred.
- URL: Uniform Resource Locator; the address used to locate a resource on the web.
- ISP: Internet Service Provider; provides internet access.
- WWW: World Wide Web; a system of interlinked web resources accessed over the Internet.
- Wi-Fi: Wireless networking technology.
- Packet: A unit of data transmitted across a packet-switched network.
- Network security: Protecting network systems and data from unauthorized access and attacks

10. Important Exam Questions

Practice MCQs

0/5 answered

1. Which device forwards data using MAC addresses within a LAN?

- A. Router
- B. Switch
- C. Modem
- D. Repeater

2. Which topology uses a central connecting device?

- A. Bus
- B. Ring
- C. Star
- D. Mesh

3. Which protocol is used to send email?

- A. SMTP
- B. POP3
- C. FTP
- D. DNS

4. What is the length of an IPv4 address?

- A. 16 bits
- B. 32 bits
- C. 64 bits
- D. 128 bits

5. Which transmission mode allows simultaneous two-way communication?

- A. Simplex
- B. Half-duplex
- C. Full-duplex
- D. Broadcast



COMPUTER NETWORK

Class 12 – CBSE (Computer Science)

Connect
Communicate
Share
Grow

1. What is a Computer Network?

- A computer network is a group of interconnected devices that share data, resources and services with each other.
- It enables communication and data exchange between devices located in different places.

Key Components:

- Devices (computers, servers, mobile, etc.)
- Network devices (router, switch, etc.)
- Transmission media (cables / wireless)
- Protocols (rules for communication)



2. Types of Computer Networks

PAN

(Personal Area Network)

- Very small area (few meters)
- Connects personal devices (phone, smartwatch, Bluetooth)

LAN

(Local Area Network)

- Small area (home, office, school)
- High speed, privately owned

MAN

(Metropolitan Area Network)

- City or large campus
- Connects multiple LANs

WAN

(Wide Area Network)

- Large geographical area
- Internet is the largest WAN

3. Network Topologies

Topology defines the physical or logical arrangement of devices in a network.

Bus Topology



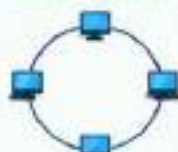
- Simple and low cost
- Single cable (backbone)
- Failure affects whole network

Star Topology



- Easy to manage
- If central device fails, network stops

Ring Topology



- Data flows in one direction
- Used in token passing networks

Mesh Topology



- High reliability
- Multiple paths
- Expensive

Tree Topology



- Combination of star and bus
- Used in large networks

4. Network Devices

Router



- Connects different networks
- Forwards data using IP addresses

Switch



- Connects devices in a LAN
- Works at Data Link layer
- Uses MAC address

Hub



- Connects multiple devices
- Broadcasts data to all ports
- Less efficient

Modem



- Modulates and demodulates data
- Connects LAN to WAN (e.g. ISP)

Access Point



- Provides wireless connectivity
- Connects Wi-Fi devices to LAN

5. Network Protocols

A protocol is a set of rules that defines how data is formatted, transmitted and received.

Protocol	Use
TCP/IP	Standard protocol suite for the Internet
HTTP	Web pages and web resources
HTTPS	Secure web communication
FTP	File transfer
SMTP	E-mail sending
POP3 / IMAP	E-mail receiving
DNS	Domain name to IP address resolution

6. IP Address vs MAC Address

IP Address	MAC Address
Logical address	Physical address
Assigned by network (automatically or manually)	Set by manufacturer (hardcoded)
Example: 192.168.1.10	Example: 00:1A:2B:3C:4D:5E
Changes (can be dynamic)	Usually fixed
Used for routing	Used for device identification



7. Important Points

- TCP/IP is the foundation of the Internet.
- HTTP is an application layer protocol.
- DNS translates domain names to IP addresses.
- LANs are faster and more secure than WANs.
- A router works at the network layer (Layer 3).
- A switch works at the data link layer (Layer 2).
- MAC address is unique for each device.
- Network security is important to protect data from unauthorized access.





Python – Class 12 (CBSE) Functions, File Handling and Stack



Important Points • Concepts • Examples • Notes

1. PYTHON FUNCTIONS

What is a Function?

- A function is a block of reusable code that performs a specific task.
- It helps in modular programming, reduces code duplication and increases readability.
- In Python, functions are defined using the keyword `def`.

Syntax of a Function

```
def function_name(parameters):
    # function body
    return value # optional
```

Types of Functions

- Built-in functions (e.g. `print()`, `len()`, `type()`)
- User-defined functions
- Anonymous (lambda) functions

Parts of a Function

- `def` – keyword to define a function
- `function_name` – name of the function
- `parameters` – input values (optional)
- `function body` – set of statements
- `return` – returns a value (optional)

Types of Arguments

- Positional arguments (in order)
- Keyword arguments (name=value)
- Default arguments
- Variable length arguments (*args, **kwargs)

Example 1: Simple Function

```
def add(a, b):
    return a + b

print(add(5, 3))
```

Output:
8

Example 2: Function with Default and Keyword Arguments

```
def greet(name, msg="Hello"):
    return msg + " " + name

print(greet("Riya"))
print(greet("Riya", "Good Morning"))
```

Output:
Hello Riya
Good Morning Riya

Example 3: Function with *args and **kwargs

```
def display(*args, **kwargs):
    print("Arguments:", args)
    print("Keyword Arguments:", kwargs)

display(1, 2, 3, name="Python", version=3.11)
```

Output:
Arguments: (1, 2, 3)
Keyword Arguments:
{'name': 'Python', 'version': 3.11}

2. PYTHON FILE HANDLING

What is File Handling?

- File handling means reading from and writing to files.
- It helps to store data permanently.
- Python provides built-in functions to work with files.

Open, Read and Close a File

```
f = open("data.txt", "r")
content = f.read()
f.close()
print(content)
```

Read Line by Line

```
with open("file.txt", "r") as f:
    for line in f:
        print(line.strip())
```

Important Points

- Always close the file after use (or use with statement).
- Use 'r' mode to read, 'w' to write, 'a' to append.
- For text files, use normal mode; for binary files, use 'rb' or 'wb'.
- Handle exceptions using try-except (e.g. `FileNotFoundError`).
- File operations are I/O operations and may take time.

File Modes

Mode	Description
r	Read (default)
w	Write (overwrites)
a	Append
x	Create (fails if exists)
rb	Read binary
wb	Write binary
ab	Append binary

Write to a File

```
f = open("output.txt", "w")
f.write("Hello Python!")
f.close()
```

Example: Count Vowels in a File (using function)

```
def count_vowels(filename):
    vowels = "aeiouAEIOU"
    count = 0
    with open(filename, "r") as f:
        for ch in f.read():
            if ch in vowels:
                count += 1
    return count

print(count_vowels("sample.txt"))
```

3. STACK

What is a Stack?

- Stack is a linear data structure that follows LIFO (Last In First Out) principle.
- Insertion and deletion are done at one end, called the top.
- It is used in function calls, expression evaluation, undo/redo, browser history, etc.

Basic Operations

- `push()` – adds an element to the top
- `pop()` – removes the top element
- `peek()` – returns the top element (without removing)
- `isEmpty()` – checks if stack is empty
- `isFull()` – checks if stack is full (in array implementation)

Stack Working (LIFO)



LIFO: Last In First Out

Stack Implementation in Python (Using List)

```
stack = []

# push
stack.append(10)
stack.append(20)
stack.append(30)

# pop
print(stack.pop()) # 30
print(stack.pop()) # 20

# peek
print(stack[-1]) # 30

# isEmpty
print(len(stack) == 0) # False
```

Example: Evaluate Postfix Expression (Using stack)

```
def evaluate_postfix(expr):
    stack = []
    for token in expr.split():
        if token.isdigit():
            stack.append(int(token))
        else:
            b = stack.pop()
            a = stack.pop()
            if token == '+':
                stack.append(a + b)
            elif token == '-':
                stack.append(a - b)
            elif token == '*':
                stack.append(a * b)
            elif token == '/':
                stack.append(a / b)
    return stack.pop()
```

Example usage:
print(evaluate_postfix("5 3 + 2 *"))

Important Points for Exam

- LIFO (Last In First Out) is the key feature of a stack.
- Stack can be implemented using list or array.
- Common operations: push, pop, peek, isEmpty, isFull.
- Used in function calls, recursion, expression evaluation, syntax parsing, undo/redo, etc.
- Infix to postfix/prefix conversion uses stack.
- Be familiar with stack-based algorithms like bracket matching.

Quick Revision

- ✓ **Functions** → reusable code, `def`, return, arguments, scope.
- ✓ **File Handling** → `open()`, `read()`, `write()`, `append()`, with, try-except.
- ✓ **Stack** → LIFO, push, pop, peek, isEmpty, isFull, used in many applications.

Practice
Builds
Confidence!





Python – Class 12 (CBSE)

Functions, File Handling and Stack

Important Points • Concepts • Examples • Notes

Learn
Cadd
a Better
Tomorrow

1. PYTHON FUNCTIONS

What is a Function?

- A function is a block of reusable code that performs a specific task.
- It helps in modular programming, reduces code duplication and increases readability.
- In Python, functions are defined using the keyword `def`.

Function Syntax

```
def function_name(parameters):
    # body of function
    return value # optional
```

Types of Functions

1. Built-in Functions

- Provided by Python.
- Example: `print()`, `len()`, `type()`, `int()`, `float()` etc.

2. User-defined Functions

- Created by the programmer.
- Example: `def square(x): ...`

Parts of a Function

- `def` – keyword to define a function
- `function_name` – name of the function
- `parameters` – input values (optional)
- `function body` – set of statements
- `return` – returns a value (optional)

Types of Arguments

- Positional arguments (in order)
- Keyword arguments (name=value)
- Default arguments
- Variable length arguments (*args, **kwargs)

Examples

1. Simple Function

```
def add(a, b):
    return a + b

print(add(5, 3)) # 8
```

2. Default Argument

```
def greet(name="Guest"):
    print("Hello", name)

greet() # Hello Guest
greet("Riya") # Hello Riya
```

3. *args and **kwargs

```
def total(*args, **kwargs):
    print(args)
    print(kwargs)

total(1, 2, 3, a=10)
```

4. Recursive Function

```
def fact(n):
    if n == 0:
        return 1
    else:
        return n * fact(n-1)

print(fact(5)) # 120
```

5. Lambda Function

```
square = lambda x: x*x
print(square(6)) # 36
```

6. Using return

```
def circle_area(r):
    return 3.14 * r * r

print(circle_area(5)) # 78.5
```

3. STACK

What is a Stack?

- A stack is a linear data structure that follows LIFO (Last In First Out) principle.
- Insertion (push) and deletion (pop) are done at the top.
- Used in function calls, expression evaluation, undo/redo, browser history, etc.

Basic Operations

- `push(x)` – add element at top
- `pop()` – remove top element
- `peek()` – view top element
- `isEmpty()` – check if stack is empty
- `isFull()` – check if stack is full

Stack Working (LIFO)



Last In First Out (LIFO)

Stack Implementation in Python (Using List)

```
stack = []

# push
def push(x):
    stack.append(x)

# pop
def pop():
    if not isEmpty():
        return stack.pop()
    else:
        print("Stack Underflow")

# peek
def peek():
    if not isEmpty():
        return stack[-1]
    else:
        print("Stack is empty")

# isEmpty
def isEmpty():
    return len(stack) == 0

# isFull (optional)
def isFull(max_size):
    return len(stack) == max_size
```

Example: Evaluate Postfix Expression (Using Stack)

```
def evaluate_postfix(exp):
    stack = []
    for token in exp.split():
        if token.isdigit():
            stack.append(int(token))
        else:
            b = stack.pop()
            a = stack.pop()
            if token == "+":
                stack.append(a + b)
            elif token == "-":
                stack.append(a - b)
            elif token == "*":
                stack.append(a * b)
            elif token == "/":
                stack.append(a / b)
    return stack.pop()

# Example
print(evaluate_postfix("5 3 + 2 *")) # 32
```

2. PYTHON FILE HANDLING

What is File Handling?

- File handling means reading from and writing to files.
- It helps to store data permanently.
- Python provides built-in functions to work with files.

File Modes

Mode	Description
r	Read (default)
w	Write (overwrite)
a	Append
x	Create (fails if exists)
rb	Read binary
wb	Write binary
ab	Append binary

Open, Read, Write, Append, Close

```
f = open("data.txt", "r") # open file
content = f.read() # read all
print(content)
f.close()
```

Write to a File

```
f = open("output.txt", "w")
f.write("Hello Python!")
f.close()
```

Read Line by Line

```
with open("file.txt", "r") as f:
    for line in f:
        print(line.strip())
```

Append to a File

```
with open("data.txt", "a") as f:
    f.write("New line\n")
f.close()
```

Important Points

- Always close the file after use (or use with statement).
- Use "r" mode to read, "w" mode to write, "a" to append.
- For text files, use normal mode; for binary files, use "rb" or "wb".
- Handle exceptions using try-except (e.g. `FileNotFoundError`).
- File operations are I/O operations and may take time.

Example Programs

1. Read a Text File and Print Each Word (Using Function)

```
def display_words(filename):
    with open(filename, "r") as f:
        for line in f:
            for word in line.split():
                print(word, end=" ")

# call
display_words("sample.txt")
```

2. Count Vowels, Consonants, Uppercase and Lowercase (Using Function)

```
def count_chars(filename):
    vowels = "aeiouAEIOU"
    vc = 0
    with open(filename, "r") as f:
        for ch in f.read():
            if ch.isalpha():
                if ch in vowels: vc+=1
                elif ch.isupper(): vc+=1
                elif ch.islower(): vc+=1
            else: cv+=1
    return v, c, cv, vc

# At last print the result
```

Quick Revision

Key Points (Functions)

- `def`, `return`, parameters
- types of arguments
- *args, **kwargs
- lambda, recursion

Key Points (File Handling)

- modes: r, w, a, x, rb, wb, ab
- with `open()`
- `read()`, `write()`, `readline()`
- exception handling
- text & binary files

Key Points (Stack)

- LIFO principle
- `push()`, `pop()`, `peek()`
- `isEmpty()`, `isFull()`
- stack using list
- postfix evaluation

Practice
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Improve
Your Skills!





Class 12 CBSE Computer Science (083)

Competency-Based Questions with Solutions



PYQ Pattern | Important Previous Year Questions | Practice + Solutions

Focus on real-life situations • Apply your concepts • Improve problem-solving skills

1. Functions (Python)

f(x)

Q1. Trace the output of the following code and write the final value of x.

```
1 x = 5
2 def fun(a, b):
3     return a + b
4 x = fun(x, 3)
5 print(x)
6 x = fun(x, 2)
7 print(x)
8
```

Solution:

Line 4: fun(5, 3) = 8
Line 5: print(8)
Line 6: fun(8, 2) = 10
Line 7: print(10)
Output:
8
10
Final value of x = 10

Q2. Write a Python function to count the number of vowels in a text file. The file name is 'data.txt'.

```
def count_vowels(filename):
    vowels = 'aeiouAEIOU'
    count = 0
    with open(filename, 'r') as f:
        for ch in f.read():
            if ch in vowels:
                count += 1
    return count
# Example call
print(count_vowels('data.txt'))
```

Solution:

The function reads the file, checks each character and counts vowels (a, e, i, o, u).

Output (example):
5 (depends on file content)

3. Stack (LIFO)



Q5. Write will be the output of the following code?

```
stack = []
stack.append(10)
stack.append(20)
stack.append(30)
print(stack.pop())
print(stack.pop())
print(stack)
```

Solution:

Stack (top at right end): [10, 20, 30]
Pop 1 → 30
Pop 2 → 20
Remaining stack → [10]

Output:
30
20
[10]

Q6. Write a program to check if the given expression has balanced parentheses using a stack.

```
def is_balanced(expr):
    stack = []
    for ch in expr:
        if ch == '(':
            stack.append(ch)
        elif ch == ')':
            if not stack:
                return "Not Balanced"
            stack.pop()
    return "Balanced" if not stack else "Not Balanced"
# Example
print(is_balanced("(a+b)*(c+d)"))
```

Solution:

• Push '(' onto stack.
• On ')', pop and match.
• If stack empty or mismatch → Not Balanced.

Output:
Balanced

2. File Handling (Text & Binary)



Q3. Write a Python program to read a text file line by line and display each word separated by a '#'.

```
def display_words(filename):
    with open(filename, 'r') as f:
        for line in f:
            words = line.strip().split()
            print('#'.join(words))
# Example
# display_words('sample.txt')
```

Solution:

Each line is split into words and printed with '#'.

Example Output:
Hello#CBSE#
Python#is#fun

(Depends on file content)

Q4. A binary file contains student records (roll no, name, marks). Write the logic to search a given roll number and display the name if found, otherwise show "Not Found".

```
import pickle
def search_student(filename, roll):
    with open(filename, 'rb') as f:
        while True:
            try:
                r, name, marks = pickle.load(f)
            except EOFError:
                break
            if r == roll:
                print("Name:", name)
                return
        print("Not Found")
```

Solution (concept):

- Use pickle to read binary records.
- Loop until EOF.
- Match roll number.
- Print name or "Not Found".

(Actual file creation and input handling to be written in exam)

4. SQL / MySQL



Q7. Consider the following table 'Student' in MySQL:

RollNo	Name	Class	Marks	City
101	Aman	12	85	Delhi
102	Neha	12	78	Bhopal
103	Rohan	11	92	Delhi
104	Isha	12	88	Rajpur
105	Karan	11	76	Bhopal

Solution:

- (a) SELECT name, marks FROM Student WHERE city = 'Delhi';
- (b) SELECT Avg(marks) FROM Student WHERE class = 12;
- (c) SELECT city, COUNT(*) AS total FROM Student GROUP BY city HAVING total >= 2;

- (d) UPDATE Student SET marks = 80 WHERE RollNo = 105;

(Adjust table/column names as per your database.)

Write a query to:

- (a) Display name and marks of students from Delhi.
- (b) Find average marks of class 12 students (use GROUP BY).
- (c) Display city and count of students (use GROUP BY and HAVING).
- (d) Update marks of RollNo 105 to 80.

5. Computer Networks



Q8. A company wants to set up a small network in its office. Which network device will you suggest for connecting multiple computers in a local area network (LAN)? Name two protocols used for web browsing and email.

Answer:

- Device: Switch (connects multiple devices in a LAN).
- Protocols: HTTP (web browsing), SMTP (email).

Q9. Which type of network topology is used when all devices are connected to a central device? Draw a simple diagram and name the device.

Answer: Star topology.
Central device: Switch / Hub



Q10. What is the difference between IP address and MAC address? Give one example of each.

Answer:

- **IP address:** Logical address (Layer 3), used for routing. Example: 192.168.1.10
- **MAC address:** Physical address (Layer 2), unique to device. Example: 00:1A:2B:3C:4D:5E



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पीएम श्री केन्द्रीय विद्यालय, कांकेर
शरदावकाश कार्य
कक्षा XII विषय: हिन्दी

- सभी प्रश्न करने अनिवार्य हैं
 - दिए गए प्रत्येक कार्य को गृहकार्य पुस्तिका में करना सुनिश्चित करें।
 - अपनी गृहकार्य पुस्तिका को अच्छे से कवर करके लाएं।
-

1. किशोरों में बढ़ती स्क्रीन के लत, ऑनलाइन शॉपिंग के फायदे और नुकसान विषयों पर 120 शब्दों में रचनात्मक लेखन कीजिए।
 2. देश में चिकित्सा व्यवस्था की कमी को आधार बनाकर सम्पादकीय लिखिए।
 3. कहानी और नाटक में क्या अंतर है?
 4. कहानी को नाटक में रूपांतरित करते समय किन बातों का ध्यान रखा जाता है?
 5. रेडियो नाटक कैसे बनता है?
 6. रेडियो नाटक लिखते समय किन बातों का ध्यान रखा जाता है?
 7. समाचार लेखन की उल्टा पिरामिड शैली का वर्णन कीजिए।
 8. पत्रकार कितने प्रकार के होते हैं? उनके विषय में लिखिए।
 9. यशोधर बाबू का चरित्र चित्रण कीजिए।
 10. 'जूझ' पाठ का लेखक आनंद विद्यालय जाना किस तरह शुरू कर पाता है?
 11. पतंग कविता में प्रयुक्त मानवीकरण अलंकार को छांटकर लिखिए।
 12. सिद्ध कीजिए 'कैमरे में बंद अपाहिज' कविता करुणा के मुखौटे में छिपी क्रूरता की कविता है।
 13. 'बादल राग' कविता का भावार्थ और शिल्प सौंदर्य लिखिए।
 14. भक्तिन की चारित्रिक विशेषताएं लिखिए।
 15. बाज़ार दर्शन' पाठ में पर्चेजिंग पावर से गर्वित लोगों का बाज़ार पर क्या प्रभाव पड़ता है?
 16. 'पहलवान की ढोलक' कहानी का सारांश और सन्देश अपने शब्दों में लिखिए।
-

✓ दिए गए विषय पर बहुविषयक परियोजना (MDP) तैयार करें।

टॉपिक :

 "सोशल मीडिया: boon या bane (बरदान या अभिशाप)"

प्रश्न:

-ज्ञानात्मक प्रश्न (Knowledge Based)

1. सोशल मीडिया की परिभाषा लिखिए।
2. भारत में सोशल मीडिया के प्रमुख प्लेटफॉर्म कौन-कौन से हैं?
3. सोशल मीडिया का पहला प्लेटफॉर्म किसे माना जाता है?

बोधार्थक प्रश्न (Comprehension Based)

1. सोशल मीडिया किस प्रकार युवाओं के जीवन को प्रभावित कर रहा है?
2. "सोशल मीडिया अभिव्यक्ति की स्वतंत्रता का सशक्त माध्यम है" इस कथन की व्याख्या कीजिए।
3. छात्र-जीवन में सोशल मीडिया के उपयोग के लाभ बताइए।

अनुप्रयोगात्मक प्रश्न (Application Based)

1. यदि आपको विद्यालय में "सोशल मीडिया जागरूकता अभियान" चलाने का अवसर मिले तो आप क्या योजनाएँ बनाएँगे?
2. आप एक विद्यार्थी के रूप में सोशल मीडिया का उपयोग सकारात्मक दिशा में कैसे कर सकते

उच्च स्तरीय प्रश्न (Higher Order Thinking)

1. क्या आपको लगता है कि सोशल मीडिया वास्तविक संबंधों को कमजोर कर रहा है? अपने तर्क दीजिए।
2. सोशल मीडिया के दुरुपयोग को रोकने के लिए सरकार व समाज को कौन-कौन से कदम उठाने चाहिए?

(A4 साइज पेपर में) (कोबरा फाइल में कम से कम 15 पेजों में यह कार्य करें।)

विशाल जैन

स्नातकोत्तर शिक्षक (हिन्दी)

PM Shri Kendriya Vidyalaya Kanker

Autumn Break Homework

Class XII

English Core (301)

Instructions for Holiday Homework

1. Complete all the work neatly in your fair notebooks.
2. The given work is to be completed over six days only.
3. Complete your work daily to avoid a last-minute rush.
4. From each question paper set, attempt only the extract-based questions.
5. Work sincerely, stay organised, and most importantly, don't forget to enjoy your holidays! 🌸

HAPPY HOLIDAYS!



SECTION – C
(LITERATURE)

(40 Marks)

7. Read the following extracts and answer the questions for **ANY ONE** of the given two (A) or (B) : **1 × 6 = 6**

(A) It would be an exotic moment
without rush, without engines.

we would all be together

in a sudden strangeness

Fishermen in the cold sea

would not harm whales

and the man gathering salt

would look back at his hurt hands.

(Keeping Quiet)

(i) How according to the poet can we create this exotic moment ?

(ii) Choose the correct option :

The outcome of fisherman's activity led to the _____
(destruction / protection) of environment.

(iii) What is the common outcome of this exotic moment ?

(A) No rush and no mechanization

(B) Men would be gathering salt.

(C) There would be a strangeness among warring nations.

(D) Fisherman will look at his hurt hands.

(iv) Choose the correct option :

The tone of the poet is _____ (appealing / introspective) in
the line "and the man gathering salt would look back at his hurt
hands."

(v) The poet uses the expression 'sudden strangeness' to suggest.
_____.

(vi) Read the assertion and the reason below, with reference to the
given extract :

Assertion : The poet advocates for taking a break to
introspect the damage inflicted by man.

Reason : Introspection will make man's life better.

Choose the correct option regarding their relationship.

(A) Both the Assertion and Reason are true, but the Reason is
not the correct explanation.

(B) Both the Assertion and Reason are true, but the Reason is
correct explanation of the Assertion.

(C) The Assertion is true, but the Reason is false.

(D) The Assertion is false, but the Reason is true.

OR



(B) A thing of beauty is a joy forever
Its loveliness increases, it will never
pass into nothingness; but will keep
A bower quiet for us, and a sleep
Full of sweet dreams, and health, and quiet breathing,
Therefore, on every morrow are we wreathing
A flowery band to bind us to the earth. *(A Thing of Beauty)*

- (i) By the phrase 'joy forever' the poet refers to things
(A) that make people extremely happy.
(B) that are a feast to eyes.
(C) that are a constant source of happiness.
(D) that are beautiful but transient.
- (ii) Choose the correct option :
By using the expression 'never pass into nothingness' the poet states that nature's beauty will create a _____ (lasting/temporary) impression on man's mind.
- (iii) How does Keats make it evident that there is a link between man's wellness and nature's beauty ?
- (iv) Read the Assertion and the Reason below, with reference to the given extract :
Assertion : Keats states that man derives strength and inspiration from the beauty of nature.
Reason : Nature gives physical, emotional and mental solace to man.
Choose the correct option regarding their relationship.
(A) Both the Assertion and Reason are true, and the Reason is the correct explanation of the Assertion.
(B) Both the Assertion and Reason are true, and the Reason is not the correct explanation of the Assertion.
(C) The Assertion is false, but the Reason is true.
(D) The Assertion is true, but the Reason is false.
- (v) Select one phrase from the extract which implies that man wants to continue his life on this earth despite innumerable problems.
- (vi) Complete the following sentence :
'a sleep full of sweet dreams' implies _____.



8. Read the following extracts and answer the questions for **ANY ONE** of the given two (A) or (B) : **1 × 4 = 4**

(A) At midnight when the town slept in peace, the Dewan and his aged wife dragged the tiger to the car and shoved it into the seat. The Dewan himself drove the car straight to the forest where the Maharaja was hunting. When they reached the forest, the tiger launched its Satyagraha and refused to get out of the car. The Dewan was thoroughly exhausted in his efforts to haul the beast out of the car and push it down to the ground.

On the following day, the same old tiger wandered into the Maharaja's presence and stood as if in humble supplication, "Master, what do you command of me ?" It was with boundless joy that the Maharaja took careful aim at the beast. The tiger fell in a crumpled heap.
(The Tiger King)

- (i) How did the Dewan manage to take the tiger to the forest ?
(A) The Dewan conceded to the tiger's satyagraha.
(B) The Dewan pushed the tiger into the car and drove to the forest.
(C) The Dewan hauled the tiger into the tent.
(D) The Dewan persuaded the tiger into a humble supplication of the Maharaja.
- (ii) Choose the correct option :
The attitude of the Dewan in the above extract can be described as _____ (negligent and reluctant / meek and servile)
- (iii) Select one statement or expression from the extract that reflects the humorous writing style of the author.
- (iv) State one reason for the 'boundless joy of the Maharaja'.

OR

(B) The rapid increase of human populations has left us battling with other species for limited resources, and the unmitigated burning of the fossil fuels has now created a blanket of carbon dioxide around the world, which is slowly but surely increasing the average global temperature.



Climate change is one of the most hotly contested environmental debates of our time. Will the west Antarctic ice sheet melt entirely ? Will the Gulf stream ocean current be disrupted ? Will be the end of the world as we know it ? *(Journey to the End of the Earth)*

- (i) List one way in which the increasing human population is affecting other species.
- (ii) Choose the correct option that best reflects the tone of the writer in the last line of the extract.
 - (A) happy and excited
 - (B) encouraging and optimistic
 - (C) anxious and concerned
 - (D) spiteful and bitter
- (iii) Choose the correct option :
'unmitigated burning of fossil fuels' reflects the _____
(avaricious / furious) streak in man's nature.
- (iv) In the above extract, what message is the author giving to mankind ?

9. Read the following extracts and answer the questions for **ANY ONE** of the given two (A) or (B) : **1 × 6 = 6**

(A) The next day both men got up in good season. The crofter was in a hurry to milk his cow, and the other man probably thought he should not stay in bed when the head of the house had gotten up. They left the cottage at the same time. The crofter locked the door and put the key in his pocket. The man with the rattraps said good bye and thank you, and thereupon each went his own way.

But half an hour later the rattrap peddler stood again before the door. He did not try to get in, however. He only went up to the window, smashed a pane, stuck in his hand, and got hold of the pouch with the thirty Kronor. He took the money and thrust it into his own pocket. Then he hung the leather pouch very carefully back in its place and went away. *(The Rattrap)*

- (i) Select the correct option from those given in brackets, to fill in the blank.

The behaviour of the peddler as described in the above extract is an act of _____. (deceit / obedience)



- (ii) “Both men got up in good season”. The author uses the expression ‘good season’ to denote that
- (A) They slept for a long time.
 - (B) They got up in a good mood.
 - (C) They got up early and timely.
 - (D) They got up hurriedly.
- (iii) State the irony in the peddler’s response. “The man with the rattrops said good bye and thank you”.
- (iv) Choose the correct option :
- The flaw in the peddler’s character as reflected in the above extract is
- (A) He is jealous of rich people.
 - (B) He indulges in self-pity.
 - (C) He can rob his benefactor.
 - (D) He can sleep anywhere without any hesitation.
- (v) Complete the following sentence :
- The role of cow in the crofter’s life is _____.
- (vi) Choose one instance from the above extract to show that peddler acted like a well mannered person.

OR

- (B) “It takes longer to build a school.” I say, embarrassed at having made a promise that was not meant. But promises like mine abound in every corner of his bleak world.

After months of knowing him, I ask him his name. ‘Saheb-e-Alam’, he announces. He does not know what it means. If he knew its meaning – lord of the universe – he would have a hard time believing it. Unaware of what his name represents, he roams the streets with his friends, an army of bare feet boys who appear like the morning birds and disappear at noon. Over the months, I have come to recognise each of them.

“Why aren’t you wearing chappals ?” I ask one.

“My mother did not bring them down from the shelf.” He answers simply.



“Even if she did he will throw them off,” adds another who is wearing shoes that do not match. *(The Last Spring)*

Select the option from those given in brackets, to fill in the blank.

- (i) The intention of the speaker in the first line of the extract is one of _____. (clarification / confusion)
- (ii) What is implied by the expression ‘he would have a hard time believing it’.
 - (A) Saheb is too innocent to believe everything.
 - (B) Saheb is living upto his name.
 - (C) Saheb’s living condition is contrary to the meaning of his name.
 - (D) Saheb is not used to anyone calling his name.
- (iii) Select the correct option from those given in brackets to fill in the blank :

“Promises like mine abound in every corner of his bleak world.”

The above statement of the speaker reveals the fact that people like Saheb are _____ (deluded / empowered) by such promises.
- (iv) State one reason for the boy was wearing shoes that did not match.
- (v) The speaker describes Saheb’s life as a ‘bleak world’ because
 - (A) he lives in a house without electricity.
 - (B) his world is his friends.
 - (C) his life is devoid of hope.
 - (D) he belongs to the world of illiterates.
- (vi) “Why aren’t you wearing chappals ?” I asked one. The conversation between the speaker and the boys reflects the _____ of the speaker.

10. Answer **ANY FIVE** of the following six questions in **40-50** words each :

5 × 2 = 10

- (i) What valid reason does Rudyard Kipling have to call an interview immoral ? *(The Interview)*
- (ii) How was self-reliance intertwined with the Champaran incident ? *(Indigo)*
- (iii) “I’ve plenty of time. I’ll learn it tomorrow. And now you see where we’ve come out.” *(The Last Lesson)*

What does M. Hamel mean to convey through these lines ?



6. Attempt **ANY ONE** of the two, (A) or (B) in **120-150** words : **1 × 5 = 5**

(A) Write an article on the commercialisation of festivals, analyzing the reasons for commercialisation and its impact on the younger generation. You may use some of the given cues along with your own ideas. You are Vinita Yadav of XII B.

- impact of globalization on celebration of festivals.
- sanctity & essence of festivals.
- role of Media in commercializing festivals.
- suggest ways in which individuals and communities can work together to preserve tradition and culture in the celebration of festivals.

OR

(B) You are Suraj, reporter of The Times of India. You are sent to cover the Mango Festival organized at the farmer's market.

Write a comprehensive report detailing the activities at the festival. Include descriptions of the events, participation details, the overall impact of these activities on the local community.

You may organize your report by following –

Who – What – When – Why – How.

SECTION – C
(LITERATURE)

(40 Marks)

7. Read the following extracts and answer the questions for **ANY ONE** of the given two (A) or (B) : **1 × 6 = 6**

(A) It is in the news that all these pitiful kin
Are to be bought out and mercifully gathered in
To live in villages, next to the theatre and the store.
Where they won't have to think for themselves anymore,
While greedy good-doers, beneficent beasts of prey,
Swarm over their lives enforcing benefits
That are calculated to soothe them out of their wits,
And by teaching them how to sleep they sleep all day
Destroy their sleeping at night the ancient way. (*A Roadside Stand*)

- (i) The expression 'It is in the news' suggests
- (A) it is good news for the roadside stand owners.
 - (B) an important decision has been taken by the government.
 - (C) the roadside stand owners have protested against the government.
 - (D) that the news was not there in the newspaper.



- (ii) Read the Assertion and the Reason below, with reference to the given extract.

Assertion : The poet complains that the rural people are exploited by the people in power.

Reason : The rural people reposed blind faith in the false promises of the people in power.

Choose the correct option regarding their relationship.

- (A) Both the Assertion and the Reason are true and the Reason is the correct explanation.
(B) Both the Assertion and the Reason are true, but the Reason is not the correct explanation of the Assertion.
(C) The Assertion is true, but the Reason is false.
(D) The Assertion is false, but the Reason is true.
- (iii) Complete the following suitably :
In the line 'that are calculated to soothe them out of their wits', the phrase 'soothe them out of their wit' refers to _____.
(iv) Bring out the irony in the expression 'they won't have to think for themselves'.
(v) Select the correct option from those given in brackets, to fill in the blank.

The poet uses the expression 'greedy good-doers' to _____ (criticize / appreciate) the intention of the powerful people.

- (vi) Complete the following suitably.

The tone of the poet in the above extract is _____.

OR

- (B) If we were not so single-minded
about keeping our lives moving,
and for once could do nothing,
perhaps a huge silence
might interrupt this sadness
of never understanding ourselves with death.
Perhaps the Earth can teach us
as when everything seems dead
and later proves to be alive.
Now I'll count up to twelve
And you keep quiet and I will go.

(Keeping Quiet)

- (i) Complete the following suitably.

The poet uses the expression 'single minded' to refer to _____.

- (ii) Why does the poet refer to silence as a welcoming interruption ?



- (iii) Read the Assertion and the Reason below, with reference to the given extract.

Assertion : The poet personifies Earth as a teacher.

Reason : We learn from the Earth that pausing doesn't mean the end.

Choose the correct option regarding their relationship.

- (A) Both the Assertion and the Reason are true, and the Reason is the correct explanation of the Assertion.
(B) Both the Assertion and the Reason are true, but the Reason is not the correct explanation of the Assertion.
(C) The Assertion is true, but the Reason is false.
(D) The Assertion is false, but the Reason is true.
- (iv) Complete the following suitably.

By the expression "keeping our lives moving" the poet refers to _____.

- (v) Choose the correct option :

The intention of the poet in the above extract is

- (A) to make us aware of the importance of Earth.
(B) to criticize our single mindedness.
(C) to highlight the reason for our sadness.
(D) to highlight the importance of sustaining peace and silence.
- (vi) What is the significance of the last line of the extract 'you keep quiet and I will go' ?

8. Read the following extracts and answer the questions for **ANY ONE** of the given two (A) or (B) :

1 × 4 = 4

- (A) When I heard this, I didn't want to laugh any more, and I felt terribly sad. How could they believe that it was disgusting if one of us held that package in his hands, even though the Vadai had been wrapped first in a banana leaf, and then parcelled in paper ? I felt so provoked and angry that I wanted to touch those wretched Vadais myself straight away. Why should we have to fetch and carry for these people. I wondered. Such an important elder of ours goes meekly to the shops to fetch snacks and hands over reverently, bowing and shrinking, to this fellow who just sits there and stuffs them into his mouth. The thought of it infuriated me.

(Memories of Childhood)

- (i) 'I felt terribly sad'. The reason for the speaker's sadness is because it was an act of _____.



- (ii) Choose the correct option :
'The thought of it infuriated me' with reference to the above line, what do you think is the impact of the incident on the speaker ?
(A) The speaker was sympathetic and helpless.
(B) The speaker was angry and condemning.
(C) The speaker was excited to see the incident.
(D) The speaker was very impressed and motivated.
- (iii) Complete the sentence suitably :
'I wanted to touch those wretched Vadais myself'
The above expression indicates the speaker's _____.
- (iv) Select the correct option from those given in brackets, to fill in the blank :
The incident made the speaker realize that the discrimination was _____. (dehumanizing/elevating)

OR

- (B) Mr. Lamb : When I go down the streets, the kids shout 'Lamey Lamb'. But they will come into the garden, into my house; it's a game. They're not afraid of me. Why should they be ? Because I'm not afraid of them, that's why not.
- Derry : Did you get your leg blown off in the war ?
- Mr. Lamb : Certainly
- Derry : How will you climb on a ladder and get the crab apples down, then ?
- Mr. Lamb : Oh, there's a lot of things I've learned to do and plenty of time for it. Years. I take it steady. (*On the Face of it*)
- (i) Complete the following suitably :
'Years. I take it steady'. The above line speaks of the speaker's _____.
- (ii) Derry, how will you climb on a ladder ? What does Derry hint at in the above query ?
- (iii) 'When I go down the streets, the kids shout Lamey Lamb.'
The attitude of the speaker expressed in the above line is
(A) his habit of finding fault.
(B) he is timid and faint hearted.
(C) his acceptance of reality and positive attitude.
(D) his indifferent and careless attitude.
- (iv) Fill in the blank suitably :
Mr. Lamb's handicap has not _____ his attitude towards life.



9. Read the following extracts and answer the questions for **ANY ONE** of the given two (A) or (B) : **1 × 6 = 6**

(A) Those were the days of mainly indoor shooting, and only five percent of the film was shot outdoors. I suppose the sets and studio lights needed the girls and boys to be made to look ugly in order to look presentable in the movie. A strict hierarchy was maintained in the make-up department. The chief make-up man made the chief actors and actresses ugly, his senior assistant 'second' hero and heroine, the junior assistant the main comedian and so forth. The players who played the crowd were the responsibility of the office boy. (Even the make-up department of the Gemini Studio had an 'office boy')

On the days when there was crowd-shooting, you could see him mixing his paint in a giant vessel and slapping it on the crowd players. The idea was to close every pore on the surface of the face in the process of applying make-up. (Poets and Pancakes)

- (i) What does the writer mean by the phrase 'indoor shooting' in the first line of the extract ?
- (ii) Pick up one sentence from the extract that reflects the sarcastic tone of the writer.
- (iii) The hierarchy in the make-up department puts the 'office boy' in the _____ (lowest / top) rung of the ladder.
- (iv) Complete the following suitably :
On the days when there was a 'crowd-shooting'. By the phrase crowd-shooting, the author refers to _____.
- (v) Choose the correct option :
".....mix his paint in a giant vessel and slapping it on the crowd players."
The choice of words like 'paint' and 'slapping' by the author reflects.
(A) author's intention to degrade the office boy's role in the make-up department.
(B) the office boy's lack of seriousness.
(C) author's sarcastic and humorous writing style.
(D) author's dislike of the office boy.
- (vi) Choose the correct option :
What does the following line from the extract showcase ?
"A strict hierarchy was maintained in the make-up department."
(A) The office boy took all the decisions in the make-up department.
(B) A system of ranks according to importance of work was followed.
(C) Everyone was given an equal share of work in the department.
(D) Nepotism was prevalent in the make-up department.

OR



- (B) My Last French Lesson ! Why, I hardly knew how to write ! I should never learn any more ! I must stop there, then ! Oh, how sorry I was for not learning my lessons, for seeking birds' eggs or going sliding on the Saar ! My books, that had seemed such a nuisance a while ago, so heavy to carry, my grammar, and my history of the saints, were old friends now that I couldn't give up and M. Hamel, too; the idea that he was going away, that I should never see him again, made me forget all about his ruler and how cranky he was.

Poor man ! It was in honour of this last lesson that he had put on his fine Sunday clothes, and now I understood why the old men of the village were sitting there in the back of the room. It was because they were sorry, too, that they had not gone to school more. It was their way of thanking our master for his forty years of faithful service and of showing their respect for the country that was theirs no more.
(The Last Lesson)

- (i) Choose the correct option :
What is the tone of the speaker in the expression 'I hardly knew how to write how sorry I was for not learning my lessons' ?
(A) confused (B) regretful
(C) surprised (D) happy
- (ii) Choose the correct option :
The speaker refers to 'seeking birds' egg' and 'sliding on the Saar' as
(A) part of his routine
(B) his daily routine
(C) source of distraction from learning
(D) fun time with friends
- (iii) What is reflected through the shift in the speaker's perception of his books through his expression of calling them his 'old friends' rather than considering them as 'nuisance' ?
- (iv) Select the correct option from those given in brackets to fill in the blank :
"It was because they were sorry too...."
They were sorry for _____ (not following the government order / not learning their language)
- (v) What is inferred from the expression 'the country that was theirs no more' ?
- (vi) What does M. Hamel's ruler reflect about his image ?



SECTION C

Literature

(40 marks)

7. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×6=6

- (a) Aunt Jennifer's fingers fluttering through her wool

Find even the ivory needle hard to pull.

The massive weight of Uncle's wedding band

Sits heavily upon Aunt Jennifer's hand.

When Aunt is dead, her terrified hands will lie

Still ringed with ordeals she was mastered by.

The tigers in the panel that she made

Will go on prancing, proud and unafraid.

(Aunt Jennifer's Tigers)

- (i) Complete the following suitably :

The massive weight of 'wedding band' symbolises _____. 1

- (ii) By the phrase 'fingers fluttering', the poet portrays Aunt Jennifer in a constant state of _____.

(nervousness/happiness) 1

- (iii) Read the assertion and the reason below, with reference to the given extract. 1

Assertion : Aunt Jennifer lives a life full of agony and pain.

Reason : She is a victim of the male dominant society.

- (A) Both the assertion and the reason are true and the reason is the correct explanation of the assertion.
- (B) Both the assertion and the reason are true, but the reason is **not** the correct explanation of the assertion.
- (C) The assertion is true, but the reason is false.
- (D) The assertion is false, but the reason is true.



- (iv) Complete the following suitably : 1
‘The tigers in the panel will go on prancing’
The above line refers to the _____ of art.
- (v) The expressions ‘terrified hands’ and ‘ordeals’ used in the
above extract highlight the _____ of women in marriage. 1
- (vi) Choose the correct option : 1
‘Tigers in the panel’ symbolise
(A) Aunt Jennifer’s interest in wildlife.
(B) Tigers in the green forest.
(C) Aunt Jennifer’s deep desire for freedom.
(D) Tigers that are yellow in colour.

OR

- (b) Driving from my parent’s
home to Cochin last Friday
morning, I saw my mother,
beside me,
doze, open mouthed, her face
ashen like that
of a corpse and realised with
pain
that she was as old as she
looked but soon
put that thought away, and
looked out at Young
Trees sprinting, the merry children spilling
out of their homes, ...

(My Mother at Sixty-six)



- (i) Complete the following suitably : 1
The expressions 'doze' and 'open mouthed' are used by the poet to indicate the poet's mother's _____.
- (ii) Give the phrase that suggests the following. 1
The image of exuberance and youthfulness affects the poet's thoughts.
- (iii) What does the imagery of 'Trees sprinting' **not** represent in the given extract ? 1
(A) energy (B) liveliness
(C) shade (D) vitality
- (iv) Select the correct option from those given in the brackets, to fill in the blank. 1
The poet's use of the phrase 'ashen like that of a corpse', illustrates the poet's use of _____ (irony/imagery).
- (v) Choose the correct option : 1
The poet is unable to bear the sight of her ageing mother, because _____.
(A) her mother had refused to accompany her
(B) she is upset with her mother dozing off
(C) it upsets her to see the ageing face of her mother
(D) she is in a hurry to reach the airport
- (vi) Read the assertion and the reason below, with reference to the given extract. 1
Assertion : The mother was accompanying her daughter to the airport.
Reason : The daughter was leaving her mother behind and flying off.
Choose the correct option regarding their relationship :
(A) Both the assertion and the reason are true and the reason is the correct explanation of the assertion.
(B) Both the assertion and the reason are true, but the reason is **not** the correct explanation of the assertion.
(C) The assertion is true, but the reason is false.
(D) The assertion is false, but the reason is true.



8. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×4=4

(a) “That young master is so proud of his skill to save life that he saves any life,” the cook said contemptuously.

“It is the children of whom we must think,” Yumi said sadly.
“What will be their fate if their father is condemned as a traitor ?”

They did not try to hide what they said from the ears of Hana as she stood arranging the day’s flowers in the veranda near by, and she knew they spoke on purpose that she might hear.

(The Enemy)

(i) Complete the following suitably : 1

The tone of the cook while speaking about her master’s skill is _____.

(ii) “They spoke on purpose that she might hear’
They wanted her to hear to convey their : 1

- (A) interest
- (B) disapproval
- (C) sympathy
- (D) respect

(iii) How is Yumi’s concern for the children justified ? 1

(iv) Select the correct option from those given in brackets to fill in the blank. 1

The above extract reveals a _____ (superficial/close) association between the master and the servants.

OR



- (b) The British officer's secretary sent word to the Maharaja through the dewan that the *durai* himself did not have to kill the tiger. The Maharaja could do the actual killing. What was important to the *durai* was a photograph of himself holding the gun and standing over the tiger's carcass. But the Maharaja would not agree even to this proposal. If he relented now, what would he do if other British officers turned up for tiger hunts ?

Because he prevented a British officer from fulfilling his desire, the Maharaja stood in danger of losing his kingdom itself.

(The Tiger King)

- (i) Select the correct option from those given in brackets to fill in the blank.

The last line of the extract reflects _____ attitude of the British officers. (an oppressive/a courageous) 1

- (ii) Why did the *durai* want to take a photograph with the tiger's carcass ? 1

- (iii) The Tiger King's refusal to the request of the *durai* reflects : 1

- (A) his concern for the tiger population.
(B) his courage to deny permission to the British officer.
(C) his ego and selfishness.
(D) his strained rapport with the British officer.

- (iv) Complete the following suitably : 1

Maharaja's _____ action put his kingdom in danger.



9. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×6=6

(a) He thought of the thirty kronor. To go up to the manor house would be like throwing himself voluntarily into the lion's den. He only wanted a chance to sleep here in the forge and then sneak away as inconspicuously as possible.

The ironmaster assumed that he felt embarrassed because of his miserable clothing.

“Please don't think that I have such a fine home that you cannot show yourself there”, He said... “Elizabeth is dead, as you may already have heard. My boys are abroad, and there is no one at home except my oldest daughter and myself. We were just saying that it was too bad we didn't have any company for Christmas. Now come along with me and help us make the Christmas food disappear a little faster.”

(The Rattrap)

- (i) What does the narrator mean by the expression ‘throwing himself into the lion's den’ ? 1
- (ii) What does the expression ‘sneak away’ reveal about the intention of ‘he’ in the above extract ? 1
- (iii) Select the correct option from those given in brackets to fill in the blank. 1

“ there is no one home” indicates that the ironmaster was leading a _____ life. (peaceful/lonely)



- (iv) “We didn’t have any company for Christmas.” The essence of Christmas spirit with reference to the above statement is : 1
- (A) to make a special dish to mark the celebration.
- (B) to invite guests to join the celebration.
- (C) to show off his wealth.
- (D) to conduct communal prayers.
- (v) Complete the following statement suitably : 1
- The peddler was feeling uncomfortable at the ironmaster’s invitation because the peddler only wanted to _____.
- (vi) Select the correct option from those given in brackets to fill in the blank. 1
- “Please don’t think that I have such a fine home.”
- The ironmaster uttered the above statement to make the peddler feel _____. (awkward/comfortable)

OR

- (b) “They wouldn’t make you manager straight off, Soaf.”
- “I’ll be like Mary Quant,” Sophie said. “I’ll be a natural. They’ll see it from the start. I’ll have the most amazing shop this city’s ever seen.”
- Jansie, knowing they were both earmarked for the biscuit factory, became melancholy. She wished Sophie wouldn’t say these things.
- When they reached Sophie’s street Jansie said, “It’s only a few months away now, Soaf, you really should be sensible. They don’t pay well for shop work, you know that, your dad would never allow it.”
- (Going Places)



- (i) Choose the correct option : 1
What trait of the speaker is reflected in the first line of the extract ?
(A) optimistic
(B) pessimistic
(C) realistic
(D) fatalistic
- (ii) Choose the correct option from those given in the brackets to fill in the blank. 1
“They’ll see it from the start.” The above statement reflects Sophie’s _____. (modesty/overconfidence)
- (iii) “They don’t pay well for the shop work.” Jansie’s statement depicts Jansie as a : 1
(A) happy-go-lucky girl.
(B) practical friend of Sophie.
(C) casual friend of Sophie.
(D) jealous friend.
- (iv) Complete the following suitably : 1
“Your dad would never allow it” The image of Sophie’s father as we infer from the above statement is that he _____.
- (v) What does the following line from the extract showcase about Jansie’s emotions ? 1
“Soaf, you really should be sensible.”
(i) indifference
(ii) concern
(iii) regret
(iv) envy
- (vi) “They were both ‘earmarked’ for the biscuit factory.” What does the word ‘earmarked’ convey ? 1



SECTION C

Literature

(40 marks)

7. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×6=6

- (a) Those who prepare green wars,
wars with gas, wars with fire,
victory with no survivors,
would put on clean clothes
and walk about with their
brothers
in the shade, doing nothing.

(Keeping Quiet)

- (i) Select the line/s that suggests the following : 1
The so-called victors of the wars are indifferent to the consequences of their actions.
- (ii) What does the imagery of 'green wars' **not** represent in the given extract ? 1
(A) environmental conflict
(B) harmful destruction
(C) sustainable peace
(D) continuous deforestation
- (iii) Complete the following suitably.
"Would put on clean clothes ?"
'Clean clothes' here refers to _____. 1
- (iv) Choose a word from the brackets to complete the following suitably :
Phrases like 'victory with no survivors' illustrate the _____ (irony/satire) in the situation where those claiming victory actually achieve nothing of true value. 1



- (v) Read the Assertion and the Reason below with reference to the given context. 1

Assertion : The poet criticizes the superficial actions of those involved in conflicts.

Reason : The actions described are meant to highlight the futility and destructiveness of wars.

Choose the correct option :

- (A) Both the assertion and the reason are true and the reason is the correct explanation of the assertion.
- (B) Both the assertion and the reason are true, but the reason is **not** the correct explanation of the assertion.
- (C) The assertion is true, but the reason is false.
- (D) The assertion is false, but the reason is true.
- (vi) What is the message that you would give to the warmongers, based on the given extract ? 1

OR

- (b) A thing of beauty is a joy forever

Its loveliness increases, it will never

Pass into nothingness; but will keep

A bower quiet for us, and a sleep

Full of sweet dreams, and health, and quiet breathing.

(A Thing of Beauty)

- (i) Which of the above lines suggests that ‘the enduring nature of beauty brings everlasting joy ?’ 1



- (ii) The phrase 'A bower quiet for us' does **not** imply : 1
- (A) A restful place
- (B) A noisy surrounding
- (C) Peace and calm
- (D) Shelter and protection
- (iii) In the line 'Its loveliness increases', the word 'its' refers to _____. 1
- (iv) Choose a word from the brackets to complete the following suitably :
The phrase 'joy forever' implies that the essence of beauty is a source of _____ (eternal/transient) peace and happiness. 1
- (v) Read the following statements : 1
- Assertion : The poet believes that beauty provides everlasting joy and comfort.
- Reason : Beauty creates an environment conducive to health and well-being.
- Choose the correct option from among the following :
- (A) Both the assertion and the reason are true and the reason is the correct explanation of the assertion.
- (B) Both the assertion and the reason are true, but the reason is **not** the correct explanation of the assertion.
- (C) The assertion is true, but the reason is false.
- (D) The assertion is false, but the reason is true.
- (vi) State in one sentence, what you would include in your address to those who seek beauty. 1



8. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×4=4

- (a) My Antarctic experience was full of such epiphanies, but the best occurred just short of the Antarctic Circle at 65.55 degrees south. The *Shokalskiy* had managed to wedge herself into a thick white stretch of ice between the peninsula and Tadpole Island which was preventing us from going any further. The Captain decided we were going to turn around and head back north, but before we did, we were all instructed to climb down the gangplank and walk on the ocean. So there we were, all 52 of us, kitted out in Gore-Tex and glares, walking on a stark whiteness that seemed to spread out forever. Underneath our feet was a metre-thick ice pack, ... In the periphery Crabeater seals were stretching and sunning themselves much like stray dogs It was nothing short of a revelation.

(Journey to the end of the Earth)

- (i) Complete the following suitably. 1
The passage suggests that the author's Antarctic experience was _____.
- (ii) Choose the correct option : 1
The *Shokalskiy* was wedged in a thick stretch of ice. As a result the captain _____.
(A) felt frustrated by the obstacles
(B) decided to surge ahead
(C) remained there till the ice melted
(D) decided to turn around
- (iii) What did the Captain instruct the team to do ? 1
- (iv) Why does the writer describe what happens as an epiphany ? 1

OR



- (b) It was celebration time for all the tigers inhabiting Pratibandapuram.

The State banned tiger hunting by anyone except the Maharaja. A proclamation was issued to the effect that if anyone dared to fling so much as a stone at a tiger, all his wealth and property would be confiscated.

The Maharaja vowed he would attend to all other matters only after killing the hundred tigers. Initially the king seemed well set to realise his ambition.

(The Tiger King)

- (i) Complete the following suitably : 1
It was celebration time for all the tigers because _____.
- (ii) What strategy does the king use to ensure that he hunts all the tigers ? 1
- (iii) The king's 'vow' indicates that he is a _____ man. 1
(A) resilient
(B) determined
(C) generous
(D) cautious
- (iv) What were the consequences of going against the king's proclamation ? 1

9. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×6=6

- (a) At last, around four in the afternoon, the poet (or the editor) arrived. He was a tall man, very English, very serious and of course very unknown to all of us. Battling with half a dozen pedestal fans on the shooting stage, The Boss read out a long speech. It was obvious that he too knew precious little about the poet (or the editor). The speech was all in the most general terms but here and there it was peppered with words like 'freedom' and 'democracy'. Then the poet spoke. He couldn't have addressed a more dazed and silent audience — no one knew what he was talking about and his accent defeated any attempt to understand what he was saying.

(Poets and Pancakes)



- (i) Give a brief description of the editor. 1
- (ii) The Boss's long speech and the visitor's serious demeanour indicates _____. 1
- (iii) The poet addressed _____ (a puzzled/an enthusiastic) audience. 1
- (iv) What, added as a last straw, made the poet's speech difficult to understand ? 1
- (v) Select the textual option that is closest to indicating a sense of unfamiliarity about the poet (or the editor). 1
- (A) He was a tall man, very English.
- (B) Battling with half a dozen pedestal fans on the shooting stage.
- (C) Very serious and of course very unknown to all of us.
- (D) The Boss read out a long speech.
- (vi) Why was the speech by The Boss in 'most general terms' ? 1

OR

- (b) Umberto Eco : Aah, now that is more difficult to explain. I have some philosophical interests and I pursue them through my academic work and my novels. Even my books for children are about non-violence and peace...you see, the same bunch of ethical, philosophical interests.

And then I have a secret. Did you know what will happen if you eliminate the empty spaces from the universe, eliminate the empty spaces in all the atoms ? The universe will become as big as my fist.

(The Interview)



- (i) Complete the following suitably : 1
Eco suggests that his books for children also share his ethical interest because they are about _____ (violence/peace).
- (ii) Complete the following suitably : 1
Umberto Eco's philosophical interests are _____ in his academic work and novels, making them interconnected.
- (iii) Select the textual option that is closest to indicating how his philosophical interests are represented. 1
(A) Aah, now that is more difficult to explain.
(B) I have a secret.
(C) I pursue them through my academic work and my novels.
(D) The universe will become as big as my fist.
- (iv) What does the following line from the extract showcase ? 1
"The same bunch of ethical, philosophical interests".
(A) separation
(B) interconnectedness
(C) isolation
(D) division
- (v) "I work in empty spaces." Choose the option that most accurately captures Eco's idea of empty spaces. 1
(A) management of time
(B) integration of work
(C) management of space
(D) tasks of a writer
- (vi) What according to Umberto Eco will happen if all the empty spaces are eliminated from the universe ? 1



SECTION C

Literature

(40 marks)

7. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×6=6

- (a) What I want should not be
confused
with total inactivity.
Life is what it is about;
I want no truck with death.
If we were not so single-minded
about keeping our lives moving

(Keeping Quiet)

- (i) Explain with reference to the given extract, “What I want should not be confused with total inactivity.” 1
- (ii) What does the term single-mindedness **not** imply in the given extract ? 1
- (A) persistence
- (B) determination
- (C) narrow-mindedness
- (D) tenacity
- (iii) In the line ‘Life is what it is about’, the phrase ‘it’ refers to _____. 1
- (iv) The poet has used the phrase ‘total inactivity’ to illustrate _____ (irony/satire) in the perception that peace means doing nothing. 1



- (v) Read the assertion and the reason below, with reference to the given extract : 1

Assertion : The poet values an active and meaningful life.

Reason : Inactivity is equated with leisure, which the poet rejects.

Choose the correct option.

- (A) Both the assertion and the reason are true.
(B) The assertion is true, but the reason is false.
(C) Both the assertion and the reason are false.
(D) Both the assertion and the reason are true, but the reason is **not** the correct explanation of the assertion.
- (vi) State in one sentence, what advice you would give to those engaged in ceaseless mechanized activity. 1

OR

- (b) Therefore, on every morrow, are we wreathing

A flowery band to bind us to the earth,

Spite of despondence, of the inhuman dearth

Of noble natures, of the gloomy days,

Of all the unhealthy and o'er-darkened ways

Made for our searching: yes, in spite of all,

Some shape of beauty moves away the pall

From our dark spirits.

(A Thing of Beauty)

- (i) Select the phrase that suggests the following : 1
In difficult times, beauty comes to our aid, in some form or the other, to make us overcome these difficulties.



- (ii) What does the imagery of 'flowery band' **not** represent in the given extract ? 1
- (A) connections to life
(B) a thing of beauty
(C) imprisonment
(D) earthly ties
- (iii) Complete the following suitably. 1
In the line, 'moves away the pall from our dark spirits', the phrase 'the pall' refers to _____.
- (iv) The poet's use of the phrase 'inhuman dearth' illustrates the _____ (scarcity/plentitude) of noble human qualities. 1
- (v) Read the assertion and the reason below, with reference to the given extract : 1
- Assertion :* The poet values beauty as it overcomes despondence and gloom.
- Reason :* Beauty, despite the world's hardships, provides comfort and lifts our spirit.
- Choose the correct option.
- (A) Both the assertion and the reason are true and the reason is the correct explanation of the assertion.
(B) Both the assertion and the reason are true, but the reason is **not** the correct explanation of the assertion.
(C) The assertion is true, but the reason is false.
(D) The assertion is false, but the reason is true.
- (vi) State in one sentence, what advice would you give to those facing dark times. 1



8. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×4=4

(a) Six hundred and fifty million years ago, a giant amalgamated southern supercontinent — Gondwana — did indeed exist, centred roughly around the present-day Antarctica. Things were quite different then: humans hadn't arrived on the global scene, and the climate was much warmer, hosting a huge variety of flora and fauna. For 500 million years Gondwana thrived, but around the time when the dinosaurs were wiped out and the age of mammals got under way, the landmass was forced to separate into countries, shaping the globe much as we know it today.

(Journey to the end of the Earth)

- (i) What was the climate like in Antarctica before the humans arrived on the global scene ? 1
- (ii) Gondwana existed nearly _____. 1
- (iii) Select the suitable option to complete the following :
Gondwana, separating into countries, contributes to the reader's understanding of the _____. 1
- (A) complexity of geological processes
(B) simplicity of continental formation
(C) speed of geological changes
(D) stability of ancient landmasses
- (iv) What difference does the author draw between then and now ? 1

OR

(b) Not that he faced no dangers. There were times when the bullet missed its mark, the tiger leapt upon him and he fought the beast with his bare hands. Each time it was the Maharaja who won. At another time he was in danger of losing his throne. A high-ranking British officer visited Pratibandapuram. He was very fond of hunting tigers. And fonder of being photographed with the tigers he had shot.

(The Tiger King)

- (i) Complete the following suitably : 1
The passage indicates that the British officer visited Pratibandapuram because _____.



- (ii) What danger was faced by the Maharaja on the tiger hunt ? 1
- (iii) From the given extract, it is evident that the Maharaja was a _____ man. 1
- (iv) Select the suitable option to complete the following : 1
- The phrase 'fonder of being photographed with the tigers' contributes to the reader's understanding of the officer's _____.
- (A) indifference towards hunting
- (B) desire for recognition/fame
- (C) love for tigers
- (D) love for photography

9. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×6=6

- (a) The make-up department of the Gemini Studios was in the upstairs of a building that was believed to have been Robert Clive's stables The make-up room had the look of a hair-cutting salon with lights at all angles around half a dozen large mirrors. They were all incandescent lights, so you can imagine the fiery misery of those subjected to make-up. The make-up department was first headed by a Bengali who became too big for the studio and left.

(Poets and Pancakes)

- (i) The phrase 'fiery misery' in the given text refers to the _____ of the actors. 1
- (A) realization
- (B) confusion
- (C) expectation
- (D) discomfort
- (ii) Select the correct option from those given in brackets to fill in the blank. 1
- The description of the make-up room is a/an _____ (criticism/admiration) of the make-up department in Gemini Studios.



- (iii) Complete the following suitably : 1
The historical significance of the make-up room was _____.
- (iv) With reference to the given extract, what does the reference to 'half a dozen large mirrors' suggest ? 1
- (v) Select the textual option that is closest to indicating a sense of discomfort. 1
- (A) The make-up room had the look of a hair-cutting salon.
- (B) The make-up department was first headed by a gang of nationally integrated make-up men.
- (C) They were all incandescent lights, so you can imagine the fiery misery.
- (D) The make-up department head was at first a Bengali, who soon quit.
- (vi) What was the fate of the head of the make-up department ? 1

OR

- (b) Umberto Eco: Aah, now that is more difficult to explain. I have some philosophical interests and I pursue them through my academic work and my novels. Even my books for children are about non-violence and peace...you see, the same bunch of ethical, philosophical interests.

And then I have a secret. Did you know what will happen if you eliminate the empty spaces from the universe, eliminate the empty spaces in all the atoms ? The universe will become as big as my fist. Similarly, we have a lot of empty spaces in our lives. I call them interstices. Say you are coming over to my place. You are in an elevator and while you are coming up, I am waiting for you. This is an interstice, an empty space. I work in empty spaces.

(The Interview)



- (i) What does Umberto's statement on his philosophical interest reveal about him ? 1
- (ii) Select the correct option from those given in brackets to fill in the blank. 1
His academic work and children's books both reveal _____
(similar/experimental) interests.
- (iii) What example of an interstice does Umberto Eco give ? 1
- (iv) The phrase 'as big as my fist' most nearly means _____ 1
with reference to the given text.
(A) strong
(B) stingy
(C) very small
(D) abundant
- (v) What secret is Umberto referring to ? 1
- (vi) Umberto Eco says, he works in interstices. By this, he means that he works _____. 1
(A) in empty spaces
(B) when he is in the university
(C) on his philosophical interest
(D) when he is with children



SECTION C

Literature

(40 marks)

7. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×6=6

(a) If we were not so single-minded
about keeping our lives moving,
and for once could do nothing,
perhaps a huge silence
might interrupt this sadness
of never understanding ourselves
and of threatening ourselves with
death.

(Keeping Quiet)

- (i) Select the phrase from the above extract that suggests the following :
The ceaseless activity in our daily life. 1
- (ii) What does the imagery of 'single-mindedness' **not** represent in the given extract ? 1
(A) flexibility
(B) unwavering determination
(C) dedication
(D) persistent efforts
- (iii) Complete the following suitably : 1
In the line, 'might interrupt this sadness', the phrase 'this sadness' refers to _____.
- (iv) The poet has used phrases like 'never understanding ourselves' to illustrate the _____ (irony/humour) in continuous movement without reflection. 1



- (v) Read the assertion and the reason below, with reference to the given extract. 1

Assertion : The poet emphasizes the need for productive silence and reflection.

Reason : Purposeless continuous movement leads to sadness and existential threats.

Choose the correct option from the following :

- (A) Both the assertion and the reason are true, but the reason is **not** the correct explanation of the assertion.
- (B) Both the assertion and the reason are true, and the reason is the correct explanation of the assertion.
- (C) The assertion is true, but the reason is false.
- (D) The assertion is false, but the reason is true.
- (vi) State in one sentence, what advice you would give to people who are always busy. 1

OR

- (b) For simple sheep; and such are daffodils
With the green world they live in; and clear rills
That for themselves a cooling covert make
'Gainst the hot season; the mid forest brake,
Rich with a sprinkling of fair musk-rose blooms;
And such too is the grandeur of the dooms
We have imagined for the mighty dead;
All lovely tales that we have heard or read;
An endless fountain of immortal drink,
Pouring unto us from the heaven's brink.

(A Thing of Beauty)



- (i) Select the phrase that suggests the following :
The small streams make a shelter for themselves. 1
- (ii) What does the phrase ‘An endless fountain of immortal drink,
Pouring unto us from the heaven’s brink” **not** imply in the
extract ? 1
(A) unlimited beauty
(B) eternal inspiration
(C) finite resources
(D) everlasting joy
- (iii) Complete the following suitably :
In the line, ‘the grandeur of the dooms’, the word ‘dooms’ refers
to _____. 1
- (iv) The poet has used phrases like ‘mighty dead’ to illustrate the
_____ (irony/satire) in the lasting impact of beauty and
heroism. 1
- (v) Read the assertion and the reason below, with reference to the
given extract. 1
Assertion : The poet views beauty as a finite source of
inspiration.
Reason : Natural elements and tales of heroism provide a
continuous flow of joy and inspiration.
Choose the correct option regarding their relationship :
(A) Both the assertion and the reason are true, and the
reason is the correct explanation of the assertion.
(B) Both the assertion and the reason are true, but the
reason is **not** the correct explanation of the assertion.
(C) The assertion is true, but the reason is false.
(D) The assertion is false, but the reason is true.
- (vi) State in one sentence, what message you would give to those
seeking inspiration from nature. 1



8. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×4=4

- (a) My journey began 13·09 degrees north of the Equator in Madras, and involved crossing nine time zones, six checkpoints, three bodies of water, and at least as many ecospheres.

By the time I actually set foot on the Antarctic continent I had been travelling over 100 hours in combination of a car, an aeroplane, and a ship; so, my first emotion on facing Antarctica's expansive white landscape and uninterrupted blue horizon was relief, followed up with an immediate and profound wonder.

(Journey to the end of the Earth)

- (i) Complete the following suitably. 1
The passage suggests that the author's journey to Antarctica was _____.
- (ii) Select the correct option from those given in brackets to fill in the blank : 1
The author highlights the numerous challenges and difficulties to emphasise the _____ (remoteness/proximity) of Antarctica.
- (iii) How does the mention of crossing multiple time zones, checkpoints and bodies of water impact the writer ? 1
(A) is excited by the adventure of travel
(B) feels indifferent towards the journey
(C) is surprised by the number of obstacles
(D) feels overwhelmed by the logistical challenges
- (iv) How does the description of the journey reflect the author's initial emotions upon arriving in Antarctica ? 1

OR



- (b) At another time he was in danger of losing his throne. A high-ranking British officer visited Pratibandapuram. He was very fond of hunting tigers. And fonder of being photographed with the tigers he had shot. As usual, he wished to hunt tigers in Pratibandapuram. But the Maharaja was firm in his resolve. He refused permission. "I can organise any other hunt. You may go on a boar hunt. You may conduct a mouse hunt. We are ready for a mosquito hunt. But tiger hunt! That's impossible!"

(The Tiger King)

- (i) Complete the following suitably.

The passage suggests that the Maharaja was in danger of losing his throne because _____. 1

- (ii) What phrase in the above passage indicates that the Maharaja was a determined man who stuck to his decision ? 1

- (iii) By saying 'that's impossible', the Maharaja in the above passage means _____. 1

- (A) he will not give up his throne
(B) that the British officer cannot go on a tiger hunt in his kingdom
(C) he would pass a law which forbade hunting of boars
(D) that the Maharaja would accompany the officer on a tiger hunt

- (iv) List any one characteristic of the Maharaja as demonstrated in the above passage. 1



9. Read the following extracts and answer the questions for any **one** of the given two, (a) or (b) : 1×6=6

- (a) The make-up room had the look of a hair-cutting salon with lights at all angles around half a dozen large mirrors. They were all incandescent lights, so you can imagine the fiery misery of those subjected to make-up. The make-up department was first headed by a Bengali who became too big for a studio and left. He was succeeded by a Maharashtrian who was assisted by a Dharwar Kannadiga, an Andhra, a Madras Indian Christian, an Anglo-Burmese and the usual local Tamils. All this shows that there was a great deal of national integration long before A.I.R. and Doordarshan began broadcasting programmes on national integration. This gang of nationally integrated make-up men could turn any decent-looking person into a hideous crimson hues monster with the help of truck-loads of pancake and a number of other locally made potions and lotions.

(Poets and Pancakes)

- (i) Why does the author compare the make-up room to a salon ? 1
- (ii) Select the correct option from those given in brackets to fill in the blank. 1
The term 'crimson hues monster' refers to the make-up applied to actors to make them look ugly so that they look _____ (beautiful/terrified) on screen.
- (iii) Complete the following sentence appropriately. 1
The make-up team's ability to transform actors reveals two things about their skills :
First, their _____ and second, their use of _____.
- (iv) Give textual evidence to prove that the make-up team reflected national integration. 1
- (v) Explain the phrase 'fiery misery' with reference to the given extract. 1



(vi) What does the following line from the extract showcase ? 1

“With the help of truck-loads of pancake and a number of other locally made potions and lotions.”

- (A) creativity
- (B) normalcy
- (C) exaggeration
- (D) simplicity

OR

(b) So it is hardly surprising that opinions of the interview — of its functions, methods and merits — vary considerably. Some might make quite extravagant claims for it as being, in its highest form, a source of truth, and, in its practice, an art. Others, usually celebrities who see themselves as its victims, might despise the interview as an unwarranted intrusion into their lives, or feel that it somehow diminishes them.

(The Interview)

(i) What does the author mean by the phrase ‘extravagant claims’ ? 1

(ii) Select the correct option from those given in the brackets to fill in the blank. 1

The phrase ‘hardly surprising’ indicates that the writer is _____ (taken aback/unsurprised) at the varied opinions of the interview.

(iii) Complete the following sentence suitably. 1

The people have diverse opinions about an interview. Some consider it _____, while others _____.



- (iv) What does the phrase 'unwarranted intrusion' illustrate about an interview ? 1
'... might despise the interview as an unwarranted intrusion into their lives.'
(A) celebration
(B) confession
(C) invitation
(D) interference
- (v) Select the textual option that is closest to indicating a feeling of deep dislike : 1
(A) celebrities see themselves as victims
(B) extravagant claims
(C) despise the interview
(D) vary considerably
- (vi) Why do celebrities feel that interviews 'diminish' them ? 1

10. Answer any **five** of the following six questions in 40 – 50 words each. 5×2=10

- (i) What is the complaint of the country folk against the 'party in power' ? (A Roadside Stand)
- (ii) Why did Sophie dream of having a boutique after leaving school ? (Going Places)
- (iii) Why is the Englishman's visit referred to as an unexplained mystery ? (Poets and Pancakes)
- (iv) Why did Gandhi agree to a settlement of 25% refund to the farmers ? (Indigo)
- (v) Explain why Umberto Eco said, "I started writing novels by accident." (The Interview)
- (vi) How would humanity benefit if people maintained silence ? (Keeping Quiet)

PM SHRI KENDRIYA VIDYALAYA KANKER

Autumn Break Holiday Homework

(2026-27)

Subject – Geography

CLASS-XII

1. Complete the practical file.
2. Make a separate file of map work (as per CBSE course structure)
3. Complete the notes of International Trade and Geographical perspective.

History

Complete the following work during the break:

1. Chapter 12 – Framing the Constitution: The Beginning of a New Era

Read the chapter carefully.

Write all the NCERT textbook questions and answers in your History notebook.

Revise and learn the important concepts, events, personalities and key terms related to the framing of the Indian Constitution.

2. History Project Work

Complete the project work topic assigned to you individually.

Prepare and submit the project according to the instructions given.

Ensure that your project is neat, well-organised and submitted on time.

3. Pre-Board Examination Preparation

Students must revise and memorise the questions from the last three years, shared in the WhatsApp group, for all four chapters of part III.

Instructions:

Complete all written work neatly and sincerely.

Bring your completed notebook and project work after the break.

Make the best use of the break for revision and examination preparation.

Class XII – Physical Activity Trainer (PAT)

1. Complete all pending work in your notebook.
2. Write five points on the importance of first aid in sports.
3. Write the basic steps to follow during a sports injury.
4. Daily Exercise: Perform at least 30 minutes of physical activity every day, such as walking, jogging, cycling, yoga, or playing outdoor games, according to your ability.

PM SHRI Kendriya Vidyalaya Kanker (C. G)
Holidays Homework Class XII Economics

1. Sample Question Paper PDF class 12  Economics QP XII .pdf
(click on the following link if the pdf icon is not accessible
https://drive.google.com/file/d/1q_9_O25XZB_Z3TXWAXZ0S4cW5M7mTorw/view?usp=drive_link)
2. A4 sheet of Formula
 - a. National Income (all three method in comparative way)
 - b. APC APS vs MPC MPS (with graphs)
3. Question Paper solution MT 01, 02, 03, 04
4. What I have learnt (in 10 lines) from the Project (that was successfully submitted by me on before 14 OCT 2026)

NOTE: *ONLY ANSWERS SHOULD BE WRITTEN ON PLAIN A4 SHEETS* (using single side only)

HAPPY HOLIDAYS ... !!

- सभी प्रश्न करने अनिवार्य हैं
 - दिए गए प्रत्येक कार्य को गृहकार्य पुस्तिका में करना सुनिश्चित करें।
 - अपनी गृहकार्य पुस्तिका को अच्छे से कवर करके लाएं।
-

1. किशोरों में बढ़ती स्क्रीन के लत, ऑनलाइन शॉपिंग के फायदे और नुकसान विषयों पर 120 शब्दों में रचनात्मक लेखन कीजिए।
 2. देश में चिकित्सा व्यवस्था की कमी को आधार बनाकर सम्पादकीय लिखिए।
 3. कहानी और नाटक में क्या अंतर है?
 4. कहानी को नाटक में रूपांतरित करते समय किन बातों का ध्यान रखा जाता है?
 5. रेडियो नाटक कैसे बनता है?
 6. रेडियो नाटक लिखते समय किन बातों का ध्यान रखा जाता है?
 7. समाचार लेखन की उल्टा पिरामिड शैली का वर्णन कीजिए।
 8. पत्रकार कितने प्रकार के होते हैं? उनके विषय में लिखिए।
 9. यशोधर बाबू का चरित्र चित्रण कीजिए।
 10. 'जूझ' पाठ का लेखक आनंद विद्यालय जाना किस तरह शुरू कर पाता है?
 11. पतंग कविता में प्रयुक्त मानवीकरण अलंकार को छांटकर लिखिए।
 12. सिद्ध कीजिए 'कैमरे में बंद अपाहिज' कविता करुणा के मुखौटे में छिपी क्रूरता की कविता है।
 13. 'बादल राग' कविता का भावार्थ और शिल्प सौंदर्य लिखिए।
 14. भक्तिन की चारित्रिक विशेषताएं लिखिए।
 15. बाज़ार दर्शन' पाठ में पर्चेजिंग पावर से गर्वित लोगों का बाज़ार पर क्या प्रभाव पड़ता है?
 16. 'पहलवान की ढोलक' कहानी का सारांश और सन्देश अपने शब्दों में लिखिए।
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- ✓ दिए गए विषय पर बहुविषयक परियोजना (MDP) तैयार करें।

टॉपिक :

🌈 "सोशल मीडिया: boon या bane (बरदान या अभिशाप)"

प्रश्न:

-ज्ञानात्मक प्रश्न (Knowledge Based)

1. सोशल मीडिया की परिभाषा लिखिए।
2. भारत में सोशल मीडिया के प्रमुख प्लेटफॉर्म कौन-कौन से हैं?
3. सोशल मीडिया का पहला प्लेटफॉर्म किसे माना जाता है?

बोधोन्मुख प्रश्न (Comprehension Based)

1. सोशल मीडिया किस प्रकार युवाओं के जीवन को प्रभावित कर रहा है?
2. "सोशल मीडिया अभिव्यक्ति की स्वतंत्रता का सशक्त माध्यम है" इस कथन की व्याख्या कीजिए।
3. छात्र-जीवन में सोशल मीडिया के उपयोग के लाभ बताइए।

अनुप्रयोगात्मक प्रश्न (Application Based)

1. यदि आपको विद्यालय में "सोशल मीडिया जागरूकता अभियान" चलाने का अवसर मिले तो आप क्या योजनाएँ बनाएंगे?
2. आप एक विद्यार्थी के रूप में सोशल मीडिया का उपयोग सकारात्मक दिशा में कैसे कर सकते हैं?

उच्च स्तरीय प्रश्न (Higher Order Thinking)

1. क्या आपको लगता है कि सोशल मीडिया वास्तविक संबंधों को कमजोर कर रहा है? अपने तर्क दीजिए।
2. सोशल मीडिया के दुरुपयोग को रोकने के लिए सरकार व समाज को कौन-कौन से कदम उठाने चाहिए?

(A4 साइज पेपर में) (कोबरा फाइल में कम से कम 15 पेजों में यह कार्य करें।)

विशाल जैन

स्नातकोत्तर शिक्षक (हिन्दी)