

Class 8: English (Autumn Break Homework)

1. Reading Comprehension:

Read the Lesson " Spectacular Wonders" and write its questions and answers in your notebook.

Skills: Comprehension.

2. Grammar Practice:

Revise Tenses: Write 5 sentences of each tense.

Competency: Tense accuracy in writing.

3. Creative Writing:

Write a short story beginning with

"I woke up and everything had changed..."

Skills: Imagination and narrative development.

4. Vocabulary Building:

Read English newspaper daily and write any five new words and their meanings.

Skills: Vocabulary enrichment and comprehension.

5. Article Writing:

Write an article on "The importance of spending time with family."

Skills: Article structure and thought development.

6. Reading Comprehension:

Choose a newspaper article and write what do you learn from it.

Competency: Critical thinking.

7. Poetry Practice:

Write a poem of your own.

Class 7: English (Autumn Break Homework)

1: Reading Comprehension:

Read the Lesson "The Tunnel" and write a summary in 100 words.

Skills: Summarization, identifying main points.

2: Grammar Practice:

Revise tenses and write their examples. (5 sentences of each tense)

3: Creative Writing:

Write a letter to your friend describing a special moment with your family during the autumn break.

Skills: Writing letters with proper format and tone.

4: Vocabulary Building: Read English newspaper daily and write 10 new words and their meanings.

Skills: Expanding vocabulary.

5: Article Writing:

Write an article on "How festivals bring people together." (100-150 words)

Skills: Essay organization, coherence.

Class 8: English (Autumn Break Homework)

1. Reading Comprehension:

Read the Lesson "Spectacular Wonders" and write its questions and answers in your notebook.

Skills: Comprehension.

2. Grammar Practice:

Revise Tenses: Write 5 sentences of each tense.

Competency: Tense accuracy in writing.

3. Creative Writing:

Write a short story beginning with

"I woke up and everything had changed..."

Skills: Imagination and narrative development.

4. Vocabulary Building:

Read English newspaper daily and write any five new words and their meanings.

Skills: Vocabulary enrichment and comprehension.

5. Article Writing:

Write an article on "The importance of spending time with family."

Skills: Article structure and thought development.

6. Reading Comprehension:

Choose a newspaper article and write what do you learn from it.

Competency: Critical thinking.

7. Poetry Practice:

Write a poem on

Subject: English Language and Literature (184)

Q.1 Complete the following sentences using the correct form of the words given in brackets.

- a) Neither the teacher nor the students ____ (be) aware of the change in the schedule.
- b) The school ____ (organise) several awareness programmes this year.
- c) If students ____ (use) their time wisely, they will perform better in examinations.
- d) The teacher asked Riya why she ____ (not complete) her assignment.
- e) Each of the participants ____ (receive) a certificate for their contribution.

Q2. Formal Letter Writing

Your school has noticed that many students waste food in the canteen, while some children in the community struggle to get nutritious meals. Write a letter to the Principal in 100–120 words suggesting practical measures to reduce food wastage and promote responsible food habits among students.

Q.3 Learn all the exercises completed in the class.

Q.4 Solve a Previous Year question paper in your notebook.

Half day homework (VI)

6th

- Discover 2 to 3 object at home that has been around since you were born
 1. Ask your parent 'why was this important in your life?'
 2. Write about it 50-60 words

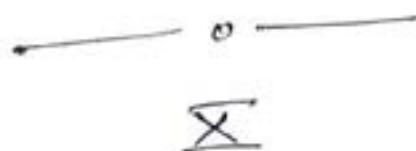
7th

- Explore India's rich culture through its traditional pattern & folk art.
 1. Name the state & mention the traditional technique.

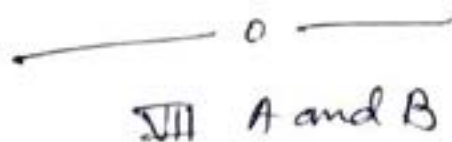
- Common electronic & electrical component
 1. Make a table in your notebook, collect real component (from old or broken object) or collect their pictures & paste them.
Resistor, Capacitor, LED, Diode, Switch, wire

- Agricultural seasons & harvest festivals
 1. Make a table of Indian cropping seasons & harvesting festivals with major crop harvested.

- Q1. Learn tables 2 to 20
- Q2. Learn and write types of angles with figure
 (i) Acute angle (ii) Right angle (iii) Obtuse angle
 (iv) Straight angle (v) complete angle (vi) Reflex angle
- Q3. Write and learn formula for Area and Perimeter of the following figures.
 (i) Triangle (ii) Square (iii) Rectangle (iv) Parallelogram
 (v) Trapezium (vi) circle
- Q4. Find the Perimeter and Area of your Home's
 (i) window (ii) Door (iii) Study table (iv) Kitchen platform
- Q5. Write and draw figure with examples.
 (i) One dimensional
 (ii) Two dimensional
 (iii) Three dimensional



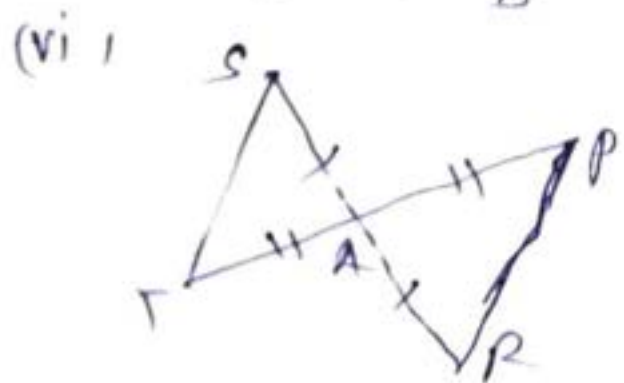
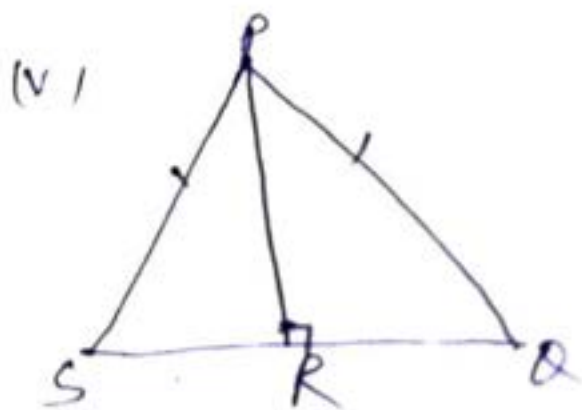
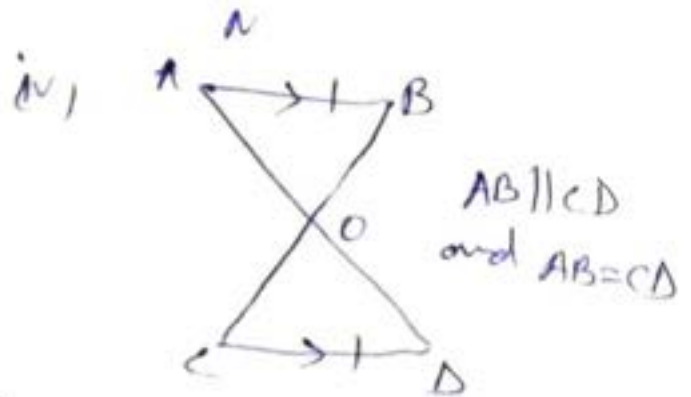
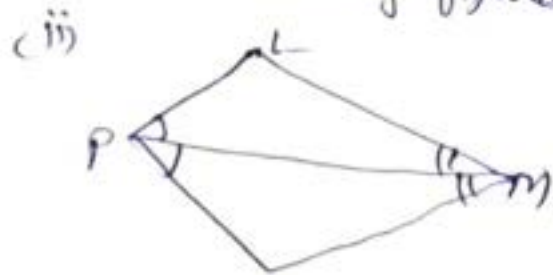
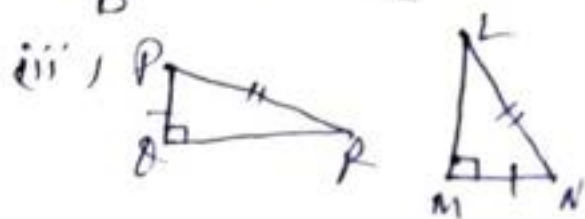
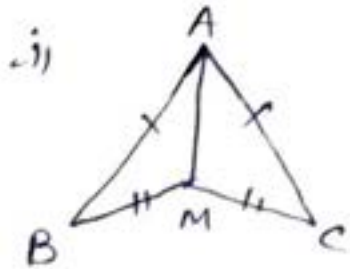
★ Solve any three last board exam papers.



- Q1. Learn tables 2 to 20
- Q2. Learn all Definitions with examples
 (i) Natural numbers (ii) whole numbers (iii) Prime numbers
 (iv) composite numbers (v) Twin Prime (vi) co-prime (vii) Integer
 (viii) Rational Numbers.
- Q3. Learn and write with diagram Types of Triangles
 (i) According to its sides (ii) According to its Angles

Q.4 If $\triangle XYZ \cong \triangle ROS$ and $\triangle ABC \cong \triangle EFD$ then
Identify the corresponding vertices, sides and Angles

Q.5 Write congruence conditions of following figures



शरदकालीन अवकाशीय गृहकाय

विषय :- हिन्दी
विषय शिक्षक :- भोजकांत के. मेल्ले

कक्षा : 8 वीं

- 1) अनुच्छेद लेखन : * समय का महत्व
* विद्यार्थी और अनुशासन
- 2) सेवाद लेखन :- दो मित्रों को बीच हुई परीक्षा पर चर्चा
- 3) पत्र लेखन :- दो औपचारिक पत्र
दो अनौपचारिक पत्र
- 4) अर्धवार्षिक परीक्षा का प्रश्नपत्र हल कीजिए:-

कक्षा : 9 वीं

- 1) अनुच्छेद लेखन :- * नारी शिक्षा का महत्व
* व्यायाम का महत्व
- 2) सेवाद लेखन :- बिजली कटौती से उत्पन्न समस्या से परेशान महिलाओं के मध्य हुई बातचीत।
- 3) पत्र लेखन :- दो औपचारिक पत्र
दो अनौपचारिक पत्र
- 4) E-मेल : दो ई-मेल लिखिए
- 5) पढ़ाए गए सभी पाठों की पुनरावृत्ति कीजिए।

कक्षा - 10 वीं

- ① तीन विषयों पर खंखल लेखन।
- ② पाँच विषयों पर अनुच्छेद लेखन।
- ③ पत्र लेखन: दो औपचारिक पत्र
दो अनौपचारिक पत्र
- ④ PT-2 परीक्षा प्रश्न-प्रश्न हल कीजिए।
- ⑤ पढ़ाए गए सभी पाठों की पुनरावृत्ति कीजिए।
- ⑥ अपने पाठ्यक्रम के पाँचों अंकों के पाँच उदाहरण परिभाषा सहित लिखिए।

केन्द्रीय विद्यालय 1एसटीसी (प्रथम-पाली) जबलपुर (म.प्र.)

शरदकालीन अवकाशीय गृहकार्य (हॉलीडे होमवर्क) - 2026-27

कक्षा	शरदकालीन अवकाश में छात्रों के लिए गृहकार्य
छठवीं-द	अपनी पाठ्यपुस्तक मल्हार से प्रतिदिन एक पेज सुलेख लिखेंगे। सत्रिया और बिहू नृत्य पाठ की अभ्यास पूरी लिख लेंगे। सभी छात्र अपनी प्रथम सत्र की हिन्दी की कॉपी सम्हाल कर रखेंगे।
सातवीं-अ	अपनी पाठ्यपुस्तक मल्हार से प्रतिदिन एक पेज सुलेख लिखेंगे। पाठ - 6 गिरिधर कविराय की कुंडलियों पाठ की अभ्यास पूरी लिख लेंगे। पाठ - 6 गिरिधर कविराय की कुंडलियाँ पाठ की दोनों कुंडलियों को अपनी कॉपी में लिखेंगे। सभी छात्र अपनी प्रथम सत्र की हिन्दी की कॉपी सम्हाल कर रखेंगे।
सातवीं-स	अपनी पाठ्यपुस्तक मल्हार से प्रतिदिन एक पेज सुलेख लिखेंगे। पाठ - 6 गिरिधर कविराय की कुंडलियाँ पाठ की अभ्यास पूरी लिख लेंगे। पाठ - 6 गिरिधर कविराय की कुंडलियाँ पाठ की दोनों कुंडलियों को अपनी कॉपी में लिखेंगे। सभी छात्र अपनी प्रथम सत्र की हिन्दी की कॉपी सम्हाल कर रखेंगे।
आठवीं -अ	अपनी पाठ्यपुस्तक मल्हार से प्रतिदिन एक पेज सुलेख लिखेंगे। पाठ - 6 एक टोकरी भर मिट्टी पाठ की अभ्यास पूरी लिख लेंगे। सभी छात्र अपनी प्रथम सत्र की हिन्दी की कॉपी सम्हाल कर रखेंगे।
आठवीं -ब	अपनी पाठ्यपुस्तक मल्हार से प्रतिदिन एक पेज सुलेख लिखेंगे। पाठ - 6 एक टोकरी भर मिट्टी पाठ की अभ्यास पूरी लिख लेंगे। सभी छात्र अपनी प्रथम सत्र की हिन्दी की कॉपी सम्हाल कर रखेंगे।
नवमी -द	अपनी हस्तलिपि में सुधार हेतु अपनी पाठ्यपुस्तक गंगा से प्रतिदिन एक पेज सुलेख लिखेंगे। पीटी - 02 परीक्षा जो कि 27-10-2026 से प्रारंभ हो रही है की तैयारी करेंगे। सभी छात्र अपनी हिन्दी की कॉपी सम्हाल कर रखेंगे।

हैमचन्द राय
(हैमचन्द राय)

विषय-शिक्षक (हिन्दी)

CLASS - XI 2nd Autumn Break H.W.
[Political Science]

- 1) Collect and paste pictures related to any four recent national or political events from newspaper or reliable news websites. For each event, write the following details:
 - (a) Title / Headline:
 - (b) Date:
 - (c) What happened?
 - (d) Political Connection:
- 2) A newly independent country decides to run its government without a written set of basic rules. What problems might arise? Why does the country need a constitution?
- 3) The government announces a new policy, but govt. departments fail to implement it properly. What does this situation tell us about the role of the Executive?
- 4) A public institution gives special treatment to people of one religion and discriminates against others. How does this conflict with the idea of Indian secularism?
- 5) People from different religions, languages and cultures work together during a national emergency. How does this demonstrate responsible citizenship and a shared sense of belonging?
- 6) Two students have equal talent, but one has access to better schools, books and technology while the other lacks these facilities. Is treating both students in exactly the same way sufficient to ensure social justice? Give reasons.

Manu
Manorma Bagde
PGT (Political Science)

Class - VIII Autumn Break Home Work
SOCIAL SCIENCE

- Q1) Locate and label the following places associated with India's freedom struggle:
(a) Meerut (Revolt of 1857) (b) Champaran
(c) Amritsar (Jallianwala Bagh) (d) Dandi
(e) Quit Movement.
- Q2) A historical building is being damaged due to pollution and neglect. Suggest three measures to protect it.
- Q3) Prepare a timeline showing any six important events of India's freedom struggle from 1857 to 1947. Mention the year and the corresponding event for each entry.
- Q4) What was ocean trenches? Name the deepest known ocean trench.
- Q5) When was the Indian National Congress established? What was its main objectives?
- Q6) Why is the preservation of historical monuments important?

CLASS - VI SOCIAL SCIENCE

- 1) During the 10 days Autumn Break, choose any one place in India that you would like to visit. Write its name, location, importance and three things you would like to learn about it. Explain why you choose this place.
- 2) Draw a simple route map showing your journey from home to school. Use appropriate symbols to represent places and features you see along the way such as roads, a temple, a hospital, a market, a park or a traffic signals. Prepare a key to explain the symbols used.
- 3) Record the daily maximum and minimum temperature of your city for 10 days in a table.
- 4) On an outline map of the world, locate and label the following. (A) Seven Continents (B) Five oceans
- 5) Prepare a small poster on 'Unity in diversity' or 'keep your neighbourhood' clean with a suitable slogan.

- शरदकालीन गृहकार्य
- (I) - कक्षा - छठवीं - 'अ' तथा छठवीं - 'स' - विषय - हिन्दी
- 1 - प्रतिदिन एक पेज सुलेख और अभिभावक की सहायता से श्रुतलेख लिखना। (प्रत्येक दिन का कार्य दिनों के साथ करना है)
 - 2 - किसी दो पर अनुच्छेद (निबन्ध) लिखना है - (शब्दसीमा 80-100)
 - क - मेरा प्रिय त्योहार 'दशहरा'
 - ख - दीपावली
 - ग - अनुशासन
 - घ - मेरा विद्यालय

- (II) - कक्षा - सातवीं - 'ब' तथा सातवीं - 'द' - विषय - हिन्दी
- 1 - परिभाषा, भेद एवं उदाहरण लिखिए -
 - क - सत्ता
 - ख - सर्वनाम
 - 2 - किसी एक विषय पर अनुच्छेद (निबन्ध) लिखना है -
 - क - शरदकालीन अवकाश
 - ख - प्रचुर
 - 3 - प्रतिदिन एक पेज अभिभावक की सहायता से श्रुतलेख लिखना है - (प्रत्येक दिन का कार्य दिनों के साथ करना है)

पाठ्य पुस्तक आधारित प्रश्न -

पाठ - 6 "गिरधर कविराय की कुँडलिया"

• सोच-विचार के लिए -

क - "बिना निचोरे जो कैरे सो पाँदे पढिनाय" - कविता में बिना-विचार किए कार्य करने के ब्या-ब्या नुकसान बताए गए हैं?

ख - कुँडलिया में जो बातें सैकड़ों वर्ष पहले कही गयी थी, क्या वे आपके लिए भी उपयोगी हैं? कैसे? उदाहरण दीजिए।

(III) - कक्षा - नवमी - 'अ', 'ब', 'स' तथा
नवमी - 'द' → विषय - संस्कृत

(1) :- सभी विद्यार्थी आगामी परीक्षाओं के ध्यान में रखते हुए अपने संस्कृत विषय की तैयारी करें।

(2) :- प्रतिदिन एक पेज अपनी पाठ्य पुस्तक "इरावती" की सहायता से लेख लिखिए। अर्थात् संस्कृत भाषा में लेखन का अभ्यास कीजिए। प्रत्येक दिन के कार्य-दिनों के साथ करना है।

PM SHRI KENDRIYA VIDYALAYA 1STC
AUTUMN BREAK HOME WORK

CLASS-10

PREPARE A MAP NOTE BOOK-

HISTORY- Nationalism in India I. Congress sessions: 1920 Calcutta• 1920 Nagpur• 1927 Madras session• II. 3 Satyagraha movements: Kheda• Champaran• Ahmedabad mill workers• III. Jallianwala Bagh IV. Dandi March

GEOGRAPHY-Minerals and Energy Resources Identify: Iron Ore Mines Mayurbhanj ,Durg Bailadila ,Bellary ,Kudremukh

Coal Mines- Raniganj ,Bokaro ,Talcher, Neyveli

Oil Fields- Digboi ,Naharkatia ,Mumbai High, Bassien, Kalol ,Ankaleshwar

Power Plants:-Thermal POWER PLANT- Namrup• Singrauli• Ramagundam•

Nuclear POWER PLANT -Narora• Kakrapara• Tarapur• Kalpakkam•.

.Manufacturing Industries Manufacturing Industries (Locating and labeling only) T

• 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

Software technology Parks: a. Noida, b. Gandhi- nagar,• c. Mumbai, d. Pune, e. Hyderabad, f. Bengaluru, g. Chennai,h. Thiruvananthapuram

Subject Teacher :
Neeta Nagwanshi
Vinith Kumari
Kiran Minocha

Lifelines of National Economy Locating and Labeling a. Major Sea Ports • Kandla • Tuticorin • Mumbai • Chennai • Marmagao • Visakhapatnam • New Mangalore • Paradip • Kochi • Haldia

b. International Airports Amritsar (Raja Sansi-Sri Guru Ram Das ji) • Delhi (Indira Gandhi) • Mumbai (Chhatrapati Shivaji) • Chennai (Meenambakkam) • Kolkata (Netaji Subhash Chandra Bose) • Hyderabad (Rajiv Gandhi) •

Interdisciplinary Project

Prepare an interdisciplinary project integrating the following NCERT chapters:

1. **History – Chapter 3:** The Making of a Global World (Subtopics 2 to 4.4: The Nineteenth Century (1815–1914) to the End of Bretton Woods and the Beginning of Globalisation)
2. **Geography – Chapter 7:** Lifelines of National Economy
3. **Economics – Chapter 4:** Globalisation and the Indian Economy

The project must cover the following subtopics:

1. Production Across Countries
2. World Trade Organisation (WTO)
3. The Struggle for a Fair Globalisation

Instructions:

- Explain the above subtopics by connecting historical developments, transport and communication networks, international trade and the Indian economy.
- Include relevant examples, maps, pictures, flowcharts, diagrams and data wherever appropriate.
- Discuss the role of transport and communication in promoting globalisation.
- Explain the role of the WTO and suggest measures to make globalisation fairer for all.
- **Write a brief conclusion highlighting the impact of globalisation on India.**

- Use the NCERT textbooks and other reliable sources for reference.
- Present the project neatly and creatively in a project file or on A4 sheets.
- Write in your own words and include a bibliography.

PM SHRI KENDRIYA VIDYALAYA 1STC
AUTUMN BREAK HOME WORK

Class -9 Class IX – Social Science

Autumn Break Holiday Homework: Interdisciplinary Project

Project Title: Climate, Livelihoods, and Everyday Economics

Interdisciplinary Connection:

- **Geography:** Atmosphere and Climate
- **Economics:** Building Blocks in Economics / The Price Puzzle: What Drives the Market?

Instructions: 1.Prepare an interdisciplinary project connecting History, Geography ,Political Science and **Economics**.

2.Prepare an interdisciplinary project explaining how climatic conditions, particularly the South-West Monsoon, affect livelihoods, the supply of vegetables and their market prices.

The project must include the following:

1. **Geography – Climate and Monsoon:** Explain the advancing and retreating South-West Monsoon. Identify areas affected by floods or droughts and mark relevant regions on an outline map of India.
2. **Economics – Supply and Demand:** Explain scarcity, opportunity cost

- and the law of supply and demand. Describe how heavy rainfall, floods or droughts can affect the supply and prices of vegetables.
3. **Real-Life Case Study:** Select any one vegetable and trace its journey from the farmer to the local market. Explain how transportation, weather conditions and storage affect its availability and price.
 4. **Experiential Activity – Choose Any One:**
 - Conduct a short survey of local vegetable vendors to understand seasonal changes in supply and prices; OR
 - Prepare a comparative household budget showing how changes in vegetable prices affect family expenditure and purchasing choices.
 5. **Conclusion:** Suggest practical measures to reduce food wastage, improve transportation and storage, and minimise the impact of extreme weather on consumers and farmers.

Presentation Guidelines:

- Use a project file or A4 sheets.
- Include relevant maps, tables, diagrams, photographs or flowcharts.
- Present survey findings or budget calculations wherever applicable.
- Use NCERT textbooks and reliable sources for reference.
- Write in your own words and include a bibliography.

Assessment: The project will be assessed internally as part of the Multiple Assessment process.

Learning Outcomes: Students will be able to explain the relationship between climate and economic activities, interpret the effects of weather on agricultural supply and market prices, apply basic economic concepts to real-life situations, and develop environmental awareness and analytical skills.

Map Work(A 4-SIZE PRACTICAL NOTENOOK)

Chapter 4: Early Humans and Beginning of Civilisation

Prehistoric Archaeological Sites (India Map):

Palaeolithic / Neolithic Sites: Bhimbetka (Madhya Pradesh), Hunsgi (Karnataka), Burzahom (Jammu & Kashmir), and Mehrgarh (Pakistan).

Indus Valley (Harappan) Civilisation Sites (India/Subcontinent Map):

- Harappa, Mohenjo-daro, Kalibangan, Lothal, Dholavira, Rakhi Garhi, and Banawali.
- **Ancient Global Civilisations (World Map):**
- General geographic locations of Mesopotamia (Tigris-Euphrates valley), Ancient Egypt (Nile valley), and early Chinese civilisation ([Huang He valley](#)).
- Chapter 5: State and Society up to 1000 CE**
- **The Mahajanapadas (India Map):**
- Locating the core early states: [Magadha](#), Vajji, [Kosala](#), and Avanti.
- **Historical Centres & Inscriptions:**
- **Ashokan Rock/Pillar Edicts:** [Sanchi](#), [Topra](#), and [Meerut](#).
- **Local Governance Landmark:** [Uthiramerur](#) (Tamil Nadu)—celebrated in the new curriculum for its historical evidence of early village democracy and committee elections.

PM SHRI KENDRIYA VIDYALAYA 1STC

AUTUMN BREAK HOLIDAY HOMEWORK

Class: VII | Subject: Social Science | Session: 2026-27

Select any one activity from 1-3 activities, activity-4 is compulsory

Activity 1: History – Explore the Past

Choose any one historical ruler, dynasty or historical monument from the chapters completed in class.

- Write five important facts about your chosen topic.
- Prepare a timeline of four important historical events, wherever applicable.
- Draw or paste a relevant picture and explain its historical significance.

Activity 2: Geography – Our Environment

Prepare an illustrated poster on "Save Natural Resources, Save Our Future."

- Identify any three natural resources.
- Write two uses of each resource.
- Suggest three practical ways to conserve them.
- Add an attractive slogan.

Activity 3: Social and Political Life – Democracy in Everyday Life

Write a short report on "Democracy Begins with Participation."

- Explain what democracy means in simple words.
- Give three examples of collective decision-making at home, school or in the community.
- Explain why respecting different opinions is important.

Activity 4: Map Practice

On outline maps of India:

1. Locate and label the states and their capitals.

2. Mark important places or geographical features covered in the completed chapters.

General Instructions

1. Complete the activities in your Social Science notebook or on A4 .
2. Use your own words and ideas.
3. Include suitable drawings, maps, tables or pictures wherever required.
4. Revise the chapters completed in class.
5. Keep the work simple, meaningful and creative.

CLASS 6 SCIENCE

AUTUMN BREAK HOLIDAY HOMEWORK

NCERT CURIOSITY | CHAPTERS 7-12

Student Name: _____ Class/Section: _____

HANDS-ON ACTIVITIES (Do all three)

Activity 1: Water Around Me (Chapter 8)

- Observe three examples of water in different forms around you, such as ice, liquid water and water vapour. Draw and write your observations also name the state of water in each example.

Activity 2: Separation in Everyday Life (Chapter 9)

- Observe any three activities at home where materials are separated, such as removing stones from rice, straining tea or winnowing grains. Draw any two examples and write the method of separation used.

Activity 3: Nature and the Night Sky (Chapters 10-12)

- Observe two plants or animals and write three characteristics of living things that you notice.
- Observe the Moon on three different nights and draw how it looks each night.

SCIENCE IN DAILY LIFE

- Write three examples of science you notice in your surroundings, with one-line explanations for each.

SUBMISSION: On the first day after the break

Bhawana Kumari

Subject Teacher

Signature: Bhawana

~~Handwritten signature~~
S.K. Shukla

CLASS 9 SCIENCE
AUTUMN BREAK HOLIDAY HOMEWORK

Student Name: _____

Class/Section: _____

1. REVISION

- Revise all chapters taught up to "Journey Inside the Atom".
- Practise 5 numerical questions based on motion in classwork notebook.

2. NCERT WORK

- Complete all in-text and exercise questions of the chapters covered in class in your Science notebook.

3. ACTIVITY (Choose any one)

- Draw and label the structure of an atom of any three elements.
- OR identify five mixtures used at home and write one suitable method to separate each.

4. DIAGRAM AND GRAPH PRACTICE

- Draw a well labelled diagram of muscle tissue.
- Draw a distance–time graph for 1. uniform motion 2. accelerated motion.

5. SCIENCE IN DAILY LIFE

- Write five examples of science in everyday life with one-line scientific explanations.

SUBMISSION: On the first day after the break

Bhawana Kumari

Subject Teacher

Signature: Bhawana

for ix D

A s.k. Shukla

CLASS 10 SCIENCE

AUTUMN BREAK HOLIDAY HOMEWORK

Student Name: _____

Class/Section: _____

1. DAILY REVISION (30 min/day)

- Chemistry: Chemical Reactions & Equations, Acids-Bases-Salts, Metals & Non-metals – practise balancing 10 equations.
- Physics: Light (Reflection & Refraction), Electricity – solve 3 numericals from each.
- Biology: Life Processes, Control & Coordination .

2. NCERT WORK

- Complete REVISION of all in-text and exercise questions of Chapters 1, 2, 3, 10 and 12 in a separate notebook.
- Solve case-based and assertion-reason questions from a sample paper.

3. PROJECT (choose any one)

- Chart: Reactivity Series of Metals with their everyday uses.
- Home Experiment: Test the pH of 5 household items using turmeric or red cabbage indicator and record your observations.

4. DIAGRAM PRACTICE

- Draw and label: human heart, human eye, ray diagrams (concave/convex mirror and lens), reflex arc.

5. SCIENCE IN DAILY LIFE DIARY

- Note 5 observations from around you (rusting, rainbow, curd formation, etc.) with the scientific reason behind each.

6. SELF-ASSESSMENT

- Attempt one full CBSE sample paper in 3 hours, check it with the marking scheme and list your weak topics.

SUBMISSION: On the first day after the break

Bhawana

Ms. Bhawana Kumari

for class X

A.S.K. Shukla

MULTIDISCIPLINARY PROJECT – HEADS

Theme: Historical Monuments of India

Class VI

S – SOCIAL SCIENCE

History and historical significance of Indian monuments
Location of monuments on the political map of India
Cultural heritage and preservation of monuments

M – MATHEMATICS

Measurement of height and dimensions of monuments
Comparison of heights of different monuments
Calculation of age of monuments using historical dates
Geometrical shapes and symmetry in monument architecture

S – SCIENCE

Building materials used in historical monuments
Types of rocks and stones used in construction
Causes of weathering and deterioration of monuments
Scientific methods for the conservation of monuments

E – ENGLISH

Paragraph writing on a famous Indian monument
Diary entry describing a visit to a historical monument
Slogan writing on heritage conservation

H – HINDI

भारत के प्रसिद्ध ऐतिहासिक स्मारकों का वर्णन
ऐतिहासिक स्मारकों पर अनुच्छेद लेखन
स्मारकों के संरक्षण पर नारा लेखन

S – SANSKRIT

भारतस्य प्रसिद्धानां ऐतिहासिकस्मारकाणां नामानि
ऐतिहासिकस्मारकाणां विषये पञ्च संस्कृतवाक्यानि
भारतीयसंस्कृतेः संरक्षणस्य महत्त्वम्

Activity given to students

HOLIDAY HOMEWORK CLASS 9(MATHS)

- 1) SOLVE THE GIVEN SAMPLE PAPER IN YOUR HOMEWORK NOTEBOOK
- 2) COMPLETE YOUR ACTIVITY NOTEBOOK AS GIVEN
- 3) Revision for PT-2

CHAPTER 1: A SQUARE AND A CUBE

1. Find the cube root of 1728 by prime factorisation. Is 1728 also a perfect square? Give a reason.
2. Find the smallest number by which 392 must be multiplied to make it a perfect square. Also find the square root of the new number.
3. Write 1729 as the sum of two cubes in two different ways (the Hardy-Ramanujan number).

CHAPTER 3: A STORY OF NUMBERS

4. Write 1999 in Roman numerals. Then write 2026 in Roman numerals.
5. In your own words, explain why a place-value system with zero is better than the Roman or Egyptian systems. Give one example.

CHAPTER 4: QUADRILATERALS

6. Three angles of a quadrilateral are 75° , 90° and 60° . Find the fourth angle.
7. One angle of a parallelogram is 70° . Find the other three angles.
8. The diagonals of a rhombus are 16 cm and 12 cm. Find the length of its side.
9. Is every square a rhombus? Is every rhombus a square? Justify your answers using properties.

CHAPTER 5: NUMBER PLAY

10. Without dividing, check whether 7,436,520 is divisible by 3, 4, 5, 9 and 11.
11. Find the digit * such that $4*72$ is divisible by 9.
12. Apply the Kaprekar routine to 3524 and find how many steps it takes to reach 6174.

CHAPTER 6: WE DISTRIBUTE, YET THINGS MULTIPLY

13. Expand and simplify:

(a) $(3x+2)(x-5)(3x+2)(x-5)$

(b) $2x(x+3)-x(x-4)2x(x+3)-x(x-4)$

CHAPTER 7: PROPORTIONAL REASONING - I

14. The cost of 12 pens is ₹90. Find the cost of 20 pens.

15. Two numbers are in the ratio 3 : 5 and their sum is 64. Find the numbers.
16. A shirt marked at ₹800 is sold at a discount of 15%. Find the selling price.
17. A price increases by 20% and then decreases by 20%. Is the final price the same as the original price? Explain.

CREATIVE TASK

Project Work: Collect five real-life examples of percentages (such as discounts, interest, taxes, etc.) and solve one problem based on each example.

CLASS - 10TH

1. Solve CBSE SAMPLE PAPERS BOTH BASICS AND STANDARD .
2. Complete your activity notebook .

Instructions:

1. Complete all the questions neatly in your Mathematics notebook.
2. Show the necessary calculations and steps wherever required.
3. Submit the holiday homework on the first day after the vacation.

HAPPY HOLIDAYS!

MDP class

ChatGPT: Chat, Work, Create & Code with AI

Mathematics in Indian Heritage and Architecture

- Maths: Explore symmetry, patterns, shapes, angles and geometrical designs.
- Science: Study materials used in construction and structural stability.
- Social Science: Research historical monuments, forts and stepwells.
- English: Describe a famous Indian monument.
- Hindi: भारतीय स्थापत्य कला पर लेख लिखिए।
- Sanskrit: Explore geometry-related concepts and ancient Indian knowledge.

CLASS 6 SCIENCE

AUTUMN BREAK HOLIDAY HOMEWORK

NCERT CURIOSITY | CHAPTERS 7-12

Student Name: _____ Class/Section: _____

HANDS-ON ACTIVITIES (Do all three)

Activity 1: Water Around Me (Chapter 8)

- Observe three examples of water in different forms around you, such as ice, liquid water and water vapour. Draw and write your observations also name the state of water in each example.

Activity 2: Separation in Everyday Life (Chapter 9)

- Observe any three activities at home where materials are separated, such as removing stones from rice, straining tea or winnowing grains. Draw any two examples and write the method of separation used.

Activity 3: Nature and the Night Sky (Chapters 10-12)

- Observe two plants or animals and write three characteristics of living things that you notice.
- Observe the Moon on three different nights and draw how it looks each night.

SCIENCE IN DAILY LIFE

- Write three examples of science you notice in your surroundings, with one-line explanations for each.

SUBMISSION: On the first day after the break

Bhawana Kumari

Subject Teacher

Signature: Bhawana

[Handwritten signature]
S.K. Shukla

CLASS 9 SCIENCE
AUTUMN BREAK HOLIDAY HOMEWORK

Student Name: _____ Class/Section: _____

1. REVISION

- Revise all chapters taught up to "Journey Inside the Atom".
- Practise 5 numerical questions based on motion in classwork notebook.

2. NCERT WORK

- Complete all in-text and exercise questions of the chapters covered in class in your Science notebook.

3. ACTIVITY (Choose any one)

- Draw and label the structure of an atom of any three elements.
- OR identify five mixtures used at home and write one suitable method to separate each.

4. DIAGRAM AND GRAPH PRACTICE

- Draw a well labelled diagram of muscle tissue.
- Draw a distance–time graph for 1. uniform motion 2. accelerated motion.

5. SCIENCE IN DAILY LIFE

- Write five examples of science in everyday life with one-line scientific explanations.

SUBMISSION: On the first day after the break

Bhawana Kumari

Subject Teacher

Signature: Bhawana

for ix D

At S.K. Shukla

CLASS 10 SCIENCE

AUTUMN BREAK HOLIDAY HOMEWORK

Student Name: _____ Class/Section: _____

1. DAILY REVISION (30 min/day)

- Chemistry: Chemical Reactions & Equations, Acids-Bases-Salts, Metals & Non-metals – practise balancing 10 equations.
- Physics: Light (Reflection & Refraction), Electricity – solve 3 numericals from each.
- Biology: Life Processes, Control & Coordination .

2. NCERT WORK

- Complete REVISION of all in-text and exercise questions of Chapters 1, 2, 3, 10 and 12 in a separate notebook.
- Solve case-based and assertion-reason questions from a sample paper.

3. PROJECT (choose any one)

- Chart: Reactivity Series of Metals with their everyday uses.
- Home Experiment: Test the pH of 5 household items using turmeric or red cabbage indicator and record your observations.

4. DIAGRAM PRACTICE

- Draw and label: human heart, human eye, ray diagrams (concave/convex mirror and lens), reflex arc.

5. SCIENCE IN DAILY LIFE DIARY

- Note 5 observations from around you (rusting, rainbow, curd formation, etc.) with the scientific reason behind each.

6. SELF-ASSESSMENT

- Attempt one full CBSE sample paper in 3 hours, check it with the marking scheme and list your weak topics.

SUBMISSION: On the first day after the break

Bhawana

Ms. Bhawana Kumari

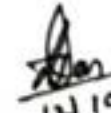
for class X

A.S.K. Shukla

Autumn Break Home Work 2026-27
Class - 10 D
Subject - Science

- 1) Draw Flow chart of following topics in A-4 sheet.
 - (a) Process of digestion in alimentary canal
 - (b) Double circulation^{of blood} in human being.
 - (c) Food chain of grass land, Forest and pond (lake)
- 2) Draw mind map of following topics in A-4 sheet.
 - (a) Types of asexual reproduction with example
 - (b) Waste management
 - (c) Respiration in cell (cellular respiration)
- 3) Draw and label following diagrams in A-4 sheet
 - 1) Pollination in flower
 - 2) Stomata (open and close both)
 - 3) Reflex arc
 - 4) Nerve cell (Neuron)
 - 5) Excretory system
 - 6) Digestive system
 - 7) Endocrine glands
- 4) Solve worksheets (4)

Also for class XIB
J-SK-Singh


12/10/2026
Jyoti Singh
TGT Science

Autumn Break Home Work 2026-27

Class - VI A and VI B

Sub. - Science

Festivals of India for VI A

1) MDP - Importance of Yoga for VI B

a) Poster

b) Collage

c) Mind map

d) 10 quiz questions

2) Make 10 MCQ questions from chapter 7 - Temperature and its measurement

3) Solve work sheet and paste in your note book.


13/10/2026
Thumur Das
TGT Science

Autumn Break Home work 2026-27

Class - VII C

Sub. - Science

Roll no. 1-10 - Save river

Roll no. 11-20 - Save tiger

Roll no. 21-30 - Save forest

Roll no. 31-45 - Save air

- 1) MDP - Topic - Save environment
- (a) Poster
 - (b) Collage
 - (c) Table of information related to topic
 - (d) Flow chart or mind map
 - (e) 10 quiz question related to topic

- 2) Make 10 MCQ question from the chapter 7 - Heat Transfer in Nature
- 3) Solve work sheet in A-4 sheet and paste in your note book.
(Case based question and MCQ)


13/10/2026

Thumma Das

TGT Science

Autumn Break Home Work 2026-27

Class - 9 B

Sub. - Science

- 1) Draw mind map of following topics in A-4 sheet.
 - a) Plant tissue and their function
 - b) Animal tissue and their function
 - c) Atomic theories (Thomson, Rutherford, Bohr theory)
 - d) Types of Joints
 - e) Types of meristem tissue
- 2) Draw labeled diagram in A-4 sheet-
 - a) Neuron
 - b) Vascular Tissue - Xylem and Phloem
 - c) Different types of muscles
 - d) Thomson's model, Energy level in an atom
 - e) Tissue system in plants
- 3) Learn question-answer of following chapters
 - 1) Tissue in Action
 - 2) Journey Inside the Atom
- 4) Solve worksheet (2)


13/10/2016
Thumur Das
TGT Science

PM SHRI KV 1STC JBP

HOLIDAY HOMEWORK

CLASS 6 (A+C)

English

(15/10/26 - 25/10/26)

- 1) Learn new words and spellings of (W/M)
Lesson - Change of Heart, The Winner
- 2) Write a paragraph on "Spices that Heal Us"
- 3) Draw and write names of spices in English and Hindi.
- 4) Complete your MDP on Festivals of India (6A)
Historical Monuments of India (6C)

CLASS 8 (B+C)

- 1) Learn new words and spellings of new W/M, lesson - The Cherry Tree, Harvest Hymn
- 2) Write a paragraph on "My favourite tree".
- 3) Complete your MDP.
- 4) Learn Outlines of lesson The Spectacular wonders.

CLASS 9 D

- 1) Learn new words and word meanings of lesson - The world of limitless responsibilities
Nine Gold Medals
- 2) Complete Writing Task given on Pg 153 - (Our Teacher) and 165.
- 3) Write information about athletes participated

in special Olympic Games 2023 (Pg 167)

4) Create an infographic on any sport
Pg - 168

CLASS X

- 1-) Solve any two Analytical paragraph from PYQ.
- 2-) Write any five letters from previous year PYQ
- 3-) Learn lessons - Madam Rides the Bus
The Sermon at Benaras, The Proposal
(Short and long answers)
- 4-) Complete your portfolio & deposit after holidays.

Anuja Malviya
(TGT English)

Class - 6th

- 1) बुद्धि: सर्वार्थसाधिका पाठ की कॉपी में पूर्ण करें तथा याद करें।
- 2) बालक: तथा बालिका शब्दरूप याद करें तथा लिखें।
- 3) पठ (पठना) धातुरूप कॉपी में लिखें व याद करें।
 - 1) लटलकार, 2) लृटलकार, 3) लङलकार
 - 4) लोटलकार
- 4) बीस तक संस्कृत में गिनती याद करें तथा कॉपी में करें।

Class -> 7th

- 1) अष्टम पाठ कॉपी में पूर्ण करें तथा याद करें।
- 2) लिख् धातुरूपाणि पांच लकार में लिखें व याद करें।
- 3) 100 तक संस्कृत में गिनती याद करें व कॉपी में लिखें।
- 4) नदी, हरि का शब्दरूप कॉपी में लिखें।

Class -> 8th

1) सप्तम पाठ का अभ्यास कार्य कापी में पूर्ण करे तथा याद करे।

2) किम् शब्दरूप - पुल्लिङ्गम्, स्त्रीलिङ्गम्
नपुंसकलिङ्गम् में याद करे
तथा कापी में लिखे।

3. वर्णानां उच्चारणस्थानम् कापी में करे।

नाम - प्रीति

दिनाङ्क -> 13/10/2024

हस्ताक्षर -> प्रीति

HOLIDAY HOMEWORK

AUTUMN BREAK

Class XIID Geography & Po. Science

Class XID Geography

1. Field Visit and Geographical Observation

Visit a geographically significant place in your surrounding area along with your family members during the Autumn Break. Capture photographs and record videos of the place. Observe its geographical features and collect relevant information about its geographical significance.

After the Autumn Break, you will share your observations, photographs, and videos, followed by a discussion in the classroom.

2. Learning through Educational Channels

During the Autumn Break, watch educational programmes related to the Earth, environment, and physical geography on channels such as Discovery Channel and Animal Planet, as well as other informative educational platforms.

Gather interesting geographical facts and information about the Earth. Be prepared to share your learning and participate in a classroom discussion after the break.

3. Revision of the Syllabus

Revise thoroughly all the topics and chapters of Geography that have been taught in the classroom from 1st April to the beginning of the Autumn Break.

Come prepared for classroom discussions and further academic activities after the break.


14/10/26
Richa Pothak

Autumn Break H.W.
Class - XI 'A'

classmate ①
Date _____
Page _____

★ Complete your practical notebooks.

Chapter - 1

- ① A body of mass m is moving in a circle of radius r with angular velocity ω . Find expression for centripetal force acting on it by the method of dimensions.
- ② The wavelength λ associated with a moving electron depends on its mass m , its velocity v & Planck's constant h . Derive the relation between the given quantities.

Chapter - 2

- ① The displacement (m) of a particle moving along x -axis is given by $x = 18t + 5t^2$. Calculate
 - a) the instantaneous velocity at $t = 2s$
 - b) avg. velocity between $t = 2s$ & $t = 3s$.
 - c) inst. acceleration.
- ② A balloon is ascending at the rate of 9.8 m/s at a height of 39.2 m above the ground when a food packet is dropped from the balloon. After how much time & with what velocity does it reach the ground? ($g = 9.8 \text{ m/s}^2$)

Chapter - 3

- ① Find the angle between the vectors $\vec{A} = \hat{i} + 2\hat{j} - \hat{k}$ & $\vec{B} = -\hat{i} + \hat{j} - 2\hat{k}$.
- ② A body is projected with a velocity of 30 m/s at an angle of 30° with the vertical. Find the max. height, time of flight & the horizontal

Range.

Chapter - 4

- (1) A cricket ball of mass 150 g is moving with a velocity of 12 m/s . It is hit by a bat, so that the ball is turned back with a velocity of 20 m/s . The force of the blow acts for 0.01 second on the ball. Find the avg. force exerted by the bat on the ball.
- (2) A cyclist speeding at 18 km/h on a level road takes a sharp circular turn of radius 3 m without reducing the speed & without bending towards the centre of the circular path. The coefficient of static friction between the tyres & the road is 0.1 . Will the cyclist slip while taking the turn.

Chapter - 5

- (1) The Kinetic energy of a body decreases by 19% . What is the % decrease in its linear momentum?
- (2) A spring gun has a spring constant of 80 N/m . The spring is compressed 12 cm by a ball of mass 15 g . How much is the potential energy of the spring? If the trigger is pulled, what will the velocity of the ball be?

Chapter - 6

- (1) A wheel is rotating at a rate of 1000 rpm & its K.E. is 10^6 J . Determine the moment of inertia of the wheel about its axis of rotation.

- ② A solid cylinder rolls down an inclined plane. Its mass is 2 kg & radius 0.1 m . If the height of the inclined plane is 4 m , what is its rotational K.E. when it reaches the foot of the plane?

Chapter - 7

- ① Find the % decrease in weight of a body when taken 16 km below the surface of the earth. ($R = 6400\text{ km}$)
- ② The distances of two planets from the sun are 10^{13} m & 10^{12} m respectively. Find the ratio of time periods & speeds of the two planets.

Class - XII B (Physics)

- Q* Last year (2025-26) CBSE question paper solve. (also give solutions of MCQ). Pdf sent in group.
- * Complete your practical notebooks / investigatory projects / Activities.
- * Solve 5-5 numericals from each chapters.

Class - VIII 'C' (Science)

- * Collect 10-10 elements & compounds. Write their uses and properties.
- * MDP - Study materials used in construction & structural stability (Indian heritage & Architecture)

छुटियों का गृहकार्य
कक्षा 8वीं व विषय- हिन्दी

1. निम्नलिखित विषय पर अनुच्छेद लिखना।

1- धार्मिक और सांस्कृतिक त्योहार

2. आपके सपने और लक्ष्य

3. बच्चों की शिक्षा में माता-पिता की भूमिका

2. पत्र लेखन

1. आपके मित्र के पिताजी को जन्मदिन की बधाई देते हुए पत्र लिखिए।

2. प्राचार्य महोदय को तीन दिन की छुट्टी लेने हेतु प्रार्थना पत्र लिखिए।

3. अपने जन्मदिन में आमंत्रित करते हुए अपने नानाजी को एक पत्र लिखिए।

3. परिभाषा, भेद और उदाहरण लिखिए-

1. संज्ञा

2. सर्वनाम

3. विशेषण

4. नीचे लिखे प्रश्नों के उत्तर लिखिए-

(कहानी - एक टोकरी भर चिट्ठी)

(i) आपके विचार से कहानी का सबसे प्रभावशाली पात्र कौन है और क्यों?

(ii) वृद्धा की पोती ने खाना क्यों छोड़ दिया था?

(iii) ज़मींदार ने झोंपड़ी पर कब्जा कैसे किया?

(iv) "किसी नौकर से न कहकर आप ही स्वयं टोकरी उठाने आगे बढ़ें।" यहाँ ज़मींदार के व्यवहार में परिवर्तन का आरंभ दिखाई देता है। पहले ज़मींदार का व्यवहार कैसा था? इस घटना के बाद उसके व्यवहार में क्या परिवर्तन आया?

(v) "उन्होंने वृद्धा से क्षमा माँगी और उसकी झोंपड़ी वापस दे दी।" ज़मींदार ने ऐसा क्यों किया?

(vi) यदि वृद्धा की पोती ज़मींदार से स्वयं बात करती तो वह क्या कहती?

(vi) यदि आप ज़मींदार की जगह होते तो क्या करते?

(vii) ज़मींदार को टोकरी उठाने में सफलता क्यों नहीं मिली होगी?

(viii) बताइए कि भारत में स्त्रियों को किन-किन चुनौतियों का सामना करना पड़ता है?

May

छुटियों का गृहकार्य
कक्षा 6वीं व विषय- हिन्दी

1. प्रतिदिन एक पेज सुलेख और अभिभावक की मदद से शुद्धलेख (श्रुतलेख) लिखना।

2. निम्नलिखित विषय पर अनुच्छेद लिखना।

1. मेरा प्रिय खेल

2. मेरा विद्यालय

3. दशहरा

4. अनुशासन

3. पत्र लेखन

1. आपके मित्र को जन्मदिन की बधाई देते हुए पत्र लिखिए ।
2. प्राचार्य महोदय को तीन दिन की छुट्टी लेने हेतु प्रार्थना पत्र लिखिए ।
3. अपने जन्मदिन में आमंत्रित करते हुए अपने मामाजी को एक पत्र लिखिए ।

4. नीचे लिखे प्रश्नों के उत्तर लिखिए-

- (i) एंजेला और उसकी माँ एलेसेंड्रा कौन-से बिहू के अवसर पर भारत आए थे? लिखिए।
- (ii) तीनों बिहू के लिए लिखिए कि उस समय किसान खेतों में क्या कर रहे होते हैं?
- (iii) आपके घर में आपको प्यार से किन-किन नामों से पुकारा जाता है?
- (iv) आपके नाम का क्या अर्थ है? आपका नाम किसने रखा? पता करके बताइए।
- (v) आप कौन-कौन से खेल अपने मित्रों के साथ मिलकर खेलते हैं?
- (vi) आपने इस पाठ में बिहू और सत्रिया नृत्यों के बारे में तो पढ़ा है। आपके प्रांत में कौन-कौन से नृत्य प्रसिद्ध हैं? आपको कौन-सा नृत्य करना पसंद है?

मिया

विनेश कुमार पटेल

10(C+D) रेन्डी

पुष्पों का गृहकार्य

कक्षा 10वीं विषय- हिन्दी

प्रश्न 1. निम्नलिखित विषयों पर दिये गए संकेत बिन्दुओं के आधार पर लगभग 120 शब्दों में अनुच्छेद लिखिए।

(क) वैश्विक तापमान (ग्लोबल वार्मिंग)- मनुष्यता के लिए खतरा

संकेत बिन्दु- भूमिका- वैश्विक तापमान क्या है - वैश्विक तापमान के कारण - वैश्विक तापमान के प्रभाव -

वैश्विक तापमान का समाधान - निष्कर्ष।

(ख) कंप्यूटर : आज की आवश्यकता

संकेत बिन्दु - भूमिका - विज्ञान की अद्भुत खोज - बढ़ता प्रयोग - ज्ञान एवं मनोरंजन का भंडार - अधिक प्रयोग हानिकारक - निष्कर्ष।

(ग) जीवन में व्यायाम का महत्त्व

संकेत बिन्दु - भूमिका- स्वास्थ्य सबसे बड़ा धन - उत्तम स्वास्थ्य की औषधि-व्यायाम - व्यायाम का सर्वोत्तम समय - व्यायाम एक-लाभ अनेक - निष्कर्ष।

प्रश्न 2. 1. अपने छोटे भाई को व्यायाम का महत्त्व बताते हुये लगभग 100 शब्दों में एक पत्र लिखिए।

II. आपके विद्यालय के पुस्तकालय में पर्याप्त पुस्तकें न होने के कारण छात्रों को कई समस्याएँ आ रही हैं। अपने विद्यालय के प्राचार्य महोदय को इस समस्या की जानकारी देते हुये उनसे पुस्तकें मँगवाने के लिए लगभग 100 शब्दों में एक प्रार्थना पत्र लिखिए।

प्रश्न 3. निम्नलिखित प्रश्नों के उत्तर दीजिए।

(क) हालदार साहब चौराहे पर रुकते थे और मूर्ति को देखते थे। (सरल वाक्य में बदलिए)

(ख) खीरे के स्वाद के आनंद में नवाब साहब की पलकें मुंद गईं। (मिश्र वाक्य में बदलिए)

(3) ज्योंही मैं घर से निकला, वर्षा शुरू हो गई। (रचना की दृष्टि से वाक्य भेद लिखिए)

प्रश्न 4. रेखांकित पद का परिचय दीजिए-

(1) नेहा यहाँ इसी मकान में रहती है।

(2) निर्धन लोगों की ईमानदारी देखो।

(3) वे बहुत कोमल और संवेदनशील व्यक्ति थे।

प्रश्न 5. अलंकार पहचान कर लिखिए -

(1) सोहत ओढ़े पीत पट, स्याम सलोने गात।

मनहुँ नील मनि सैल पर आतप परयो प्रभात।।

(2) 'उषा सुनहले तीर बरसती

जयलक्ष्मी सी उदित हुई।'।

(3) आगे नदिया पड़ी अपार, घोड़ा कैसे उतरे पार।

राणा ने सोचा इस पार, तब तक चेतक था उस पार।।

प्रश्न 6. निम्नलिखित प्रश्नों के उत्तर लिखिए- (शब्द सीमा 25-30)

(1) शीला अग्रवाल की बातों का लेखिका पर क्या प्रभाव पड़ा?

(2) किस लगाव के कारण बिस्मिल्ला खां अन्यत्र नहीं जाना चाहते ?

प्रश्न 7. निम्नलिखित प्रश्नों के उत्तर लिखिए- (शब्द सीमा 25-30)

(1) कवि ने शिशु की मुसकान को दंतुरित मुसकान क्यों कहा है तथा कवि के मन पर उस मुसकान का क्या प्रभाव पड़ा?

प्रश्न 8. निम्नलिखित प्रश्नों के उत्तर लिखिए- (शब्द सीमा 50-60)

(1) आपके विचार से भोलानाथ अपने सखियों को देखकर सिसकना क्यों भूल जाता है?

(2) कभी श्वेत तो कभी रंगीन पताकाओं का फहराना किन अलग-अलग अवसरों की ओर संकेत करता है?

(3) हिरोशिमा की घटना विज्ञान का भयानकतम दुरुपयोग है। आपकी दृष्टि में विज्ञान का दुरुपयोग कहाँ-कहाँ किस तरह से हो रहा

प्रश्न 1. निर्देशानुसार 'समास' पर आधारित प्रश्नों के उत्तर दीजिए।

- (क) 'यथाशक्ति' शब्द में कौन-सा समास है ?
 (i) अव्ययीभाव (ii) तत्पुरुष (iii) द्वन्द्व (iv) बहुव्रीहि
- (ख) सात सौ दोहों का समूह का उचित समस्त पद और समास का नाम है।
 (i) सतसई- द्विगु समास (ii) सतसई- कर्मधारय समास (iii) सतसई- द्वन्द्व समास (iv) सतसई- बहुव्रीहि
- (ग) बहुव्रीहि समास का उचित उदाहरण है-
 (i) दशानन - दस है आनन जिसके अर्थात् रावण (ii) महात्मा - महान है जो आत्मा (iii) यथाशक्ति - शक्ति के अनुसार (iv) नवरात्रि - नौ रात्रियों का समूह
- (घ) 'देशवासी' शब्द में कौन-सा समास है ?
 (i) अव्ययीभाव (ii) तत्पुरुष (iii) द्वन्द्व (iv) बहुव्रीहि
- (ङ.) 'भीम-अर्जुन' - का उचित समास का नाम और समास धिग्रह होगा-
 (i) भीम और अर्जुन-द्वन्द्व समास (ii) भीम और अर्जुन-तत्पुरुष समास (iii) भीम और अर्जुन-कर्मधारय समास (iv) भीम और अर्जुन-अव्ययीभाव समास

2- अलंकार पर आधारित चार प्रश्नों के उत्तर लिखिए।

- (क) 'घातु-चंद्र की चंचल किरणें, खेल रही थी जल-धन में।' पंक्ति में कौन-सा अलंकार है?
 (i) अनुप्रास (ii) श्लेष (iii) यमक (iv) इनमें से कोई नहीं
- (ख) 'सुबरन को दूँदत फिरत, कवि, व्यभिचारी, चोरा।' पंक्ति में निहित अलंकार है -
 (i) अनुप्रास (ii) श्लेष (iii) यमक (iv) इनमें से कोई नहीं
- (ग) सजना है सजना के लिए। पंक्ति में निहित अलंकार है -
 (i) अनुप्रास (ii) श्लेष (iii) यमक (iv) इनमें से कोई नहीं
- (घ) 'मुदिप महीपति मंदिर आये' - पंक्ति में निहित अलंकार है -
 (i) अनुप्रास (ii) श्लेष (iii) यमक (iv) इनमें से कोई नहीं
- (ङ.) काली घटा का घमंड घटा। - पंक्ति में निहित अलंकार है -
 (i) अनुप्रास (ii) श्लेष (iii) यमक (iv) इनमें से कोई नहीं

प्रश्न 3. निम्नलिखित प्रश्नों के उत्तर दीजिए -

प्रश्न 1. लेखक ने कन्याकुमारी के स्थानीय लोगों के विषय में क्या-क्या बताया?

प्रश्न 2. "अपने प्रयत्न की सार्थकता से संतुष्ट होकर मैं टीले पर बैठ गया" इस पंक्ति में 'प्रयत्न की सार्थकता से क्या अभिप्राय है?

प्रश्न 3. इस यात्रा-वृत्तांत में कन्याकुमारी में स्थित चन्न को अखिरी चन्न कहा गया है। पता लगाइए कि वर्तमान समय में भारत का अंतिम छोर (दक्षिणतम बिंदु) किसे माना जाता है। उस स्थान के विषय में लिखिए।

प्रश्न 4. इंटरनेट या अन्य किन्हीं माध्यमों से पता लगाइए कि अखिरी चन्न में वर्णित कन्याकुमारी के विवेकानंद स्मारक चन्न के स्वरूप में किस प्रकार का विस्तार हुआ है?

(संकेत - तिरुवल्लुवर की प्रतिमा इत्यादि)

प्रश्न 5. डिजिटल खरीदारी और ई-वणिज्य कुटीर उद्योग को बढ़ावा देने में किस प्रकार उपयोगी है?

प्रश्न 6- लता मंगेशकर पर अपने पिताजी पं. दीनानाथ मंगेशकर के व्यक्तित्व का क्या प्रभाव पड़ा? उनके कौन-कौन से कार्यों और व्यवहारों में उनके पिता का प्रभाव दिखाई देता है?

प्रश्न 7- "अगर कोई बात तुम्हें सही लगती है, तो उसे करो और किसी के आगे झुकने की जरूरत नहीं है।" क्या आप किसी ऐसी स्थिति से गुजरे हैं जब आपको किसी सही बात पर अकेले खड़ा होना पड़ा हो? कब और क्यों?

प्रश्न 4- लिखिए-

1. आपके क्षेत्र में हरे-भरे पेड़ों को अंधाधुंध कटा जा रहा है। इसकी शिकायत करते हुए अपने जिले के वन-निरीक्षक को पत्र लिखें।

2. मोटरसाइकिल सुविधा के लिए है, तेज़ चलाने, करतब दिखाने के लिए नहीं, यह समझाते हुए अपने छोटे भाई को एक पत्र लिखिए।

प्रश्न 3. 'अभ्यास की शक्ति' शीर्षक के आधार पर एक लघु कथा लिखिए।

प्रश्न 4 'हमारे सच्चे मित्र - पेड़-पौधे' विषय पर एक अनुच्छेद लिखें।

(संकेत बिंदु - पेड़-पौधे के बिना जीवन असंभव, इनकी क्षति का परिणाम, इन्हें बचाने के उपाय)

Prin. y
निदेश कुमार पटेल

HOLIDAY HOMEWORK

AUTUMN BREAK

Class XIID Geography & Po. Science

Class XID Geography

1. Field Visit and Geographical Observation

Visit a geographically significant place in your surrounding area along with your family members during the Autumn Break. Capture photographs and record videos of the place. Observe its geographical features and collect relevant information about its geographical significance.

After the Autumn Break, you will share your observations, photographs, and videos, followed by a discussion in the classroom.

2. Learning through Educational Channels

During the Autumn Break, watch educational programmes related to the Earth, environment, and physical geography on channels such as Discovery Channel and Animal Planet, as well as other informative educational platforms.

Gather interesting geographical facts and information about the Earth. Be prepared to share your learning and participate in a classroom discussion after the break.

3. Revision of the Syllabus

Revise thoroughly all the topics and chapters of Geography that have been taught in the classroom from 1st April to the beginning of the Autumn Break.

Come prepared for classroom discussions and further academic activities after the break.



14/10/26

PM SHRI KENDRIYA VIDYALAYA NO. 1 STC

SHIFT-1, JABALPUR (M.P.)
DEPARTMENT OF MATHEMATICS

Ref No: KV1STC/MATHS/2026-27/AUTUMN

Date: 13th October 2026

AUTUMN BREAK HOMEWORK NOTICE

All students of **Class XI-A** and **Class XII-B** are hereby instructed to complete their assigned **Mathematics Practical Activities** during the Autumn Break. All activity write-ups and constructions must be recorded strictly in the official **Mathematics Practical Notebook** and submitted immediately upon the reopening of the school.

CLASS XI - A (LIST OF ACTIVITIES)

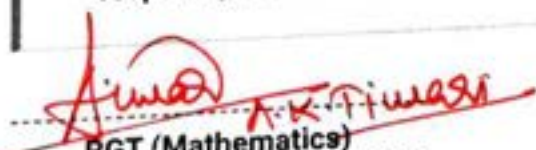
- Activity 1:** To find the number of subsets of a given set and verify that the total number of subsets of a set containing n elements is 2^n .
- Activity 2:** To represent set operations (Union, Intersection, Difference) using Venn Diagrams.
- Activity 3:** To verify that the relation R in the set L of lines in a plane defined by $(l_1, l_2) \in R \Rightarrow l_1 \perp l_2$ is symmetric but neither reflexive nor transitive.
- Activity 4:** To construct a parabola using paper folding technique and verify its geometric properties.

CLASS XII - B (LIST OF ACTIVITIES)

- Activity 1:** To verify that the relation R on the set A of lines in a plane defined by $R = \{(l_1, l_2) : l_1 \parallel l_2\}$ is an equivalence relation.
- Activity 2:** To demonstrate a function which is one-one but not onto using thread and board setup.
- Activity 3:** To evaluate the definite integral $\int_a^b f(x) dx$ as the limit of a sum geometrically.
- Activity 4:** To construct a three-dimensional model to demonstrate the shortest distance between two skew lines.

MANDATORY GUIDELINES FOR PRACTICAL NOTEBOOK SUBMISSION

- Notebook Format:** All write-ups must be recorded in the standard practical notebook, structured with clear headings: *Aim, Material Required, Prerequisite Knowledge, Procedure, Observations, and Conclusion.*
- Diagrams & Figures:** All geometric constructions, Venn diagrams, and graphs must be drawn neatly on the unruled side using a sharp pencil, ruler, and compass.
- Index Page:** The Index page at the beginning of the notebook must be fully updated with Activity titles, page numbers, and dates.
- Submission Deadline:** Notebooks must be submitted to the Subject Teacher on the **first day of school reopening** after the Autumn Vacation. Late submissions will affect internal assessment marks.


PGT (Mathematics)
Shift-1, PM SHRI KV No. 1 STC

Principal / Vice-Principal
PM SHRI KV No. 1 STC Jabalpur

Practical: Use of spreadsheet

Graphs of an exponential function, demand and supply functions on Excel and study the nature of function at various points, maxima/minima, Matrix operations using Excel

Autumn Break Homework

Suggested practical using the spreadsheet

- i) Plot the graphs of functions on excel and study the graph to find out the point of maxima/minima
- ii) Probability and dice roll simulation
- iii) Matrix multiplication and the inverse of a matrix
- iv) Stock Market data sheet on excel
- v) Collect the data on weather, price, inflation, and pollution analyze the data and make meaningful inferences
- vi) Collect data from newspapers on traffic, sports activities and market trends and use excel to study future trends

List of Suggested projects (Class XI / XII)

- i) Use of prime numbers in coding and decoding of messages
 - ii) Prime numbers and divisibility rules
 - iii) Logarithms for financial calculations such as interest, present value, future value, profit/loss etc. with large values)
 - iv) The cardinality of a set and orders of infinity
 - v) Comparing sets of Natural numbers, rational numbers, real numbers and others
 - vi) Use of Venn diagram in solving practical problems
-
- vii) Fibonacci sequence: Its' history and presence in nature
 - viii) Testing the validity of mathematical statements and framing truth tables
 - ix) Investigating Graphs of functions for their properties
 - x) Visit the census site of India
[http://www.censusindia.gov.in/Census_Data_2001/Census_Data_Online/Language/State ment3.htm](http://www.censusindia.gov.in/Census_Data_2001/Census_Data_Online/Language/State%20ment3.htm) Depict the information given there in a pictorial form
 - xi) Prepare a questionnaire to collect information about money spent by your friends in a month on activities like travelling, movies, recharging of the mobiles, etc. and draw interesting conclusions
 - xii) Check out the local newspaper and cut out examples of information depicted by graphs. Draw your own conclusions from the graph and compare it with the analysis given in the report
 - xiii) Analysis of population migration data – positive and negative influence on urbanization
 - xiv) Each day newspaper tells us about the maximum temperature, minimum temperature, and humidity. Collect the data for a period of 30 days and represent it graphically. Compare it with the data available for the same time period for the previous year
 - xv) Analysis of career graph of a cricketer (batting average for a batsman and bowling average for a bowler). Conclude the best year of his career. It may be extended for other players also – tennis, badminton, athlete
 - xvi) Vehicle registration data – correlating with pollution and the number of accidents

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A. K. Tiwari

CLASS XII – MATHEMATICS (Question Bank)

Chapters: Integrals · Application of Integrals · Differential Equations

SECTION A (20 × 1 = 20 Marks)

Questions 1 to 18 are Multiple Choice Questions. Select the correct option.

- $\int e^x (\sin x + \cos x) dx$ is equal to
(a) $e^x \cos x + C$ (b) $e^x \sin x + C$ (c) $e^x (\sin x - \cos x) + C$ (d) $-e^x \sin x + C$
- $\int dx / (x^2 + 16)$ is equal to
(a) $\tan^{-1}(x/4) + C$ (b) $\frac{1}{4} \tan^{-1}(x/4) + C$ (c) $4 \tan^{-1}(x/4) + C$ (d) $(1/16) \tan^{-1}(x/4) + C$
- The value of $\int$ from $-\pi/2$ to $\pi/2$ of $x^3 \cos x dx$ is
(a) 0 (b) $\pi/2$ (c) π (d) $-\pi$
- The value of $\int$ from 0 to $\pi/2$ of $\sin x / (\sin x + \cos x) dx$ is
(a) $\pi/2$ (b) $\pi/4$ (c) $\pi/8$ (d) 0
- $\int dx / \sqrt{9 - 4x^2}$ is equal to
(a) $\frac{1}{2} \sin^{-1}(2x/3) + C$ (b) $\sin^{-1}(2x/3) + C$ (c) $\frac{1}{3} \sin^{-1}(2x/3) + C$ (d) $2 \sin^{-1}(2x/3) + C$
- The area of the region bounded by the curve $y = x^2$, the x-axis and the lines $x = 1$ and $x = 2$ is
(a) $7/3$ sq. units (b) $8/3$ sq. units (c) 3 sq. units (d) $1/3$ sq. units
- The area of the region enclosed by the ellipse $x^2/25 + y^2/16 = 1$ is
(a) 20π sq. units (b) 10π sq. units (c) 5π sq. units (d) 40π sq. units
- The area of the region bounded by the parabola $y^2 = 4x$ and the line $x = 1$ is
(a) $8/3$ sq. units (b) $4/3$ sq. units (c) $16/3$ sq. units (d) $2/3$ sq. units
- The order and degree of the differential equation $[1 + (dy/dx)^2]^{3/2} = d^2y/dx^2$ are respectively
(a) 2, 3 (b) 2, 2 (c) 3, 2 (d) 2, not defined
- The general solution of the differential equation $dy/dx = e^{(x-y)}$ is
(a) $e^y = e^x + C$ (b) $e^{-y} = e^x + C$ (c) $e^x + e^y = C$ (d) $e^y = e^{-x} + C$
- The integrating factor of the differential equation $x(dy/dx) + 2y = x^2$ is

- (a) x^2 (b) $1/x^2$ (c) e^{2x} (d) $2x$

12. The number of arbitrary constants in a particular solution of a fourth order differential equation is

- (a) 4 (b) 3 (c) 1 (d) 0

13. The differential equation representing the family of curves $y = A e^{2x}$, where A is an arbitrary constant, is

- (a) $dy/dx = 2y$ (b) $dy/dx = y/2$ (c) $d^2y/dx^2 = 2y$ (d) $dy/dx = 2x$

14. The solution of the differential equation $dy/dx = (1 + y^2)/(1 + x^2)$ is

- (a) $\tan^{-1} y - \tan^{-1} x = C$ (b) $\tan^{-1} y + \tan^{-1} x = C$ (c) $(1 + x^2)(1 + y^2) = C$ (d) $y = Cx$

15. $\int dx / (\sin^2 x \cos^2 x)$ is equal to

- (a) $\tan x + \cot x + C$ (b) $\tan x - \cot x + C$ (c) $\cot x - \tan x + C$ (d) $\tan x \cdot \cot x + C$

16. The value of $\int$ from 0 to 2 of $|x - 1| dx$ is

- (a) 0 (b) 1 (c) 2 (d) $1/2$

17. $\int x^2 / (1 + x^3) dx$ is equal to

- (a) $1/3 \log|1 + x^3| + C$ (b) $\log|1 + x^3| + C$ (c) $3 \log|1 + x^3| + C$ (d) $1/3 (1 + x^3)^2 + C$

18. The area of the region bounded by the curve $y = \sin x$ and the x-axis between $x = 0$ and $x = 2\pi$ is

- (a) 2 sq. units (b) 4 sq. units (c) 0 sq. units (d) 8 sq. units

Questions 19 and 20 are Assertion-Reason based questions. Two statements are given: Assertion (A) and Reason (R). Choose the correct option:

- (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): $\int$ from -1 to 1 of $x^2 dx = 2/3$.

Reason (R): If f is an odd function, then $\int$ from -a to a of $f(x) dx = 0$.

20. Assertion (A): The degree of the differential equation $d^2y/dx^2 + \sin(dy/dx) = 0$ is not defined.

Reason (R): The degree of a differential equation is defined only when it is a polynomial equation in its derivatives.

SECTION B ($5 \times 2 = 10$ Marks)

Questions 21 to 25 are Very Short Answer type questions of 2 marks each.

21. Evaluate: $\int \cos(\sqrt{x}) / \sqrt{x} \, dx$.
22. Evaluate: $\int$ from 0 to 1 of $x e^{x^2} \, dx$.
23. Find the area of the region bounded by the curve $y = 4 - x^2$ and the x-axis.
24. Find the general solution of the differential equation $dy/dx = (x + 1)/(2 - y)$, $y \neq 2$.
25. Find the integrating factor of the differential equation $(x \log x) \, dy/dx + y = 2 \log x$.

SECTION C ($6 \times 3 = 18$ Marks)

Questions 26 to 31 are Short Answer type questions of 3 marks each.

26. Evaluate: $\int (2x + 1) / (x^2 + 4x + 5) \, dx$.
27. Evaluate: $\int dx / [(x + 1)(x^2 + 1)]$.
28. Evaluate: $\int$ from 0 to $\pi/2$ of $\sqrt{(\sin x)} / (\sqrt{(\sin x)} + \sqrt{(\cos x)}) \, dx$.
29. Using integration, find the area of the region $\{(x, y) : x^2 \leq y \leq |x|\}$.
30. Find the general solution of the differential equation $(x - y) \, dy = (x + y) \, dx$.
31. Find the general solution of the differential equation $dy/dx + y \cot x = 2x + x^2 \cot x$, $x \neq 0$.

SECTION D ($4 \times 5 = 20$ Marks)

Questions 32 to 35 are Long Answer type questions of 5 marks each.

32. Evaluate: $\int x^2 / [(x^2 + 1)(x^2 + 4)] \, dx$.
33. Evaluate: $\int$ from 0 to π of $x \sin x / (1 + \cos^2 x) \, dx$.
34. Using integration, find the area of the smaller region bounded by the circle $x^2 + y^2 = 4$ and the line $x + y = 2$.
35. Find the particular solution of the differential equation $dy/dx + 2y \tan x = \sin x$, given that $y = 0$ when $x = \pi/3$.

SECTION E ($3 \times 4 = 12$ Marks)

Questions 36 to 38 are case-based / source-based questions of 4 marks each.

36. Case Study – Garden Design

A landscape designer is planning a flower bed in a park. The boundary of the flower bed is formed by the parabola $y = 4x - x^2$ and the x-axis, where x and y are measured in metres.

Based on the above information, answer the following:

- (i) Find the points where the parabola meets the x-axis. (1)
- (ii) Write the definite integral that represents the area of the flower bed. (1)
- (iii) Find the area of the flower bed. If turf costs ₹ 90 per square metre, find the total cost of covering the flower bed with turf. (2)

37. Case Study – Marginal Cost

A small factory manufactures x units of an item per day. The marginal cost (rate of change of total cost) is given by $C'(x) = 3x^2 + 12x$ (in ₹ hundred per unit). The fixed cost of production (cost when $x = 0$) is ₹ 500 hundred.

Based on the above information, answer the following:

- (i) Write the integral which gives the total cost function $C(x)$. (1)
- (ii) Find the total cost function $C(x)$. (1)
- (iii) Using definite integration, find the increase in total cost when the output rises from 10 units to 12 units. (2)

38. Case Study – Bacterial Growth

In a laboratory, the rate at which the number of bacteria in a culture grows is directly proportional to the number of bacteria present at that time. Let $N(t)$ be the number of bacteria at time t hours. Initially ($t = 0$) there are 1000 bacteria, and the number doubles in 2 hours.

Based on the above information, answer the following:

- (i) Write the differential equation representing the above situation, where k is the constant of proportionality. (1)
- (ii) Find the general solution of the differential equation in (i). (1)
- (iii) Find the number of bacteria present after 6 hours. (2)

PM SHRI KV 1STC JABALPUR
AUTUMN BREAK HOMEWORK

CLASS 12 BIOLOGY

- 1- Complete your practical file and submit on reopening of school.
- 2- Complete your investigatory project and submit on reopening of school.
- 3- Solve 2 sample papers given by CBSE as per following link
 - i) https://cbseacademic.nic.in/web_material/SQP/ClassXII_2026_27/Biology-SQP.pdf
 - ii) https://cbseacademic.nic.in/web_material/SQP/ClassXII_2025_26/Biology-SQP.pdf
- 4- What is an operon? Explain the mechanism of regulation of gene expression using the Lac Operon model.
- 5- Detail the steps involved in the process of Recombinant DNA (rDNA) technology
- 6- Explain the process of double fertilisation and triple fusion in angiosperms. What is its significance?
- 7- Describe the hormonal regulation of the human menstrual cycle
- 8- What are the various types of population interactions observed in an ecosystem? Provide NCERT examples for each.



Complete MDP file on the following topic-

"THREATS TO LIFE ON EARTH"

SOLVE FOLLOWING QUESTION PAPER

Class 8 Science – Curiosity

Chapter: The Particulate Nature of Matter

Section A: Multiple-Choice Questions (1 mark each)

Choose the correct answer.

1. Matter is made up of:
 - (a) Continuous, unbreakable material
 - (b) Tiny particles
 - (c) Only atoms that cannot move
 - (d) Only visible substances
2. Which of the following is an example of matter?
 - (a) Sound
 - (b) Light
 - (c) Air
 - (d) Heat
3. When sugar dissolves in water, the sugar particles:
 - (a) Disappear completely
 - (b) Change into water
 - (c) Spread among the water particles
 - (d) Lose all their properties immediately
4. The smell of perfume spreads throughout a room due to:
 - (a) Freezing
 - (b) Diffusion
 - (c) Condensation
 - (d) Melting
5. Which state of matter has a definite shape and a definite volume?
 - (a) Solid
 - (b) Liquid
 - (c) Gas
 - (d) All three
6. The particles of a gas are generally:
 - (a) Very closely packed in fixed positions
 - (b) Free to move and widely separated
 - (c) Completely motionless
 - (d) Arranged in a fixed pattern
7. Which observation provides evidence that particles of matter are constantly moving?
 - (a) A stone has a fixed shape
 - (b) The smell of incense spreads through a room

A.

- (c) Ice has a definite shape
(d) A book rests on a table
8. When a solid is heated, its particles generally:

- (a) Stop moving
(b) Move or vibrate more vigorously
(c) Disappear
(d) Become weightless
9. Which of the following can be compressed most easily?

- (a) Iron
(b) Water
(c) Air
(d) Ice

10. Which statement about particles of matter is correct?

- (a) There are no spaces between particles.
(b) Particles never move.
(c) Particles have spaces between them.
(d) Only gases contain particles.

Section B: Very Short-Answer Questions (1 mark each)

11. What is matter?
12. What is meant by the particulate nature of matter?
13. Name the three common states of matter.
14. What is diffusion?
15. Give one example showing that particles of matter have spaces between them.
16. Why can we smell food being cooked from another room?
17. Which state of matter has a fixed volume but no fixed shape?
18. What happens to the movement of particles when a substance is heated?

Section C: Short-Answer Questions (2 marks each)

19. State any two characteristics of particles of matter.
20. Explain how dissolving sugar in water provides evidence that particles of matter have spaces between them.
21. Why does the smell of perfume spread faster in a warm room than in a cold room?
22. Differentiate between the arrangement of particles in solids and gases.
23. Why can gases be compressed more easily than solids?
24. Explain why a liquid takes the shape of the container in which it is kept.
25. A student adds a small crystal of potassium permanganate to water. After some time, the water becomes uniformly coloured. What does this observation tell us about particles of matter?
26. Why does the size of an ice cube decrease when it is left at room temperature? Explain in terms of particles.
27. Explain the particulate nature of matter with three suitable examples from daily life.
28. Compare solids, liquids and gases on the basis of:
(a) Shape
(b) Volume
(c) Arrangement and movement of particles
29. Describe an activity to demonstrate that particles of matter have spaces between them. Write the observation and conclusion.

30. Explain diffusion with two examples. Why does diffusion occur?
31. Describe how the particles of a substance behave when it is heated and when it is cooled.
32. A student claims that sugar disappears when it dissolves in water. Do you agree? Explain your answer scientifically.
33. Why does a gas fill the entire container in which it is kept, whereas a solid does not? Explain using the particle model.

Section D: Long-Answer Questions (5 marks each)

34. Explain the particulate nature of matter. Describe the main characteristics of particles of matter with suitable examples.
35. Compare solids, liquids and gases in detail with respect to:
Arrangement of particles
Interparticle spaces
Forces of attraction
Movement of particles
Shape and volume
36. Design an experiment to show that particles of matter are continuously moving. Include the materials required, procedure, observations and conclusion.
37. Explain how the particle model helps us understand:
(a) Dissolving of sugar in water
(b) Spreading of perfume in air
(c) Compressibility of gases
(d) Change in the shape of a liquid
(e) Expansion of substances on heating

Competency-Based and Case-Based Questions

38. Case Study: Sugar and Water (4 marks)

Aarav takes a glass of water and marks its level. He adds two teaspoons of sugar and stirs until the sugar is no longer visible. He observes that the water level changes very little.

Answer the following questions:

Has the sugar ceased to exist after dissolving?

Where do the sugar particles go?

What does this experiment tell us about the spaces between water particles?

How could Aarav confirm that sugar is still present in the solution?

39. Case Study: Perfume in a Room (4 marks)

A teacher sprays perfume in one corner of a classroom. Students sitting far away can smell it after some time, even though the perfume has not physically reached them as a liquid.

Answer the following questions:

Name the process responsible for the spreading of the smell.

What does this process reveal about the movement of particles?

In which state of matter does the perfume vapour spread?

Would the smell generally spread faster in a warmer room? Give a reason.

40. Case Study: Three Unknown Substances (4 marks)

A scientist studies three substances, P, Q and R.

Substance P has a definite shape and a definite volume.

Substance Q has a definite volume but takes the shape of its container.

Substance R spreads to fill the entire container and can be compressed easily.

Answer the following questions:

Identify the states of matter represented by P, Q and R.

Which substance has the strongest forces of attraction between its particles, generally?

Which substance has the largest interparticle spaces, generally?

Which substance has particles that move most freely?

Assertion-Reason 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.

41. Assertion: Sugar dissolves in water without causing a very large increase in volume.

Reason: Sugar particles occupy spaces between water particles.

42. Assertion: Gases are more compressible than solids.

Reason: Gas particles have relatively large spaces between them.

43. Assertion: The smell of perfume spreads throughout a room.

Reason: Particles of matter are continuously moving.

44. Assertion: Particles in a solid are completely motionless.

Reason: Particles in a solid vibrate about their fixed positions.

Higher-Order Thinking Skills (HOTS)

45. Two identical containers have equal volumes of water. One contains cold water and the other contains hot water. A drop of food colouring is added to each without stirring. In which container would the colour generally spread faster? Explain why.

46. A student says, "If particles of matter are extremely small, they cannot have spaces between them." Explain why this statement is incorrect.

47. Why does a balloon become smaller when air is allowed to escape from it? Explain using the particle model.

48. Imagine that there were no spaces between particles of matter. What difficulties would this create when trying to explain the dissolving of substances and the compressibility of gases?

49. A bottle containing a little perfume is opened in a room. Explain how the smell can reach a person sitting several metres away, even without a fan.

50. Two students dissolve equal amounts of sugar in equal volumes of water. One uses warm water and the other uses cold water. Predict which student will generally dissolve the sugar faster when both stir at the same rate. Explain your reasoning.

Class 11 Biology

- 1- Prepare investigatory project as per topics given in text book.
- 2- Answer the following questions and write on notebook

2-Mark Questions (Short Answer Type I)

- 1- Define taxonomic hierarchy. Write the standard sequence of taxonomic categories in descending order.
- 2- What are the primary criteria used by R.H. Whittaker for classifying organisms in the five-kingdom system?
- 3- Differentiate between liverworts and mosses based on their plant body structure and rhizoids.
- 4- Distinguish between chordates and non-chordates based on any two major diagnostic features.
- 5- Define placentation. Name any two types of placentation found in flowering plants.
- 6. Anatomy of Flowering Plants:** What is the structural and functional difference between open and closed vascular bundles?
- 7. Cell: The Unit of Life:** Why are lysosomes commonly referred to as the "suicide bags" of the cell?

3-Mark Questions (Short Answer Type II)

- 1- Biological Classification:** Write three salient features of Kingdom Fungi regarding their habitat, mode of nutrition, and cell wall composition.
- 2- Plant Kingdom:** Explain the life cycle pattern shown by bryophytes and pteridophytes with reference to alternation of generations.
- 3- Morphology of Flowering Plants:** Describe racemose and cymose types of inflorescence with one suitable example for each.
- 4- Biomolecules:** What are enzymes? Explain the effect of temperature and pH on enzyme activity.
- 5- Cell Cycle and Cell Division:** Differentiate between mitosis and meiosis based on the site of occurrence, number of daughter cells produced, and genetic variation.
- 6- Structural Organisation in Animals:** Give three points of distinction between skeletal muscle, smooth muscle, and cardiac muscle.

5-Mark Questions (Long Answer Type)

- 1- Cell: The Unit of Life:** Draw a neat and labeled diagram of the ultrastructure of a mitochondrion. Explain its structural adaptations and role as the powerhouse of the cell.
- 2- Biomolecules:** Explain the levels of protein structure. Differentiate between primary, secondary, tertiary, and quaternary structures of proteins with bonding details.
- 3- Plant Kingdom:** Give a comparative account of the three main classes of Algae—Chlorophyceae, Phaeophyceae, and Rhodophyceae—based on major pigments, stored food, and flagellar number.
- 4- Cell Cycle and Cell Division:** Explain the various sub-stages of Prophase I of Meiosis (Leptotene, Zygotene, Pachytene, Diplotene, and Diakinesis) with key events occurring in each.

Ard

CLASS XI APPLIED MATHEMATICS (CBSE) QUESTION BANK

PGT (Maths)

Total Questions: 50 (Very Short Answer Type - 1 Mark Each) | Total Marks: 50

Topic - Chapter 1 to 8

Subject: Applied Mathematics (Code-241)

Class: XI (CBSE)

PART A: QUESTION BANK (50 Very Short Answer Questions)

- Q1. Convert the decimal number 45 into binary number.
- Q2. Evaluate in binary: $(1011)_2 + (110)_2$.
- Q3. Convert the binary number $(11011)_2$ into decimal number.
- Q4. Evaluate: $(1100)_2 - (101)_2$.
- Q5. Find the value of $\log_2(32)$.
- Q6. Express $\log(10) + \log(5) - \log(2)$ as a single logarithm.
- Q7. If $\log_x(81) = 4$, find the value of x .
- Q8. Evaluate: $\log_3(1/27)$.
- Q9. What is the angle between the hands of a clock at 3:30?
- Q10. How many odd days are there in a leap year?
- Q11. If 1st January 2024 was a Monday, what day of the week was 1st January 2025?
- Q12. Find the time between 4 and 5 o'clock when the hands of a clock coincide.
- Q13. A can complete a work in 10 days and B in 15 days. In how many days can they complete it together?
- Q14. A train 120 meters long is running at 60 km/h. How long will it take to cross a pole?
- Q15. Pipe A can fill a tank in 6 hours and Pipe B can empty it in 8 hours. If both are opened together, in how much time will the tank be full?
- Q16. Two cars start from the same place at the same time in opposite directions at 45 km/h and 55 km/h respectively. After how much time will they be 300 km apart?
- Q17. In a certain code, 'APPLE' is written as 'BQQMF'. How is 'GRAPE' written in that code?
- Q18. Pointing to a photograph of a boy, Suresh said, 'He is the son of the only son of my mother.' How is Suresh related to that boy?
- Q19. Find the odd one out in the series: 3, 5, 7, 12, 13, 17, 19.
- Q20. Five persons A, B, C, D, and E are sitting in a row facing north. C is sitting exactly in the middle. B is to the immediate left of C and E is to the right of C. Who is sitting at the extreme right end?

- Q21. If 'POCKET' is coded as 'QNEMDS', how is 'BASKET' coded?
- Q22. A is B's sister. C is B's mother. D is C's father. E is D's mother. Then how is A related to D?
- Q23. Find the odd one out: 8, 27, 64, 125, 216, 343, 512, 730.
- Q24. Four people P, Q, R, and S are sitting around a square table facing center one on each side. If P is sitting opposite to R and Q is to the immediate left of P, who is sitting to the right of R?
- Q25. If set $A = \{1, 2, 3, 4\}$, write all subsets of A containing exactly 2 elements.
- Q26. If $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$, $A = \{2, 4, 6, 8, 10\}$, find $n(A')$.
- Q27. Write the power set of set $B = \{a, b\}$.
- Q28. If A and B are two sets such that $n(A) = 15$, $n(B) = 12$, and $n(A \cup B) = 22$, find $n(A \cap B)$.
- Q29. Let $A = \{1, 2, 3\}$ and $R = \{(1, 1), (2, 2), (3, 3), (1, 2)\}$. Is R reflexive on A? Give reason.
- Q30. If $f(x) = x^2 - 3x + 2$, find $f(-2)$.
- Q31. Find the domain of the real function $f(x) = 1 / \sqrt{x - 3}$.
- Q32. Let $f(x) = 2x + 1$ and $g(x) = x^2$. Find $(f + g)(2)$.
- Q33. Find the range of the constant function $f(x) = 5$.
- Q34. Define an equivalence relation on a non-empty set A.
- Q35. Find the 10th term of the AP: 3, 7, 11, 15, ...
- Q36. Which term of the AP: 5, 11, 17, ... is 101?
- Q37. Find the sum of first 20 terms of the AP: 2, 4, 6, 8, ...
- Q38. Find the 6th term of the GP: 2, 6, 18, 54, ...
- Q39. If the 3rd term of a GP is 4 and the 6th term is 32, find its common ratio.
- Q40. Find the sum of the infinite GP: 1, 1/2, 1/4, 1/8, ...
- Q41. If the sum of first n terms of an AP is $S_n = n^2 + 2n$, find its 2nd term.
- Q42. Insert two arithmetic means between 3 and 18.
- Q43. Evaluate: $\log_5(125) + \log_2(8)$.
- Q44. If $A = \{x : x \text{ is a prime number} < 10\}$, write A in roster form.
- Q45. Find the domain of $f(x) = \sqrt{9 - x^2}$.
- Q46. In a code language, if 'WATER' is coded as 'YCVGT', how is 'FIRE' coded?
- Q47. If A and B are disjoint sets with $n(A) = 5$ and $n(B) = 7$, find $n(A \cup B)$.
- Q48. Find the 8th term of the geometric progression: 1/2, 1, 2, 4, ...
- Q49. A clock strikes 6 times in 5 seconds. How many times will it strike in 10 seconds?
- Q50. If $\log_{10}(x) = 3$, find the value of x.

Holiday (Autumn Break H.W.)

11B

S. J. Gredam
P. S. T. (Mistry)

CLASS 11 - MATHEMATICS (CBSE Standard) QUESTION PAPER

Topics: Complex Numbers, Permutations & Combinations, Binomial Theorem, Geometric Progression

Maximum Marks: 50 | Difficulty Level: High

Instructions: All 50 questions are Multiple Choice Questions (MCQs) carrying 1 mark each. Questions 41 to 50 are Assertion-Reasoning based questions.

1. If $z = x + iy$ and $|z - 1| = |z + 1|$, then the locus of z is:
 - (a) Real axis
 - (b) Imaginary axis
 - (c) Circle
 - (d) Parabola
2. The radius of the circle represented by the equation $|z|^2 + 2(z + \bar{z}) + 3 = 0$ is:
 - (a) 1 unit
 - (b) $\sqrt{2}$ units
 - (c) 2 units
 - (d) $\sqrt{3}$ units
3. If ω is an imaginary cube root of unity, then the value of $(1 - \omega + \omega^2)(1 + \omega - \omega^2)$ is:
 - (a) 1
 - (b) 2
 - (c) 4
 - (d) 8
4. If z is a complex number such that $|z + 3| \leq 2$, then the maximum value of $|z + 1|$ is:
 - (a) 2
 - (b) 3
 - (c) 4
 - (d) 5
5. The least positive integer n for which $((1 + i)/(1 - i))^n = 1$ is:

(a) 1

(b) 2

(c) 4

(d) 8

6. If z_1, z_2, z_3 are complex numbers such that $|z_1| = |z_2| = |z_3| = 1$ and $z_1 + z_2 + z_3 = 0$, then $z_1^{-1} + z_2^{-1} + z_3^{-1}$ is equal to:

(a) 0

(b) 1

(c) -1

(d) $z_1 + z_2 + z_3$

7. If $\arg(z - 1) = \arg(z + 3i)$, where $z = x + iy$, then the relation between x and y is:

(a) $3x + y - 3 = 0$

(b) $3x - y + 3 = 0$

(c) $x + 3y - 1 = 0$

(d) $3x + y + 3 = 0$

8. If $(z - 1)/(z + 1)$ is purely imaginary, then the locus of z is a:

(a) Straight line

(b) Circle of radius 1

(c) Circle of radius 2

(d) Parabola

9. The number of solutions of the equation $z^3 + \bar{z} = 0$ is:

(a) 2

(b) 3

(c) 4

(d) 6

10. If $|z_1| = 1$, $|z_2| = 2$, $|z_3| = 3$ and $|9z_1z_2 + 4z_1z_3 + z_2z_3| = 12$, then $|z_1 + z_2 + z_3|$ is equal to:

(a) 1

(b) 2

(c) 3

(d) 4

11. If ω is a cube root of unity, then $(3 + \omega + 3(\omega^2))^4$ is equal to:

(a) 16ω

(b) $16(\omega^2)$

(c) 16

(d) -16

12. If $z + (1/z) = 2 \cos(\theta)$, then $z^n + (1/z^n)$ equals:

(a) $2 \cos(n\theta)$

(b) $2 \sin(n\theta)$

(c) $\cos(n\theta)$

(d) $2i \sin(n\theta)$

13. How many words can be formed from the letters of the word 'EQUATION' so that all vowels always come together?

(a) 1440

(b) 2160

(c) 4320

(d) 7200

14. 5 boys and 4 girls are to be seated in a row such that no two girls sit together. The total number of ways is:

(a) 2880

(b) 43200

(c) 14400

(d) 72000

15. If $nPr = 1680$ and $nCr = 56$, then the value of (n, r) is:

(a) (8, 3)

(b) (7, 4)

(c) (8, 4)

(d) (6, 3)

16. The number of diagonals of a polygon is 54. The number of its sides is:

- (a) 9
- (b) 10
- (c) 12
- (d) 15

17. How many distinct words can be formed using all letters of 'MISSISSIPPI' such that no two I's come together?

- (a) 840
- (b) 7350
- (c) 6120
- (d) 9800

18. In how many ways can 5 cards be chosen from a pack of 52 playing cards such that the selection contains exactly 3 aces?

- (a) 4512
- (b) 4824
- (c) 5184
- (d) 5420

19. If 15 people sit around a circular table, the number of ways two particular persons sit together is:

- (a) $2 \cdot 13!$
- (b) $13! \cdot 2!$
- (c) $14!$
- (d) $12! \cdot 4! / 2$

20. How many numbers between 1 and 100 (inclusive) are divisible by 2, 3, or 5?

- (a) 74
- (b) 78
- (c) 82
- (d) 68

21. The number of non-negative integer solutions to $x_1 + x_2 + x_3 = 11$ is:

- (a) 66
- (b) 78
- (c) 91
- (d) 105

22. An examination consists of 10 MCQs each having 4 choices. In how many ways can a student answer all questions such that he answers at least one question wrong?

- (a) $4^{10} - 1$
- (b) 3^{10}
- (c) $4^{10} - 10$
- (d) $3^{10} - 1$

23. A committee of 5 members is to be formed from 5 men and 4 women containing at least 3 women. Total ways are:

- (a) 40
- (b) 45
- (c) 50
- (d) 65

24. If $(n+1)C_3 = 2 * (nC_2)$, then n is equal to:

- (a) 4
- (b) 5
- (c) 6
- (d) 7

25. In the expansion of $(x + 2y)^9$, the coefficient of $x^6 y^3$ is:

- (a) 672
- (b) 5376
- (c) 2688
- (d) 1344

26. If coefficients of 2nd, 3rd, and 4th terms in the expansion of $(1 + x)^n$ are in A.P., then n is:

- (a) 7
- (b) 14

(c) 7 or 14

(d) None of these

27. The term independent of x in the expansion of $(\sqrt{x} + 1/(3x^2))^n$ is:

(a) 40/27

(b) 80/243

(c) 160/729

(d) 210/243

28. The sum $\sum_{r=0}^n r \cdot {}^nC_r$ is equal to:

(a) $n \cdot 2^n$

(b) $n \cdot 2^{(n-1)}$

(c) $(n+1) \cdot 2^n$

(d) 2^n

29. If $(1 + x + x^2)^n = a_0 + a_1x + \dots + a_{2n}x^{2n}$, then $a_0 + a_2 + a_4 + \dots + a_{2n}$ equals:

(a) $(3^n + 1)/2$

(b) $(3^n - 1)/2$

(c) 3^n

(d) $3^n / 2$

30. The remainder when $(9^{99} + 11)$ is divided by 100 is:

(a) 0

(b) 1

(c) 10

(d) 12

31. If the coefficients of three consecutive terms in $(1 + x)^n$ are in ratio 1 : 7 : 42, then n equals:

(a) 45

(b) 50

(c) 55

(d) 60

32. The value of $C(n,0) + 2C(n,1) + 3C(n,2) + \dots + (n+1)C(n,n)$ is:
- (a) $(n+2) \cdot 2^{n-1}$
 - (b) $(n+1) \cdot 2^n$
 - (c) $(n+2) \cdot 2^n$
 - (d) $n \cdot 2^{n-1}$

33. The value of $(\sqrt{3} + \sqrt{2})^6 + (\sqrt{3} - \sqrt{2})^6$ is:
- (a) 970
 - (b) 980
 - (c) 990
 - (d) 1000

34. If the coefficient of the greatest term in the expansion of $(1+x)^n$ is 70 for $n=4$, then x equals:

- (a) 1
- (b) 2
- (c) $1/2$
- (d) Cannot be determined

35. The value of $\sum_{k=0}^n ((-1)^k \cdot nCk / (k+1))$ from $k=0$ to n is:

- (a) $1/(n+1)$
- (b) $1/n$
- (c) 0
- (d) 1

36. The middle term in the expansion of $(2x^2 - 1/x)^{20}$ is:

- (a) $-C(20,10) \cdot 2^{10} \cdot x^{10}$
- (b) $C(20,10) \cdot 2^{10} \cdot x^{10}$
- (c) $C(20,10) \cdot 2^{20} \cdot x^{10}$
- (d) $-C(20,10) \cdot 2^{20} \cdot x^{10}$

37. If the p -th term of a G.P. is 'a' and q -th term is 'b', then its $(p+q)$ -th term is:

- (a) ab

(b) a/b

(c) $a^p b^q$

(d) $a^q b^p$

38. The sum of an infinite G.P. is 4 and the sum of the cubes of its terms is $192/7$, then the first term of the G.P. is:

(a) $\pm 3/2$

(b) $\pm 2/\sqrt{3}$

(c) $\pm 4/3$

(d) $\pm 3/4$

39. If a, b, c are in A.P. and x, y, z are in G.P., then $x^{(y-z)} \cdot y^{(z-x)} \cdot z^{(x-y)}$ equals:

(a) 0

(b) 1

(c) xyz

(d) -1

40. If S_n denotes sum of n terms of a G.P., P their product and R the sum of their reciprocals, then P^2 equals:

(a) $(S_n / R)^n$

(b) $(S_n \cdot R)^n$

(c) $(S_n / R)^{2n}$

(d) R / S_n

41. Assertion (A): For a complex number z , $|z| = 0$ if and only if $z = 0$.

Reason (R): Modulus is always a non-negative real number.

(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.

42. Assertion (A): The total number of permutations of the letters of 'ALLAHABAD' is 7560.

Reason (R): The number of permutations of n distinct objects taken r at a time is given by $nPr = \frac{n!}{(n-r)!}$.

(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.

43. Assertion (A): The number of terms in the expansion of $(1 + x)^n$ is $n + 1$.
Reason (R): Binomial index n is a positive integer.

- (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.

44. Assertion (A): If all terms of a G.P. are positive, then each term is geometric mean of its preceding and succeeding terms.
Reason (R): If a, b, c are in G.P., then $b^2 = ac$.

- (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.

45. Assertion (A): The argument of the complex number $z = 1 + i$ is $\pi/4$.
Reason (R): $\tan(\theta) = y/x$, where $x > 0$ and $y > 0$.

- (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.

46. Assertion (A): $nCr + nC(r-1) = (n+1)Cr$.
Reason (R): This fundamental property of combinations is known as Pascal's Identity.

- (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.

47. Assertion (A): For real x , the maximum value of $(1 + x^2)^{-1}$ is 1.
Reason (R): The denominator is minimum at $x = 0$, which maximizes the function.

- (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.

48. Assertion (A): The 10th term of the G.P. 2, 4, 8, 16, ... is 1024.
Reason (R): The n-th term of a G.P. is given by $a_n = ar^{(n-1)}$.

- (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.

49. Assertion (A): In the expansion of $(1 + x)^{(2n)}$, the middle term is the n-th term.
Reason (R): When exponent is even (2n), total terms are $2n + 1$ (odd), making the (n+1)-th term the middle term.

- (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.

50. Assertion (A): The value of i^{107} is -i.
Reason (R): $i^2 = -1$ and $i^4 = 1$.

- (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.

AUTUMN BREAK ASSIGNMENT CLASS-XI [CS]

- Q1. Which of the following is a valid or invalid Python variable name?
a) 1variable b) @name c) _value d) class
- Q2. What does range(5, 1, -1) generate?
- Q3. Explain the difference between for loop and while loop with example?
- Q4. What will happen if the condition in a while loop is always True? Give one example.
- Q5. What is the difference between break and continue with example.
- Q6. Predict the output

<pre>i = 1 while i <= 5: print(i * "*") i += 1</pre>	<pre>n = 10 while n > 0: print(n, end=" ") n -= 3</pre>	<pre>x = 1 s = 0 while x < 6: s += x * x x += 2 print(s)</pre>
<pre>n=4 fact=1 for i in range(1,n+1): fact*=i print(fact)</pre>	<pre>for l in range(20,30,2): print(i)</pre>	<pre>for i in "python": print(i, end='?')</pre>

Q7. Convert the following for loop code into while loop.

```
for x in range (1,100,2):
print(x)
```

Q8. Rewrite the following code using a for loop instead of a while loop:

```
count = 0
while count < 4:
    print("Python")
    count += 1
```

Q8. Write a program to print all numbers from 1 to 10 except 5 using continue statement.

Q9. Write a program to print the factorial of a number using for loop.

Q10. Write a program to check whether a number is prime or not.

Q12. Write a Python program that accepts a from the user between 30 to 40 and prints all the integers that end with 8.

Q13. Write a program to print the table of the given number :

for example input number is 7 so output will be 7,14,21,28,.....70

AUTUMN BREAK ASSIGNMENT

CLASS-XI [IP]

- Q1. Which of the following is a valid or invalid Python variable name?
 a) 1variable b) @name c) _value d) class
- Q2. What does range(5, 1, -1) generate?
- Q3. Explain the difference between for loop and while loop with example?
- Q4. What will happen if the condition in a while loop is always True? Give one example.
- Q5. What is the difference between break and continue with example.
- Q6. Predict the output

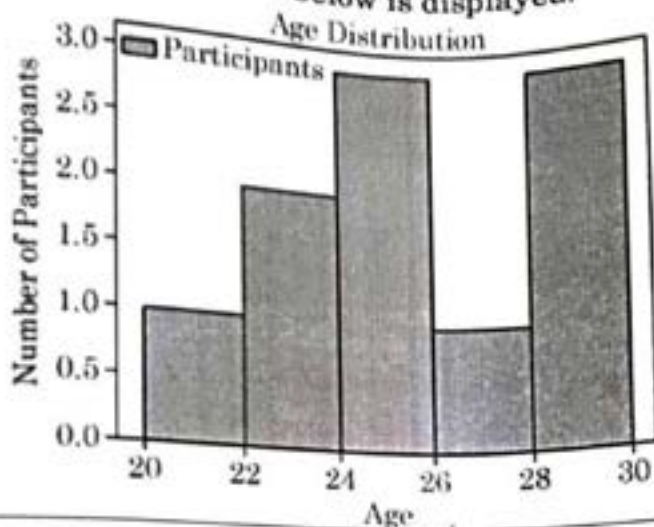
<pre>i = 1 while i <= 5: print(i * "*") i += 1</pre>	<pre>n = 10 while n > 0: print(n, end=" ") n -= 3</pre>	<pre>x = 1 s = 0 while x < 6: s += x * x x += 2 print(s)</pre>
<pre>n=4 fact=1 for i in range(1,n+1): fact*=i print(fact)</pre>	<pre>for l in range(20,30,2): print(i)</pre>	<pre>x = "123" for i in x: print("a")</pre>

- Q7. Convert the following for loop code into while loop.
for x in range (1,100,2):
print(x)
- Q8. Write a program to print all numbers from 1 to 10 except 5 using continue statement.
- Q9. Write a program to print the factorial of a number using for loop.
- Q10. Write a program to check whether a number is prime or not.
- Q12. Write a Python program that accepts a list of integers from the user and prints all the integers that end with 8.
 Eg: for the list [10, 28, 8, 86, 98] the program should print 28 8 98
- Q13. Write output of the following python statement:
 sample_list = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
- sample_list[:-5:-1]
 - sample_list[2:-1:2]
 - sample_list[1::2]
 - sample_list[9:0:-2]
 - sample_list[-2:0:-1][::3]

AUTUMN BREAK ASSIGNMENT CLASS-XII [Informatics Practices]

Q1 Ms. Anjali, a data analyst, has been assigned the task of creating a histogram to display the age distribution of ten participants in a workshop. She has been provided with the following list of their ages :
Ages = [22, 25, 24, 28, 30, 24, 29, 27, 21, 23]

She has started writing a Python program for it. However, the code is incomplete. Help her complete the program by filling in the missing parts, so that the histogram as shown below is displayed.



2 Shalini, who works as a database designer in the hotel industry, has created a table named **Guest** to keep track of guest details as shown below :

Table : Guest

GuestID	GuestName	RoomNumber	CheckInDate	Charges
G101	Harish	101	2025-04-03	3000
G102	Sunita	101	2025-04-03	3000
G103	Ramesh	102	2025-05-04	5000
G104	Bhumika	103	2025-06-02	3500

Write a suitable SQL query for the following :

- Display last 3 characters of guest name in upper case.
- Display the name of the guest along with the day name of check-in date.
- Display the remainder when charges are divided by 1000.
- Extract and display three characters, starting from the second character, of each guest name.

3 Write the output of the following code :

```
import pandas as pd
s1 = pd.Series([1, 2, 3], index = ['a', 'b', 'c'])
s2 = pd.Series([4, 5, 6], index = ['b', 'c', 'd'])
print(s1 +
```

Am

4

Table 2 : SUBJECT, which stores Subject ID (SID), Subject Name (SubName) and ID of the teacher(TID) teaching that Subject.

SID	SubName	TID
101	Physics	1
102	Chemistry	2
103	Mathematics	3
104	Informatics Practices	4
105	Computer Science	5

Write appropriate SQL query for the following :

- (I) Delete the record of the subject whose TID is equal to 4.
- (II) Display the names of teachers who have more than 5 years of experience and who stay in Nagpur.
- (III) Display subject names along with their teacher names.

5

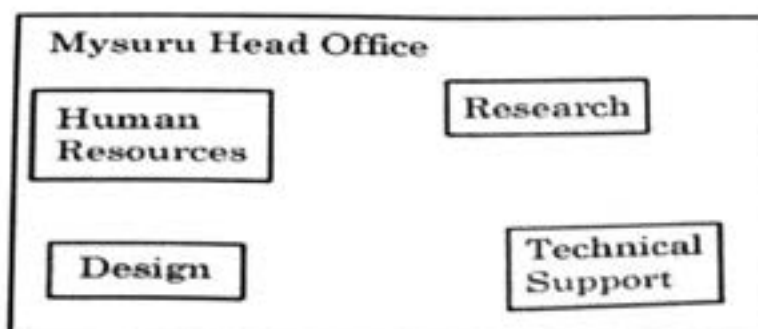
(b) Consider the table **LIBRARY** as given below.

BookId	Title	Genre	Price
101	Python Basics	Technology	278
201	The Silent Patient	Fiction	340
301	Data Science	Technology	291
401	Oceans	Marine Life	NULL

- (I) Which attribute(s) can be considered as the Candidate keys(s) ? Justify your answer.
- (II) Write an SQL query to insert a new record with the following values :
BookId : 501
Title : AI for ALL
Genre : Technology
Price : 589

6

My Solutions Pvt. Ltd. is a reputed software development and IT consulting firm. The company's head office is located in Mysuru, and it has a regional office in Chennai. The Mysuru office comprises four departments: Human Resources, Research, Design and Technical Support.



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AUTUMN BREAK ASSIGNMENT

CLASS-XII [Computer Science]

1	Q1. What is the output of the following code snippet ? <pre>s="War and Peace by Leo Tolstoy" print(s.partition("by"))</pre> (A) ('War and Peace ', 'by', ' Leo Tolstoy') (B) ['War and Peace ', 'by', ' Leo Tolstoy'] (C) ('War and Peace ', ' Leo Tolstoy') (D) ['War and Peace ', ' Leo Tolstoy']
2	What will be the output of the following statement ? <pre>print("PythonProgram"[-1:2:-2])</pre>
3	What possible output(s) from the given options will NOT be displayed when the following code is executed ? Also, mention, for how many iterations the for loop in the given code will run ? <pre>import random a = [1,2,3,4,5,6] for i in range(4): j=random.randrange(i,5) print(a[j],end='--') print()</pre> Options : (A) 3-4-5-4- (B) 2-2-4-5- (C) 4-3-3-5- (D) 5-1-2-4-
4	a) Write a Python function that counts and returns the number of digits appearing in the text file "Space.txt".
5	Karthik is a manager working in a recruitment agency. He needs to manage the records of various candidates. For this, he wants the following information of each candidate to be stored: Candidate_ID – integer Candidate_Name – string Designation – string Experience – float You, as a programmer of the company, have been assigned to do this job for Karthik. - Write a function to input the data of a candidates and append it in a binary file - Write a function to update the data of candidates whose experience is less than 10 years and change their designation to "Assistant Manager". - Write a function to read the data from the binary file and display the data of all those candidates who are not "Assistant Manager".
6	Mr. Ashok is working on a Toy Shop project to manage toys records using Python. The toys data is stored in a binary file named TOYDATA.DAT. The binary file TOYDATA.DAT contains each record in given format: <pre>{"Toy_ID": T_ID, "TName":toy_name, "Price":price}</pre> Where • Toy_ID: Toy ID (string) • TName: Toy name (string) • Price: Price of toy (integer) You as a programmer, help him to write following python functions: - ADD_Data() : To write n records in binary file TOYDATA.DAT by taking the values for each record from user. - SHOW_Data() : Read all records from binary file and display them. - Remove_Toy() : that deletes the record of a toy in the file TOYDATA.DAT based on the Toy ID provided by the user. If the Toy ID does not exist in the file, display an appropriate message.
7	Write a Program in Python that defines and calls the following user defined functions: - ADD() – To accept and add data of an employee to a CSV file 'record.csv'. Each record consists of a list with field elements as empid, name and salary to store employee id, employee name and employee salary respectively. - COUNTR() – To count the number of records present in the CSV file named 'record.csv'

8

Vedansh is a Python programmer working in a school. For the Annual Sports Event, he has created a csv file named Result.csv, to store the results of students in different sports events. The structure of Result.csv is :

[St_Id, St_Name, Game_Name, Result]

Where

St_Id is Student ID (integer)

St_Name is Student Name (string)

Game_Name is name of game in which student is participating (string)

Result is result of the game whose value can be either 'Won', 'Lost' or 'Tie'

For efficiently maintaining data of the event, Vedansh wants to write the following user defined functions:

Accept() – to accept a record from the user and add it to the file Result.csv. The column headings should also be added on top of the csv file.

wonCount() – to count the number of students who have won any event.

As a Python expert, help him complete the task

9

A list contains following record of course details for a University:

[Course_name, Fees, Duration]

Write the following user defined functions to perform given operations on the stack named 'Univ' :

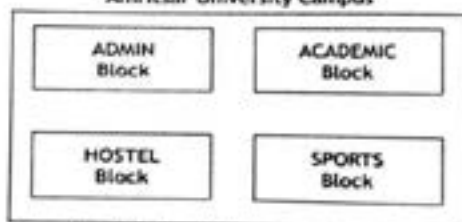
(i) Push_element() - To push an object containing the Course_name, Fees and Duration of a course, which has fees greater than 100000 to the stack.

(ii) Pop_element() - To pop the object from the stack and display it. Also, display "Underflow" when there is no element in the stack.

10

Sanjeevani is a big group of educational institutions with its head office in Hyderabad. It is planning to set up a new University in Amritsar. The Amritsar University Campus will have four block/buildings – ADMIN, ACADEMIC, HOSTEL, SPORTS. You, as a network expert, need to suggest the best network – related solutions for them to resolve the issues/problems mentioned in points (i) to (v), keeping in mind the distances between various blocks/buildings and other given parameters.

Amritsar University Campus



Block to Block distances (in Mtrs) :

FROM	TO	DISTANCE
ADMIN	ACADEMIC	60 M
ADMIN	HOSTEL	160 M
ADMIN	SPORTS	80 M
ACADEMIC	HOSTEL	40 M
ACADEMIC	SPORTS	120 M
HOSTEL	SPORTS	150 M

ADMIN	25
ACADEMIC	600
HOSTEL	120
SPORTS	50

Distance of Hyderabad Head Office from Amritsar University Campus = 2000 km Number of computers in each block is as follows :

- Suggest the most appropriate location of the server inside the Amritsar University Campus. Justify your choice.
- Draw the cable layout to efficiently connect various blocks within the Amritsar University Campus.
- Name any two wired media that can be used to connect various computers of a block inside Amritsar Campus.
- For the academic purpose, the University will provide its own 24x7 FM channel within the University Campus. Which communication medium, out of the following, is used by FM ? (A) Radio Waves (B) Micro Waves (C) Infrared Waves
- (a) The students will be attending a lot of online academic sessions and workshops.

AUTUMN BREAK ASSIGNMENT

CLASS-XI [IP]

Q1. Which of the following is a valid or invalid Python variable name?
a) 1variable b) @name c) _value d) class

Q2. What does range(5, 1, -1) generate?

Q3. Explain the difference between for loop and while loop with example?

Q4. What will happen if the condition in a while loop is always True? Give one example.

Q5. What is the difference between break and continue with example.

Q6. Predict the output

<pre>i = 1 while i <= 5: print(i * "*") i += 1</pre>	<pre>n = 10 while n > 0: print(n, end=" ") n -= 3</pre>	<pre>x = 1 s = 0 while x < 6: s += x * x x += 2 print(s)</pre>
<pre>n=4 fact=1 for i in range(1,n+1): fact*=i print(fact)</pre>	<pre>for i in range(20,30,2): print(i)</pre>	<pre>x = "123" for i in x: print("a")</pre>

Q7. Convert the following for loop code into while loop.

```
for x in range (1,100,2):
print(x)
```

Q8. Write a program to print all numbers from 1 to 10 except 5 using continue statement.

Q9. Write a program to print the factorial of a number using for loop.

Q10. Write a program to check whether a number is prime or not.

Q12. Write a Python program that accepts a list of integers from the user and prints all the integers that end with 8.

Eg: for the list [10, 28, 8, 86, 98] the program should print 28 8 98

Q13. Write output of the following python statement:

```
sample_list = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
```

i) sample_list[:-5:-1]

ii) sample_list[2:-1:2]

iii) sample_list[1::2]

iv) sample_list[9:0:-2]

v) sample_list[-2:0:-1][:3]

CLASS 12th CHEMISTRY

Autumn Break

HOLIDAY HOMEWORK

Dear Students,
Use this break wisely to learn, revise and excel.
Complete the following tasks sincerely.

1

Complete the assigned Investigatory Project and submit after autumn break.



2

Complete the practical record file.



3

Learn all Name Reactions.

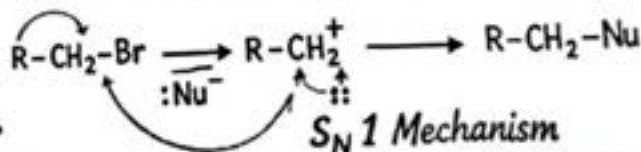


Cannizzaro ✓
Aldol ✓
Rosenmund ✓
Hell-Volhard-Zelinsky ✓
Etard ✓
and many more...



4

Learn all the Reaction Mechanisms.



5

Solve at least 50 Conversion Reactions from Chapter 6, 7, 8 and 9.

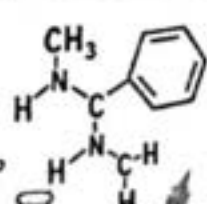
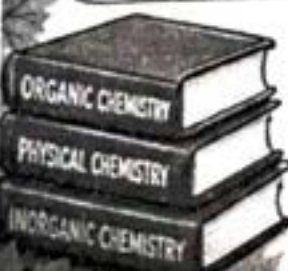
Chapter 6
Haloalkanes &
Haloarenes

Chapter 7
Alcohol, Phenol
Ether

Chapter 8
Aldehyde, Ketone &
Carboxylic Acid

Chapter 9
Amines

50 CONVERSIONS



Stay Curious,
Stay Consistent,
Keep Learning!



SEETA Goutam
PGT Chemistry
P M SHRI K V 1ST JABALPUR



- Investigatory project are listed in splitup syll shared by CBSE.
- Work sheet of individual chapters are shared in whatsapp group, of XII B class.

CLASS 11th CHEMISTRY

Autumn Break

HOLIDAY HOMEWORK

Dear Students,
Use this break wisely to learn, create and grow.
Complete the following tasks sincerely.

1

Complete the assigned Investigatory Project and submit after autumn break.



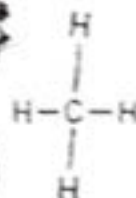
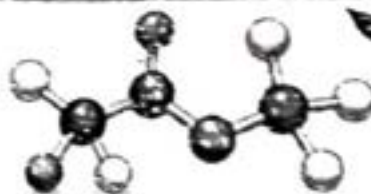
2

Complete the practical record file.



3

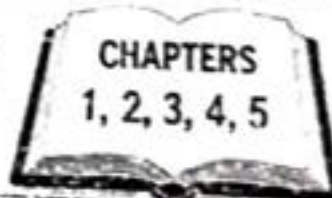
Make an Art Integrated Ball-and-Stick Model.



NaCl

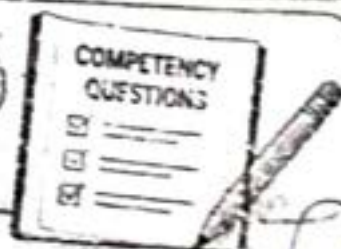
4

Revise the Chapter 1, 2, 3, 4, 5 for the Half Yearly Exam.



5

Solve assigned 10 Competency Based Questions.



Stay Curious,
Stay Consistent,
Keep Learning!



- Seeta Goutam

PGT Chemistry

P.M. SHRI K V I STC JABALPUR

CLASS XI – CHEMISTRY

AUTUMN BREAK HOLIDAY HOMEWORK

10 Competency-Based Questions | 2 Questions from Each Chapter (1–5)

Manish Kumar Goutam | PGT Chemistry | P M SHRI K V COD Jabalpur

Instructions: Answer all questions with clear reasoning and appropriate calculations. Show formulae, units, assumptions and chemical equations wherever required.

Chapter 1: Some Basic Concepts of Chemistry

1. A laboratory technician prepares a solution by dissolving 4.90 g of H_2SO_4 in water and making the final volume 250.0 mL. A 25.0 mL portion of this solution is then diluted to 200.0 mL. Calculate (i) the molarity of the original solution, (ii) the molarity after dilution, and (iii) the number of H_2SO_4 molecules present in 10.0 mL of the diluted solution. (Molar mass of $\text{H}_2\text{SO}_4 = 98.0 \text{ g mol}^{-1}$; $N_A = 6.022 \times 10^{23} \text{ mol}^{-1}$.)
2. A 2.50 g sample containing only Na_2CO_3 and inert impurities is treated with excess dilute HCl. The reaction produces 0.448 L of CO_2 at STP (take molar gas volume as 22.4 L mol^{-1}). Calculate the mass percentage of Na_2CO_3 in the sample. Then explain why the measured amount of CO_2 can be used to determine the purity of the carbonate sample. (Molar mass of $\text{Na}_2\text{CO}_3 = 106 \text{ g mol}^{-1}$.)

Chapter 2: Structure of Atom

3. An electron in a hydrogen atom is initially in the $n = 4$ state and falls to $n = 2$. Using $E_n = -13.6/n^2 \text{ eV}$, calculate the energy released in eV and joules per atom. Determine the wavelength of the emitted radiation using $hc = 1240 \text{ eV nm}$. State the region of the electromagnetic spectrum to which this line belongs.
4. Two species, ^{23}Na and $^{24}\text{Mg}^+$, each contain 11 electrons. (i) Write their electronic configurations. (ii) Explain why they are isoelectronic but do not have the same nuclear charge. (iii) Predict which species would have the smaller radius and justify your answer in terms of attraction between the nucleus and electrons.

Chapter 3: Classification of Elements and Periodicity in Properties

5. An unknown element X has successive ionisation enthalpies (in kJ mol^{-1}) of 738, 1451, 7733 and 10540. Identify the most likely group of X in the periodic table. Explain the large jump in ionisation enthalpy and predict the formula of the chloride that X is most likely to form.
6. Arrange the following species in order of increasing radius: O^{2-} , F^- , Na^+ and Mg^{2+} . All four species are isoelectronic. Explain your order using nuclear charge. A student argues that Mg^{2+} must be largest because magnesium has more protons; evaluate the argument.

Chapter 4: Chemical Bonding and Molecular Structure

7. Using Lewis structures and VSEPR theory, compare NH_3 and H_2O in terms of (i) number of bond pairs and lone pairs on the central atom, (ii) molecular shape, and (iii) approximate bond angle. Explain why the bond angle in H_2O is smaller than that in NH_3 .
8. A student predicts that CO_2 is polar because each C=O bond is polar, whereas BF_3 is non-polar because B–F bonds are non-polar. Identify both errors. Draw or describe the molecular geometry of each molecule and use bond-dipole cancellation to predict the overall polarity of CO_2 and BF_3 .

Chapter 5: Thermodynamics

9. A reaction is carried out in a calorimeter and releases 5.60 kJ of heat to the surroundings at constant pressure. The system also does 1.25 kJ of work on the surroundings. Determine (i) the heat change q of the system, (ii) the work w using the chemistry sign convention, and (iii) the change in internal energy ΔU . Explain why the heat measured at constant pressure corresponds to ΔH rather than ΔU .
10. Use the following standard enthalpies of formation: $\Delta_f H^\circ[\text{CO}_2(\text{g})] = -393.5 \text{ kJ mol}^{-1}$, $\Delta_f H^\circ[\text{H}_2\text{O}(\text{l})] = -285.8 \text{ kJ mol}^{-1}$, and $\Delta_f H^\circ[\text{CH}_4(\text{g})] = -74.8 \text{ kJ mol}^{-1}$. Calculate the standard enthalpy change for the combustion reaction $\text{CH}_4(\text{g}) + 2\text{O}_2(\text{g}) \rightarrow \text{CO}_2(\text{g}) + 2\text{H}_2\text{O}(\text{l})$, taking $\Delta_f H^\circ[\text{O}_2(\text{g})] = 0$. Then calculate the heat released when 4.00 g of methane burns completely. (Molar mass of $\text{CH}_4 = 16.0 \text{ g mol}^{-1}$.)

Think • Analyse • Apply • Learn

Autumn Break Home-work class VI C
Science

Q.1 MDP - (Project)
Theme: Historical Monuments of India.

Science Topic - (a) Building material used in historical monuments.

- (b) Types of rocks and stones used in construction
- (c) Causes of weathering and deterioration of monuments.
- (d) Scientific methods for the conservation of monuments.

Q.2 Art Integrated Project. (Science)

Make an interesting project related to temperature and its effects in our daily life. Join it with art integrated model.

Q.3 Solve work sheet of Chapter 1 -
"Temperature and its measurements"


Seeta Gaurav
(PBT Chemistry)

SECTION C: LITERATURE TEXTBOOKS (40 Marks Weightage Focus)

(Competency-Based, High-Order Thinking Questions based on mid-term syllabus)

I. FLAMINGO (Prose & Poetry)

- **The Last Lesson & Lost Spring (Cross-Text Integration):**
 - Imagine a panel discussion where **M. Hamel** and **Anees Jung** meet. Both share a common pain—the loss of identity (one through linguistic chauvinism, the other through systemic poverty). Draft a dialogue (120-150 words) between them focusing on how education can liberate individuals from both mental and physical shackles.
- **Deep Water:**
 - Douglas says, "*The experience had a deep meaning for me...*" Analyze how an individual's personal trauma can transform into psychological strength. Write a short self-reflection paragraph linking Douglas's strategy to overcoming **Exam Stress**.
- **Poetry (My Mother at Sixty-Six & Keeping Quiet):**
 - Answer the following in 40–50 words:
 1. How does Kamala Das use the contrast between the inside of the car and the world outside to highlight her internal conflict?
 2. How does Pablo Neruda link 'total inactivity' with death, and why does he advocate 'enforced silence' as a healing mechanism for humanity?

II. VISTAS (Supplementary Reader)

- **The Third Level:**
 - Sam's letter to Charley is a blend of reality and fantasy. Do you believe "The Third Level" is a safe haven for people dealing with the anxieties of modern warfare and fast-paced life? Justify your stance based on your reading of the chapter.
 - **The Enemy:**
 - Dr. Sadao's character is a classic example of **Professional Ethics** overcoming **National Boundaries**. Write a brief character evaluation (100-120 words) analyzing whether Sadao was traitor to his country or a true servant of humanity.
- *****

May -

(MK TIWARI)

PGT-English

Task 6: Grammar Application (Tenses, Determiners & Subject-Verb Concord)

- Edit the following passage by finding the error in each line and writing the correction:

Sentence Passage

Many a student **have** forgotten the value of reading.
Neither the teacher nor the pupils **was** present in the room.
Much books **is** available in the library on traditional crafts.
Every morning, the old man **walk** down to the riverbank.

Error Correction

_____	_____
_____	_____
_____	_____
_____	_____

SECTION D: ART-INTEGRATED PROJECT & NEP 2020 ACTIVITIES

Task 7: The "Kaveri" Cultural Choice Board (Pick ONE)

The Comic Strip: Convert a humorous scene from *Vitamin-M* into a 6-panel colorful comic strip with appropriate dialogues and speech bubbles.

The Word Web & Interview: Complete a detailed **Word Web** focused on "Literacy and Empowerment". Interview one elderly person in your family or neighborhood regarding their early school experiences, and document their responses in a summary report.

Artistic Book Jacket: Design an original, aesthetic front and back cover for the textbook *Kaveri* that visually synthesizes elements from the first four chapters you have read so far.

May

(MR TIWARI)

PST-English

PM SHRI KENDRIYA VIDYALAYA 1 STC JABALPUR
AUTUMN BREAK HOLIDAY HOMEWORK (SESSION 2026-27)
CLASS: XI- B& C SUBJECT: ENGLISH CORE (Code: 301)

General Instructions:

1. All work must be completed systematically in a dedicated **A4 size Holiday Homework Notebook** (approx. 50-60 pages) or an organized portfolio folder.
2. Neatness, accurate grammar, and structural adherence to the **CBSE guidelines** carry designated weightage.
3. The assignments are mapped to the syllabus prescribed and covered up to **October 15, 2026**.

SECTION A: READING SKILLS (20 Marks)

Task 1: Unseen Comprehension & Note-Making Passages

- **A.1. Case-Based Factual Passage:** Locate any two factual or case-based unseen data passages (with statistical charts/graphs) from the *KVS English Support Material*. Write down the passages or paste their printouts, and answer the multiple-choice and short-answer questions.
- **A.2. Note-Making & Summarization:** Choose two discursive passages (400-500 words). Prepare comprehensive notes using a recognizable numbering/indentation system and a minimum of 4 abbreviations with a clear Key box. Write a summary of both passages in your own words (up to 50 words).

SECTION B: GRAMMAR & CREATIVE WRITING SKILLS (23 Marks)

Task 2: Integrated Grammar Work

Answer the following in your homework notebook:

1. **Gap Filling / Cloze Test:** Rewrite a passage from your choice of a current editorial piece, omitting 5 prepositions/determiners and filling them correctly.
2. **Sentence Transformation & Reordering:** Reorder the following jumbled words into meaningful sentences:
*a / fundamental / human / education / right / is / everyone / for
the / rain / down / elements / drought / coming / atomies / laves / and / the*

Task 3: Short & Long Composition Practice

Classified Advertisements (50 Words):

You are the Administrative Officer of **Kendriya Vidyalaya**. Draft an advertisement for the local daily announcing the sale of old school furniture and discarded lab equipment under the 'SITUATION VACANT' or 'FOR SALE' column.

Poster Designing (50 Words):

Design an eye-catching, creative poster on behalf of your school's Eco Club promoting a "Green Diwali / Eco-Friendly Autumn Break" to spread awareness against air and noise pollution.

Speech Writing (120-150 Words):

You have been selected to speak in the morning assembly. Prepare a speech on "The Role of Youth in Preserving India's Cultural Heritage during Festival Seasons". Incorporate formal opening, structured body paragraphs, and a concluding vote of thanks.

SECTION C: LITERATURE (31 Marks)

Task 4: Short & Long Answer Analytical Matrix

Answer the following questions critically, focusing on character motivation and structural themes:

1. **The Portrait of a Lady:** Contrast the author's changing relationship with his grandmother during his early childhood in the village with his university days in the city. What does this tell us about shifting generational values?
 2. **A Photograph:** Explain how Shirley Toulson juxtaposes the permanent, changeless nature of the sea with the transient nature of human life ("terribly transient feet").
 3. **Discovering Tut: The Saga Continues:** Why did King Tut's mummy have to undergo a CT scan? Detail how modern archaeology relies on technology over mere treasure hunting.
 4. **The Voice of the Rain / The Laburnum Top:** Compare the cyclic journey of rain described by Walt Whitman with the biological relationship between the Goldfinch and the Laburnum tree.
 5. **The Address:** Justify Marga Minco's decision to resolve her painful past by choosing to forget her old address (Number 46, Marconi Street).
- *****

May 13/10/2026
(MKTIWARI)
PGT-English

PM SHRI KENDRIYA VIDYALAYA 1 STC JABALPUR
AUTUMN BREAK HOLIDAY HOMEWORK (2026-27)
CLASS: XII | SUBJECT: ENGLISH CORE (301)
Max Time Allocation: 1-2 hours daily over the break
Submission Deadline: Reopening day of the Vidyalaya

SECTION A: READING SKILLS & VOCABULARY ENRICHMENT (22 Marks Weightage Focus)

- **Task 1: Discursive Passage Practice**
 - Find a recent article (500–700 words) from a national daily newspaper (*The Hindu* or *The Indian Express*) regarding **Sustainable Development Goals (SDGs)** or **The Evolution of AI in Education**.
 - Cut and paste the article into your assignment notebook.
 - Draft **5 Multiple-Choice Questions (MCQs)** and **5 Short Answer Questions** based on inference, vocabulary (synonyms/antonyms), and central theme from the passage. Write their answers.
- **Task 2: Case-Based Statistical Analysis**
 - Collect a chart, graph, or infographic showing data about **"Youth Employment Trends in India"** or **"Social Media Consumption Patterns among Teenagers"**.
 - Write a **100-word analytical summary** interpreting the data trends, highlighting the peaks, drops, and general conclusions.

SECTION B: CREATIVE WRITING SKILLS (18 Marks Weightage Focus)

- Task 1: Short Writing Task - Notice Writing (Word Limit: 50)**
You are the School Captain of PM SHRI Kendriya Vidyalaya. Draft a notice for the school notice board inviting students of Classes XI and XII to register for a **Career Counseling Seminar** on "Avenues in Digital Media and AI Arts" to be conducted right after the autumn break.
- Task 2: Short Writing Task - Formal Invitation & Reply (Word Limit: 50)**
Part A: On behalf of the Principal and Staff of your Vidyalaya, draft a formal invitation card inviting parents and local dignitaries to the **Annual Sports Day Celebration**.
Part B: Draft a formal letter of **refusal/inability to attend** the event from the perspective of the Chief Guest due to a prior professional commitment.
- Task 3: Long Writing Task - Letter to the Editor (Word Limit: 120-150)**
You are deeply concerned about the rising instances of cyberbullying and online identity theft targeting school-going children. Write a letter to the Editor of *The Times of India* drawing attention to this issue and suggesting pragmatic steps that schools and parents can take to ensure **Cyber Safety**.
- Task 4: Long Writing Task - Job Application (Word Limit: 120-150)**
The Millennium School, New Delhi, has advertised a vacancy for the post of "Student Counselor". Write an application applying for the post, attaching a well-structured **Bio-Data/Resume** with dummy personal details.

SECTION C: LITERATURE TEXTBOOKS (40 Marks Weightage Focus)

(Competency-Based, High-Order Thinking Questions based on mid-term syllabus)

I. FLAMINGO (Prose & Poetry)

- **The Last Lesson & Lost Spring (Cross-Text Integration):**
 - Imagine a panel discussion where **M. Hamel** and **Anees Jung** meet. Both share a common pain—the loss of identity (one through linguistic chauvinism, the other through systemic poverty). Draft a dialogue (120-150 words) between them focusing on how education can liberate individuals from both mental and physical shackles.
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 - **The Enemy:**
 - Dr. Sadao's character is a classic example of **Professional Ethics overcoming National Boundaries**. Write a brief character evaluation (100-120 words) analyzing whether Sadao was a traitor to his country or a true servant of humanity.
-

May -

(MK TIWARI)
PGT-English

Holiday Homework Autumn Break

CLASS- 8th

SUBJECT- SOCIAL SCIENCE

1. Complete all the Questions and answers of Lesson - 1 (Part-1) in your Social Science Notebook.
2. Show the Oceans and Continents on the Political outline map of the world.
3. Why do all maps projections have some amount of distortion?
4. What makes the Tibetan Plateau unique?
5. Why are coral reefs called the 'rainforests of the sea'?
6. How do the oceans help to regulate the Earth's climate?
7. What is the main reason for the Great Barrier Reef facing threats today?
8. Choose two different types of geographical features you have explored in this chapter. Write short paragraphs on how they influence the flora and Fauna or human lives in that area. Do they also have an implication for the whole globe?
9. Discuss how oceans influence climate and trade. Use examples from the Indian and Pacific Oceans.
10. Choose an environmental issue (deforestation, reef bleaching or desertification) and explain its causes, impacts, and possible solutions.
11. Describe any three major physical features of the Earth.

R. Pathanija
13/10/26
13/10/26

Holiday Home Work Autumn Break

CLASS - XI D

SUBJECT - HISTORY

1. Learn Questions and answers of the lessons 1 to 5.
2. Complete all written work neatly in your History Notebook.
3. Complete the project work on the topic given to you and submit Project file on 26.10.2026.
4. Write any two source based questions from each chapter in your history notebook
5. Show the following places on the Political outline map of the world :-
 - 1) Italy 2) Germany 3) France 4) Constantinople
 - 5) Florence 6) Bagdad 7) Mongol Empire 8) Venice
 - 9) England 10) Rome
6. Answer the following questions in 200 words :-
 - 1) Explain three important features of urban life in Mesopotamia.
 - 2) How did trade contribute to the prosperity of the Roman Empire?
 - 3) Explain the military and administrative achievements of Genghis Khan.
 - 4) Describe the position and responsibilities of peasants in Medieval European society.
 - 5) Explain the importance of humanism during the Renaissance period.

Holiday Homework Autumn Break
CLASS - XII D
SUBJECT - HISTORY

1. Learn Questions and answers of all the lessons.
2. Write NCERT Questions in your History notebook.
3. Complete the map work and paste in history notebook.
4. Write all the source based questions of lessons 9 to 12 in your history copy with solutions.
5. Complete the Project work and submit Project file on 26.10.2026.
6. Answer the following questions in 250 words :-
 - 1) Explain the Permanent Settlement and its impact on peasants and Zamindars.
 - 2) Explain the causes, programme and significance of the Civil Disobedience Movement.
 - 3) Why was Awadh an important centre of the revolt?
 - 4) Why was the issue of separate electorates controversial in the Constituent Assembly?
 - 5) Explain the significance of the Constituent Assembly debates in framing the Indian Constitution.
 - 6) Discuss the Gandhi's role in transforming Indian nationalism into a mass movement.
 - 7) Why did Gandhiji choose salt as a symbol of protest?
 - 8) How do official records, paintings and contemporary accounts help historians to reconstruct the Revolt of 1857?

R. Pathariya

Autumn Break Homework (13/10/2026)
Class XI , XII Subject – Accountancy & Business Studies

XI Accountancy

1. Solve any five questions of Depreciation as Practice (Machinery sold & calculation of P&L , Provision).
2. Theory of Chapter Trial Balance and Rectification of errors (Note book should be completed)
3. Project work assign .

XI Business Studies

1. Write the theory of Chapter source of Business Finance. (Note book should be completed)
2. Project work assign .(File)

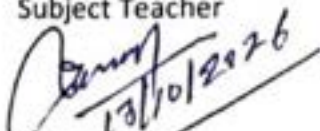
XII Accountancy

- 1 Project work Assign. (Final project file) Accountancy
- 2 Solve any 4 questions , prepare Balance Sheet with note to account .
- 3 . Write any 20 Items with Major Heading and Sub Heading. (Note book should be completed)

XII Business studies

- 1 Project work Assign. (Final project file) Business Studies.
- 2 Write Chapter MARKETING theory in Note book
3. (Note book should be completed)

Subject Teacher


13/10/2026
B.M. PANTHI

Down Break Holiday Homework Date
13-10-26
Class XIC & XID ECONOMICS

The Students of both classes $XIC + XID (50+9) = 59$ distributed in 15 groups, each group allotted ~~has~~ 4 students and the topic will be same. Each student has to prepare separate project file for final project & Assignment work during final practical and submission of this project file on 31 Oct. 2026.

Topic allotted to each group as following:-

- Collection of data.
- Organisation of data.
- Demand.
- Elasticity of Demand
- Revenue.
- Cost
- Production function
- Producer's Equilibrium
- Consumer's Equilibrium
- Supply.
- Elasticity of Supply.
- Co-Relation
- Law of Demand
- Graphic Presentation.
- Diagrammatic Presentation.

S.S. Gautam
PGT Economics

Autumn Break Holiday Home work

Date 13/10/26

Class XIIC & XIID (ECONOMICS)

The Students of both classes XIIC+XIID ($47+10=57$) has divided in 14 groups, each groups has allotted 04 Students and the topic will be same. Each Student has to prepare separate project-file for final project and Assignment work during final practical and Submission of these project files on 31-10-2026.

Topic allotted to each group as following:-

- ① New Economic Policy (1991)
- ② Human capital formation
- ③ Rural Development-
- ④ Employment
- ⑤ Environment & Sustainable Dev.
- ⑥ Comparative Development (Ind, Pak, China)
- ⑦ Money & Banking
- ⑧ Govt. Budget & Economy.
- ⑨ FERA & BOP
- ⑩ Problem of Excess & Deficient Demand.
- ⑪ Demonetisation
- ⑫ Make in India & startup
- ⑬ G.S.T.
- ⑭ Digital India

SS. Gautam
PGT (ECO)

Autumn Break

Home Work

Date: 13/10/2026

Name: Neheshu
Nishwaha

Des: PG7 (CHEM)

CLASS - XII

Subject: Chemistry

- ① OS Sample paper of chemistry - to solve
- ② Investigating project - to prepare
- ③ practical file completion

CLASS - XI

Subject: Chemistry

- ① OS Sample paper of Half yearly exam — practice / solve
- ② practical file completion

CLASS - VIII

Subject - Science

- ① Subject Enrichment Topics.
- ① A Collect Ten elements from your surrounding and write their
① Name ② Symbol ③ OS uses of each
- ② B Name OS compound from your surrounding and write their
① Name. ② OS uses of each
- ③ C Track the festival Record and relate it with Lunar calendar [for two years]

Neheshu
13/10/26

(Holiday HW - 2026)

Class XI B - Physics

- i) 05 Numericals & 05 Conceptual questions from each chapter.
- ii) All practical written work.

Class XII A - Physics

- i) 05 Numericals & 05 Conceptual questions from each chapter of last 05 years Board Exam.
- ii) All practical written work

Class IX (BED)

- i) Exercise questions of Chapter - Work & Energy
- ii) ~~05~~ diagrams of any 05 simple machine.
- iii) 05 properties of sound waves



ANIL SONDHIYA
PGT Physics



PM SHRI KENDRIYA VIDYALAYA NO. 1, STC JABALPUR AUTUMN BREAK HOMEWORK

ENGLISH | CLASSES IX, XI & XII

Academic Session: 2026-27

Dear Students,

Please complete the following assignments during the Autumn Break. Work should be neat, original, well-organised and submitted on the date communicated by the subject teacher. Use reliable sources for research and acknowledge them wherever applicable.

CLASS IX

1. Portfolio Activity: Famous Gardens of India

Research and collect information on any FIVE famous gardens of India (for example, Amrit Udyan, Brindavan Gardens and other notable gardens). Prepare a short report and a presentation.

Your work should include:

- Historical background and location of each garden.
- Important design features, landscaping and distinctive elements.
- Cultural, environmental or historical significance.
- Photographs or illustrations with captions and source details.
- A brief conclusion explaining what makes these gardens special.

2. Research Activity: Ten Unique Flowers of India

Collect information about ANY TEN unique flowers found in India. Add a clear picture of each flower and write about:

- Where it is found and its habitat.
- Appearance, colour, shape and distinctive features.
- Fragrance or smell, if any (mention if it has little or no fragrance).
- Historical, cultural, medicinal or religious significance, if any.
- One interesting fact and the source of information.

Presentation guidelines: Compile the work in a portfolio or project file. Include a cover page, index, headings, labelled pictures, conclusion and bibliography. Do not copy paragraphs without understanding them.

CLASS XI

English Project for Internal Assessment

Prepare the English project on the topic allotted to you for Internal Assessment.

Ensure that the project includes:

- A title page with name, class/section, roll number, school and session.
- Acknowledgement and index, wherever required.
- A clear introduction, relevant research/content and analysis.
- Conclusion/reflection and bibliography or list of sources.
- Neat presentation, correct language and proper organisation.

Follow the instructions and format shared by the subject teacher. Students should work independently and submit their own original work.

CLASS XII

1. Previous Years' Question Papers

Solve TWO English Core question papers from previous years.

Solve TWO English Core question papers from previous years.

- Attempt each paper under examination conditions and within the prescribed time.
- Answer all sections: Reading Skills, Creative Writing Skills and Literature, as applicable to the paper.
- Follow the word limits and prescribed formats for writing tasks.
- Check your answers using the marking scheme, where available, and make corrections in a different colour.

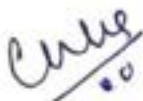
2. Extra Classes

Extra classes are scheduled from 15 to 18 October. Students are expected to attend regularly, arrive on time and bring their English Core textbook, notebook and completed question papers.

GENERAL INSTRUCTIONS

- Write your name, class/section and roll number clearly on the cover page.
- Maintain accuracy, originality, neatness and proper organisation.
- Use age-appropriate, credible sources and acknowledge books/websites used.
- Paste or print pictures neatly; add captions and source details.
- Complete the work within the given time and follow any further instructions issued by the subject teacher.

Department of English
PM SHRI KV No. 1, STC Jabalpur



Holiday Home Work
Class IX
Sub: Maths

- Q1. Plot mirror images of points A (3, 4), B (7, 1) and C (9, 6).
- Q2. Plot the points P (2, 1), Q (-1, 2), R (-2, -1) and S (1, -2). Is PQRS a square? Why or why not?
- Q3. The difference between two positive integers is 63. The ratio of the two integers is 2 : 5. Find the integers.
- Q4. The length of the rectangle is thrice its breadth. Find its area if its perimeter is 240 m.
- Q5. Draw the graph for: (i) $x = y$ (ii) $x = 2y$ (iii) $x + y = 0$ and $y = x + 2$.
- Q6. Draw the graphs: (i) $y = 2x + 5$ (ii) $y = 2x + 1$ and $y = 2x - 1$. Are they parallel?
- Q7. Represent on the number line: $2/3$, $-5/4$, $3/2$.
- Q8. Convert into the form p/q : (i) 0.35 (ii) 0.45 (iii) 2.34 (iv) 0.28 .
- Q9. Using identity, expand the following:
(i) $(2x + 5y)^2$
(ii) $(3/2 x + 4/3 y + 1/2 z)^2$
(iii) $(x - 3y)^2$
(iv) $(3x - 5y)^2$
(v) $(3x + 8y)^2$
- Q10. Factorise:
(i) $m^2 - 4m + 4$
(ii) $x^2 - 7x + 12$
(iii) $x^2 + x - 20$
(iv) $27x^3 - 1/125 - 27x^2/5 + 9x/25$
- Q11. In a circle, prove that:
(i) Equal chords are equidistant from the centre of the circle.
(ii) The angle subtended by an arc at the centre of the circle is double the angle subtended by the arc at any point on the circle.
- Q12. Show that the sum of two opposite angles of a cyclic quadrilateral is 180° .
- Q13. Two parallel chords of lengths 10 cm and 24 cm are on the same side of the centre of a circle. The distance between the chords is 7 cm. Find the radius of the circle.
- Q14. Using Heron's formula, find the area of an equilateral triangle.
- Q15. The circumference of a circle is 44 m. Find its area.
- Q16. Find the area of the triangle if its sides are 8 cm and 11 cm and its perimeter is 32 m.
- Q17. The sides of a triangular plot are in the ratio 3 : 5 : 7. Its perimeter is 300 m. Find its area.
- Q18. In $\triangle ABC$, the midpoint of BC is D and the median AD is drawn. P is any point on AD. Show that $\text{area}(\triangle ABP) = \text{area}(\triangle ACP)$.

- Q10. The length of the minute hand of a clock is 7 cm. Find the area swept by the minute hand in 10 minutes.
- Q11. If you roll a die, find the probability of getting: (i) an odd prime number, (ii) an even prime number, (iii) a number more than 4, (iv) a composite number less than 3.
- Q12. A box contains 50 numbered marbles. Find the probability of getting, when one marble is drawn: (i) a perfect square, (ii) a prime number, (iii) a number more than 45.
- Q13. Determine whether 97 and 172 are terms of the sequence $t_n = 5n - 3$, for $n \geq 1$.
- Q14. Which term of the A.P. 21, 18, 15, ... is -81? Also, is 0 a term of this A.P.? Give a reason and support your answer.

Additional instructions: Write and learn all algebraic formulae. Learn all definitions.



Holiday HomeWork

Class VI

Sub- Maths

1. Learn tables from 2 to 20.
2. Learn and write the types of angles with figures:
(i) acute angle, (ii) right angle, (iii) obtuse angle, (iv) straight angle, (v) reflex angle, (vi) complete angle.
3. Write and learn the formula for the area and perimeter of the following figures: (i) triangle, (ii) square, (iii) rectangle, (iv) parallelogram, (v) trapezium, (vi) circle.
4. Find the perimeter and area of the following at your home: (i) cupboard, (ii) door, (iii) dining table, (iv) kitchen platform. Is their perimeter and area are same/equal?
5. Write a list of examples and also draw figures of: (i) one-dimensional objects, (ii) two-dimensional objects, (iii) three-dimensional objects.

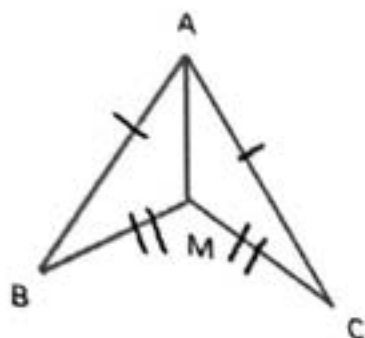
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Holiday HomeWork

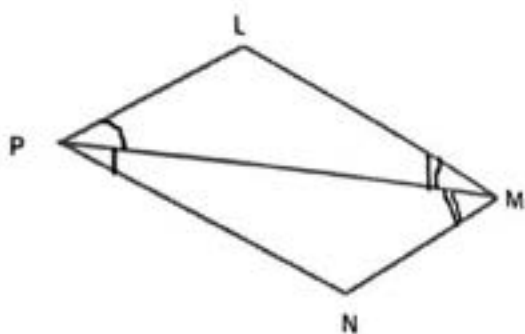
Class VII

Sub-Maths

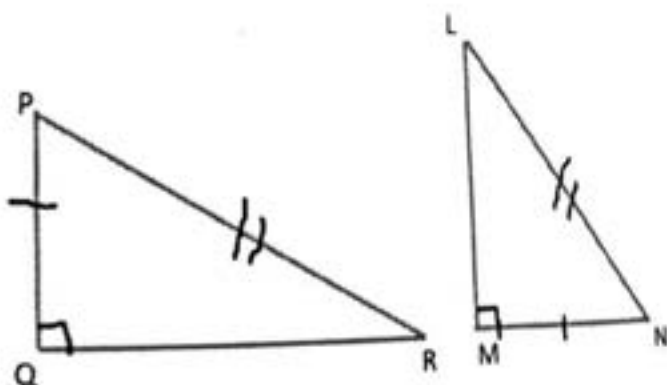
1. Learn tables from 2 to 20.
2. Learn all definitions with examples: (i) natural numbers, (ii) whole numbers, (iii) prime numbers, (iv) composite numbers, (v) twin prime numbers, (vi) co-prime numbers, (vii) integers, (viii) rational numbers.
3. Learn and write with diagrams the types of triangles: (i) according to their sides, (ii) according to their angles.
4. Write the following congruency conditions of the following triangles.



(ii)



(iii)



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(iv)