

पीएम श्री केंद्रीय विद्यालय बोवेनपल्ली
कक्षा 6 विषय : हिंदी
शीतकालीन अवकाश गृहकार्य

1. मैया मैं नहीं माखन खायो -(पद से)- (i) मेरे समझ से (ii) मिलकर करें मिलान
(iii) पंक्तियों पर चर्चा (iv) सोच विचार के लिए (v) शब्दों के रूप - क (vi) घर की वस्तुएँ
2. परीक्षा : (i) मेरे समझ से (ii) समस्या और समाधान (iii) सोच विचार के लिए
(iv) खोजबीन (v) विपरीतार्थक शब्द
3. चेतक की वीरता : (i) मेरे समझ से (ii) मिलकर करें मिलान-क (iii) पंक्तियों पर चर्चा
(iv) समार्थी शब्द (v) आज की पहेली ।
4. हिन्द महासागर में छोटा सा हिंदुस्तान : (i) मेरे समझ से (ii) सोच- विचार के लिए (iii) अनुमान या कल्पना से -ख,ग,घ (iv) संज्ञा के स्थान पर
5. पेड़ की बात : (i) मेरे समझ से (ii) मिलकर करें मिलान (iii) सोच- विचार के लिए

प्रश्न 6. निम्नलिखित प्रश्नों के उत्तर लिखिए -

1. बीज के अंकुरित होने में किस-किस का सहयोग मिलता है ?
2. हिरन समूह में क्यों खड़े थे ?
3. चेतक शत्रुओं की सेना पर किस प्रकार टूट पड़ता था ?
4. नौकरी की चाह में आए लोगों ने नौकरी पाने के लिए क्या-क्या प्रयत्न (प्रयास) किए?
5. माता यशोदा ने श्रीकृष्ण को हँसते हुए गले से क्यों लगा लिया?

प्रश्न 7 . दो मित्रों के बीच फुटबॉल पर वार्तालाप करते हुए संदेश लिखिए-

प्रश्न 8 दिए गए विषय पर छोटा अनुच्छेद लिखिए-

1. मेरा प्रिय त्यौहार 2. मेरा विद्यालय 3. मेरा प्रिय मित्र

प्रश्न 9 . मित्र के जन्मदिवस पर बधाई देते हुए पत्र लिखिए-

प्रश्न 10 प्रधानाचार्य को दो दिनों का अवकाश मांगते हुए पत्र लिखिए -

अवकाशः गृह कार्य

देवः शब्दः ,ग्रन्थः शब्दः , कथा शब्दः, अस्मत् शब्दः , युष्मत् शब्दः

English(6th Class)

1)You have won the chess match in your school,defeating last year's champion of your school.

Write a diary entry sharing your feelings of the match in 100 words

2)Write a Paragraph about your play time.

3) Who do you think were birds neighbours.why do you think so?

Discuss and draw the pictures of neighbour.

4)Describe your favourite City in 100 words .

CLASS- 6TH SOCIAL SCIENCE WINTER BREAK HHW

Write the answer of the following questions in your HW notebook :-

1. Explain the three main types of economic activities with suitable examples.
2. Mention any five features of Indus valley civilization.
3. What are the major types of landforms and their significance to life and culture?
4. Write short notes on Plains?
5. What caused the decline of the Harappans?
6. Write three key functions of Gram Panchayat?
7. What is a Children's Parliament in Rajasthan?
8. How have Sangkhu Radhu Khandu Gram Panchayat helped children?
9. How do we classify economic activities into three sectors ? Explain with example.
10. Primary sector depends on secondary and tertiary sector . How?

**Class 6 WINTER HOLIDAY HOME WORK
SUBJECT. SCIENCE**

1. REVISE THE FOLLOWING CHAPTERS FOR PT2
2. Chapter 6

3. Chapter 7
4. Chapter 8
5. Chapter 5 – only types of motion
6. II. Make a beautiful project on air pollution
7. Page 1- My profile
8. Page 2 contents
9. Page 3 – Introduction to air pollution
10. Page 4 paste beautiful pictures and draw graphs to present air quality

Class 6 Mathematics

WINTER

1. Perimeter of a triangle = sum of the lengths of itssides.
2. Akshi wants to put lace all around a rectangular tablecloth that is 3 m long and 2 m wide. Find the length of the lace required
3. Perimeter of an equilateral triangle = \times length of a side.
4. A rectangle ABCD has length and breadth 12 cm and 8 cm, respectively. What is its perimeter?
5. Draw a rangoli design on A-4 SIZE SHEET

English Holiday Homework

Class VII

Instructions

☐☐ Do your holiday homework in HW notebook.

1. Diary Entry: write about a fun holiday memory, describing your feelings and experiences.
2. Write a poem of your own on ANY ONE of the following topics:
 - A. Winter
 - B. Friendship
 - C. Soldiers
4. Write a conversation between you and a soldier.
5. Prepare a collage on Armed Forces.
6. Practice Reported speech and Formal letters.

पीएम श्री केन्द्रीय विद्यालय बोवानपल्ली

ग्रीष्मावाकाश गृहकार्य - कक्षा -7

1. नहीं होना बीमार (पाठ से)- (i) मेरे समझ से , (ii) मिलकर करें मिलान,(iii) सोच-विचार
के लिए , (iv) अनुमान और कल्पना से - ग, घ , (v) आज की पहेली ।
2. गिरिधर कविराय की कुंडलिया : (i) मेरे समझ से (ii) (ii) मिलकर करें मिलान, (iii)
सोच विचार के लिए - क,ख, (iv) काल से जुड़े शब्द ।
3. वर्षा बहार : (i) मेरे समझ से , (ii) पंक्तियों पर चर्चा (iii) सोच- विचार के लिए क , ग
(iv)- विशेषण- क, ख । (v) आज की पहेली ।

4. बिरजू महाराज से साक्षात्कार : (i) मेरे समझ से (ii) पंक्तियों पर चर्चा
(iii) सोच- विचार

के लिए -1. क,ख,ग,घ (iv) शब्दों की बात - ख । (व) सृजन - ख

अनुच्छेद लेखन - 1. बाल दिवस 2. गणतन्त्र दिवस

अपनी activity book में कीजिए

KV BOWENPALLY

Winter break home work

Class 7. Mathematics

1. Make a magic square in which middle number is 10.

2. Draw a pair of parallel lines and a transversal.

Measure all the angles and write.

3. Draw a figure of linear pair and measure both the angles.

4. Draw a pair of intersecting lines and measure all the 4 angles and write.

5. Draw a triangle of any measurement. Measure the lengths of sides and find perimeter. Also measure all the three angles. Find the sum.

CLASS 7TH SCIENCE WINTER BREAK HOME WORK

Chapter 6 – Adolescence: A Stage of Growth and Change

1. Write a short summary (100–120 words) on what adolescence is and why it is important.
2. List 6 physical and 4 emotional changes seen during adolescence.
3. Activity: Interview a friend or sibling older than you about one challenge they faced during adolescence and write their response.

Chapter 7 – Heat Transfer in Nature

4. Define conduction, convection & radiation with one example each.

5. Explain with a diagram how sea breeze and land breeze are formed.
6. Experiment: Place equal amounts of hot water in two cups (one metal, one plastic). After 10 minutes, record which feels warmer outside and explain why.
7. Why are hollow bricks used in hot regions?
8. How do large water bodies affect temperature?

Chapter 8 – Measurement of Time and Motion

9. Define motion, speed, distance and time in your own words.
10. Solve these problems:
 - a) A car travels 60 km in 2 h. What is its speed?
 - b) A cyclist covers 15 km in 1.5 h. Find the speed (show calculations).
 - c) Draw a simple distance-time graph for an object that covers 0–10 m in 5 seconds.
11. Practical Activity: Use a stopwatch (or phone timer) to measure how long it takes you to walk a set distance (like 20 m). Calculate your walking speed.

Chapter 9 – Life Processes in Animals

12. Label the human digestive system on a diagram.
13. What happens in the small intestine?
14. Why do we need a balanced diet?

General Homework Tips

- ✓ Answer all questions in your own words—don't just copy.
- ✓ Include diagrams with labels wherever asked.
- ✓ Use illustrations and real-life examples to support your answers.
- ✓ Do it in your Home work Notes & Prepare well for yopur PT-2 Exams.

CLASS- 7TH SOCIAL SCIENCE WINTER BREAK HHW

Write the answer of the following questions in your HW notebook

- 1. Why was the post – Maurya era also known as the era of reorganization?**
- 2. What were the values or the principals that guided emperors of that period[the age of reorganization]**
- 3. Write a short note on Sangam literature?**
- 4. What is the effect of climate on economy, culture, and society?**
- 5. What were the limitations of the barter system?**
- 6. What were the salient features of ancient Indian coins?**
- 7. What are the different types of government? Explain**
- 8. Do you think democratic government is better than other forms of government ?why.**

**From Barter to Money Notes: write in CW
NOTEBOOK**

1. What is Barter System?

- Barter is the exchange of goods for goods.**
- Example:**
 - A farmer gives wheat and receives rice from another farmer.**
 - No money was used in ancient times.**

◆ 2. Problems of the Barter System

- (1) Double Coincidence of Wants.**
- (2) No Common Measure of Value**
- (3) Difficulty in Storing Wealth**
- (4) Difficult to Make Large Payments**

◆ 3. What is Money?

Money is anything that is generally accepted as a medium of exchange, store of value, and measure of value.

◆ 4. Evolution (Stages) of Money

(1) Commodity Money

(2) Metallic Money

(3) Paper Money

(4) Plastic Money

(5) Digital Money

◆ 5. Functions of Money

(1) Medium of Exchange

(2) Measure of Value.

(3) Store of Value

(4) Standard of Deferred Payment

◆ 6. Why Money is Better than Barter?

- No need for double coincidence of wants**
- Easy to fix prices**
- Easy to store for long time**
- Easy to make small or large payments**
- More convenient and widely accepted**

◆ 7. Modern Forms of Money

- Currency notes**
- Coins**
- Cheques**
- ATM cards**

- Mobile payment apps (UPI)
- Online banking

Only RBI (Reserve Bank of India) can issue currency notes in India.

संस्कृत

अवकाशः गृह कार्य

1,लङ् लकार भूटकल ,

2,तद् शब्दः ,पुंलिङ्ग मे स्त्रीलिङ्ग मे लिखकर लना है

3, किम् शब्दः, लिख कर पना है

4, हिन्दी मे अनुवाद करना है

क, अहं पठामि ।

ख,अहं अबकषे अरुनाचलं गच्छामि ।

ग, शीतकालिन अवकाशे योगः करोमि ।

घ, त्वं किं करोषि ।

ङ,अद्य भवति कुत्र गच्छत ।

च,स्वः अहं मातुलालयं गच्छामि।

छ,परस्वः प्रदत्तम् कार्यं करोमि ।

PM SHRI KENDRIYA VIDYALAYA BOWENPALLY

CLASS VIII WINTER BREAK HOMEWORK

English(8th Class) Winter Break Holiday Homework

Do the following home work in home work book

*1)*Write a letter to your Grandparents thanking them for the valuable lessons they Have thought you.Include how their wisdom has shaped your Values and Behaviour in life.

*2)*As the member of art and craft club, Write report on an interschool "Art Exhibition" Organised by your school.Include the necessary

*3)*According to Doctor kurein "Life is A privilage and it is Wrong to waste it".What is your opinion on this .

*4)*What can be inferred about gopi's Character based on her refusal to follow Zamindar's order.

HINDI

1. एक आशीर्वाद -(पाठ से)- (i) मेरे समझ से , (ii) पंक्तियों पर चर्चा (iii) भाषा की बात – ख (iv) सपनों की बात -क ।

2. हरिद्वार : (i) मेरे समझ से (ii) (ii) मिलकर करें मिलान, (iii) सोच विचार के लिए (iv) हैं और है का प्रयोग (v) काल की पहचान । (vi) पत्र

3. कबीर के दोहे : (i) मेरे समझ से (ii) मिलकर करें मिलान-क (iii) पंक्तियों पर चर्चा (iv) सोच- विचार के लिए (v) अनुमान और कल्पना- क, च, छ (vi)– कहावतें ।

4. एक टोकरी भर मिट्टी : (i) मेरे समझ से (ii) सोच- विचार के लिए (iii) अनुमान और कल्पना से -क,ख,ग (iv) कि , की –का प्रयोग (v) मुहावरे, वचन की पहचान

5. मत बांधो : (i) मेरे समझ से (ii) सोच- विचार के लिए --क,ख,ग (iv) अनुमान और कल्पना से -क,ख,छ (iv) सृजन- ग – खोया-पाया

6. नए मेहमांमः (i) मेरे समझ से (ii) पंक्तियों पर चर्चा (iii) सोच- विचार के लिए -क,ख,ग (iv) मुहावरों का वाक्यों में प्रयोग ।

10 शब्द लिखिए जिसमें उपसर्ग जुड़ा हुआ हो । जैसे- अ + सुंदर = असुंदर

10 शब्द लिखिए जिसमें प्रत्यय जुड़ा हुआ हो । जैसे- मधुर + ता + मधुरता

Activity Book में करो

अपनी activity book में कीजिए

SANSKRIT

संस्कृत

अवकाश: गृह कार्य

- 1, विशेषण, विशेष्य, के परिभाषा उदाहरण के साथ
- 2, ल्यप् प्रत्यय -उदाहरण के साथ
- 3, पदच्छेदः, अन्वयः, भावार्थ क्या होता है

MATHEMATICS

1. Draw a quadrilateral and measure all the four angles. Find their sum.
2. Represent the following numbers in Roman system.

1222, 2999, 302, 715

3. Find whether the following are divisible by 9.

123, 405, 8888, 93547, 358085

4. Expand

$$(3+u)(v-3)$$

$$(10a+b)(10c+d)$$

$$(m+3)^2$$

$$(m-3)^2$$

$$(m+3)(m-3)$$

5. Fill in the missing numbers for these ratios that are proportional to 18:24

3:___

12:___

20:___

6. Find the missing number.

120:15::80:?

150:90::240:x

SCIENCE- HHW-Winter Break 2025-26

Practice in HW Book

- 1.Non- Communicable diseases table given on Page 36 of NCERT, Antibiotics definition & flow chart on Antibiotics Resistance given on page 40 of NCERT Text & CW**
- 2. Read and understand Electricity lesson CW and text book and Practice definitions given in CW (Dark Letter words). Draw voltaic cell and Dry cell Label parts and their role (Refer CW and Text Book)**
- 3.Write and Practice all Definitions given in BOLD letters of EXPLORING FORCES (Refer CW)**
- 4.Read , understand CW and Text Book of lesson PRESSURE, Winds, STORMS AND CYCLONES .**
- 5. Read , write and practice states of matter differences page 112 and Read the lesson Particulate nature of matter and practice key concepts given in Bold, color letters**
- 6.Practice concepts given in CW of lesson Elements, compounds and Mixture and write definitions, equations given in Dark colored letters (Key Concepts) -write in HW book**
- 7.Practice Activity 8.1,8.3 and 8.5 in HW book**

HOLIDAY HOMEWORK

SOCIAL SCIENCE – WINTER BREAK

Class: VIII

Subject: Social Science

Instructions:

- Answer all questions neatly in your HW notebook.
 - Use proper headings where required.
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Q1. Explain the role of technology and entrepreneurship in the production of goods and services.

Q2. How do land and labour contribute to the production of goods and services?

Q3. Explain the circumstances that led to the rise of the Marathas.

Q4. Describe the role of Shivaji in strengthening the Maratha power.

Q5. What is the parliamentary system of government?

Q6. Explain the relationship between the legislature and the executive in a parliamentary system.

Q7. What do you understand by colonialism?

Q8. Explain the Doctrine of Lapse and the Subsidiary Alliance introduced by the British.

Q9. Describe any two administrative changes introduced by the British in India.

Q10. “Colonial rule brought major changes in Indian society.” Explain the statement with examples.

Ch -5 – Colonial Era in India Notes – write in your CW notebook for class 8 A

Meaning of Colonialism

Colonialism refers to a system in which a powerful country controls another country politically, economically, and socially to serve its own interests. In India, colonial rule was established by the British.

Coming of the British to India

The British first came to India as traders through the East India Company. Over time, they used political influence, military power, and treaties to gain control over Indian territories.

Expansion of British Rule

The British expanded their rule through:

- Wars and conquests
- Treaties with Indian rulers
- Policies like Subsidiary Alliance and Doctrine of Lapse

Subsidiary Alliance

Under this system, Indian rulers had to keep British troops in their kingdom and pay for their maintenance. They were not allowed to make alliances with other powers. This reduced the independence of Indian states.

Doctrine of Lapse

According to this policy, if an Indian ruler died without a natural heir, his kingdom was taken over by the British. Many states like Jhansi were annexed using this policy.

Administrative Changes

The British introduced a centralized administration. Laws were made uniform, and new systems of revenue collection, courts, and police were established to control the country efficiently.

Economic Impact of Colonial Rule

British policies damaged Indian industries and agriculture. Raw materials were taken from India, and British-made goods were sold here, leading to poverty and unemployment.

Social Changes under British Rule

Western education, new ideas, and reforms were introduced. At the same time, traditional industries declined, and social inequalities increased

PM SHRI KENDRIYA VIDYALAYA BOWENPALLY

HOLIDAY HOME WORK

ENGLISH

CLASS IX

English

1. Write paragraphs for each of the following: Describe a person, place, event and a thing.
2. Diary Entry: write about a fun holiday memory, describing your feelings and experiences.
3. Practice questions and answers for PT 2.
4. Practice Reported Speech, Determiners and Modals and write the rules in your notebook.
5. Practice Reading passages and Tenses regularly.
6. Learn and practice irregular verbs and write 30 sentences using different verbs.

कक्षा ix हिंदी गृहकार्य

1. अनुप्रास, यमक और श्लेष अलंकार की परिभाषा लिखकर पांच-पांच उदाहरण लिखिए
2. अर्थ के आधार पर वाक्य के भेद लिखकर दो दो उदाहरण लिखिए
3. रीड की हड्डी, प्रेमचंद के फटे जूते, कैदी और कोकिला और ग्राम श्री इन पाठों का संक्षेप में भावार्थ लिखिए।

SCIENCE

II. Prepare the given chapters for your PT3 Exams.

1. Atoms and Molecules
2. Structure of atoms
3. Gravitation
4. Work and Energy

COMPLETE YOUR LAB MANUAL AND WRITE THE FOLLOWING PRACTICALS

1. **Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.**
2. **Establishing the relation between the loss in weight of a solid when fully immersed in**
 - a) Tap water
 - b) Strongly salty water with the weight of water displaced by it by taking at least

II. SUBJECT ENRICHMENT ACTIVITY: Solve the worksheet in your Science Notebook.

SCIENCE WORKSHEET

- Q1.** Give three differences between acceleration due to gravity (g) and universal gravitational constant (G).
- Q2.** Derive expression for force of attraction between two bodies and then define gravitational constant.
- Q3.** State the Universal law of Gravitation.
- Q4.** Why is it difficult to hold a schoolbag having a strap made of a thin and strong string?
- Q5.** Amit buys a few grams of gold at the poles as per the instruction of one of his friends. He hands over the same when he meets him at the equator. Will the friend agree with the weight of gold bought? If not, why?
- Q6.** Why do we hear the sound produced by the humming bees while the sound of vibrations of a pendulum is not heard?
- Q7.** Draw Graph each with two separate diagrams (i) Two sound waves with equal amplitude but different frequencies?
(ii) Two sound waves with equal frequency but different amplitudes.
(iii) Two sound waves have different amplitudes and also different wavelengths.
- Q8.** Suppose you and your friend are on the moon. Will you be able to hear any sound produced by your friend?
- Q9.** Find the wavelength of a sound wave with a frequency of 220 Hz and a velocity of 440 m/s in a specific medium.
- Q10.** Show diagrammatically the formation of $\text{O} \longrightarrow \text{O}^{2-}$ ion?
- Q11.** Electron attributes negative charge, protons attribute positive charge. An atom has both but why there is no charge?
- Q12.** Write the correct representation of an element 'X' which contains 15 electrons and sixteen neutrons.
- Q13.** Predict the valency of the following elements
(i) A (Atomic number 5) (ii) B (Atomic number 12)
(iii) C (Atomic number 14) (iv) D (Atomic number 17)
- Q14.** Find the molecular mass of H_2O .
- Q15.** What is Law of conservation of mass and Law of constant proportions?
- Q16.** Define atomicity.
- Q17.** A pair of bullocks exert a force of 140 N on a plough. The field being ploughed is 15 m long. How much work is done in ploughing the length of the field?

Q18. What will happen to the kinetic energy of a body if its mass is doubled?

Q19. A light body and a heavy body have the same kinetic energy. Which one will have the greater momentum?

Q20. Explain power. What is 1 watt of power? Calculate the power if the lamp consumes 1000 J of electrical energy in 10 s.

Biology homework

1.Read, understand and prepare for seminar topic given from Cell- Structure and function as part of Multiple assessment collaborative work for presenting in Class after reopening

2.Prepare the lesson Tissues for class test for 20 marks (MCQs, 2 M,3M,5 M ,Assertion- Reason Qn)

3.Read the lesson Crop Production and Management write Key words, definitions and Differences in HW book.

SOCIAL SCIENCE – WINTER BREAK

Class: IX

Subject: Social Science

Instructions:

- Answer all questions neatly in your HW notebook.
- Use proper headings and sub-headings where required.

Section A: History

Chapter: Forest Society and Colonialism

Q1. Why did the British want to control Indian forests?

Q2. Explain how forest laws affected tribal communities.

Section B: Political Science

Chapter: Electoral Politics

Q3. What are reserved constituencies? Why are they needed?

Q4. Describe the role of the Election Commission of India.

Section C: Economics

Chapter: Food Security in India

Q5. Explain how food security is ensured in India.

Q6. Discuss the importance of buffer stock.

Q7. Suggest measures to improve food security in the country.

Q8. Explain the role of the Food Corporation of India (FCI) in ensuring food security.

Q9. What problems are associated with the Public Distribution System (PDS)?

Chapter: Poverty as a Challenge

Q10. Explain the main causes of poverty in India in detail.

Q11. Discuss the various indicators used to identify poverty other than income.

Q12. How has economic growth helped in reducing poverty in India?

Q13. Explain the role of government programmes in poverty alleviation.

maths holiday homework for winter break

Number system chapter 1(9marks)

1. Write in the form of $\frac{p}{q}$ of the following

(i) $0.\bar{6}$

(ii) $0.4\bar{7}$

(iii) $0.\overline{001}$

(iv) $0.2\bar{6}$

2. Represent the real number $\sqrt{2}, \sqrt{3}, \sqrt{5}$ on a single number line.

3. Rationalize the denominator

$$\frac{1}{3-\sqrt{2}} \quad (b) \quad \frac{3}{7-4\sqrt{3}}$$

4. Simplify by using law of exponent

$$(i) \left(\frac{256}{6561} \right)^{\frac{3}{8}} \quad (ii) (15625)^{\frac{1}{5}} \quad (iii) \left(\frac{343}{1331} \right)^{\frac{1}{3}}$$

$$(iv) \sqrt[3]{\frac{6561}{65536}} \quad (v) 343^{-\frac{1}{3}}$$

5. Represent $\sqrt{9.3}$ on number line

6. Find the values of a and b in each of the following:

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

$$(ii) \frac{5+2\sqrt{3}}{7+4\sqrt{3}} = a + b\sqrt{3}$$

7. If $x = (3 + \sqrt{8})$, find the value of $\left(x^2 + \frac{1}{x^2} \right)$.

Polynomials chapter 2(13)

1. : Find the value of each of the following polynomials at the indicated value of variables:

$$(i) p(x) = 5x^2 - 3x + 7 \text{ at } x = 1.$$

$$(ii) q(y) = 3y^3 - 4y + 11 \text{ at } y = 2.$$

$$(iii) p(t) = 4t^4 + 5t^3 - t^2 + 6 \text{ at } t = a.$$

2 Verify whether the following are zeroes of the polynomial, indicated against them.

$$(i) p(x) = 3x + 1, x = \frac{1}{3}$$

$$(ii) p(x) = 5x - \pi, x = \frac{4}{5}$$

$$(iii) p(x) = x^2 - 1, x = 1, -1 \quad (iv) p(x) = (x + 1)(x - 2), x = -1, 2$$

3. Divide $p(x)$ by $g(x)$, where $p(x) = x + 3x^2 - 1$ and $g(x) = 1 + x$.

4. Factorise $x^3 - 23x^2 + 142x - 120$.

5. Expand $(3a-7b-c)^2$

6. Factorise:

(i) $4x^2 + 9y^2 + 16z^2 + 12xy - 24yz - 16xz$

7. Factorise $8a^3 - b^3 - 12a^2b + 6ab^2$

8. Factorise $27x^3 + y^3 + z^3 - 9xyz$

Coordinate chap 3(4marks)

1. Write the quadrant and axis of the following points

(2,3) (-5,-6) (-4,3) (7,-8) (-4,0) (0,3) (2,2)(0,-5)

2. Show the point on the graph

(-2,-3) (3,0) (-4,-1) ,(-2,1),(5,-5)(-3,4)

Linear equation chap 4(10marks)

1. Write each of the following equations in the form $ax + by + c = 0$ and indicate the values of a , b and c in each case:

(i) $2x + 3y = 4.37$ (ii) $x - 4 = 3y$ (iii) $4 = 5x - 3y$ (IV) $2x = y$

2. Find two solutions for each of the following equations:

(i) $4x + 3y = 12$ (ii) $2x + 5y = 0$ (iii) $3y + 4 = 0$

3. Draw the graph of the following

(i) $2x + y = 3$ (ii) $3x + 4y = 6$

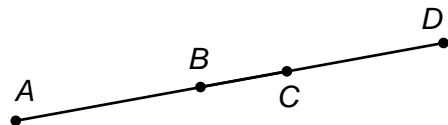
4. If $x = 2$, $y = 2$ is a solution of the equation $7x + py = 2$, find p .

5. Show that $(x = 1, y = 1)$ as well as $(x = 4, y = 13)$ is a solution of the equation $4x - y - 3 = 0$.

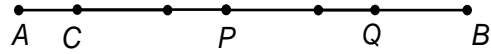
6. Find four solution of equation $3x + 4y = 6$

5. INTRODUCTION TO EUCLID'S GEOMETRY(4)

1. In figure, if $AC = BD$, then prove that $AB = CD$.



2. In figure, $AC = PQ$ and $CP = BQ$,
Prove that P is mid-point of the line
segment AB .



6.Line and angle(6marks)

1. In Fig. 6.13, lines AB and CD intersect at O . If $\angle AOC + \angle BOE = 70^\circ$ and $\angle BOD = 40^\circ$, find $\angle BOE$ and reflex $\angle COE$.

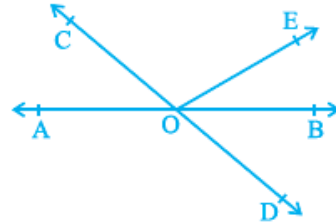
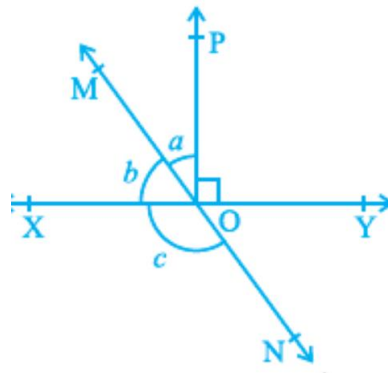


Fig. 6.13

2. In Fig. 6.14, lines XY and MN intersect at O . If



$\angle POY = 90^\circ$ and $a : b = 2 : 3$, find c .

3. If a transversal intersects two lines such that the bisectors of a pair of corresponding angles are parallel, then prove that the two lines are parallel
- 4.

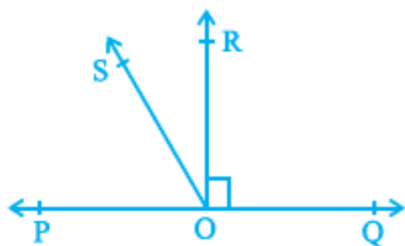


Fig. 6.17

3.

In Fig. 6.17, POQ is a line. Ray OR is perpendicular to line PQ. OS is another ray lying between rays OP and OR. Prove that

$$\angle ROS = \frac{1}{2} (\angle QOS - \angle POS).$$

7. TRIANGLE(6)

1. Prove that $\triangle ABC$ is isosceles if any one of the following holds :

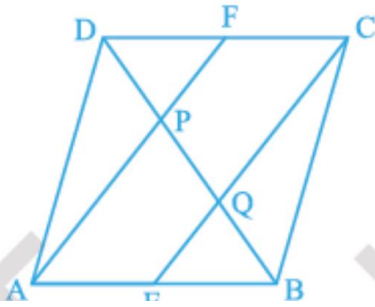
- (i) Altitude AD bisects BC
- (ii) Median AD is perpendicular to the base BC

2. $\triangle ABC$ is an isosceles triangle with $AB = AC$. Side BA is produced to D such that $AB = AD$. Prove that $\angle BCD$ is a right angle.

3. If $\triangle ABC$ is an isosceles triangle with $AB = AC$. Prove that the perpendiculars from the vertices B and C to their opposite sides are equal.

8. QUADRILATERAL(5marks)

1. If ratio of the angle of a quadrilateral are 3:4:5:6 then find each angle of a quadrilateral.
2. If the diagonals of a parallelogram are equal, then show that it is a rectangle.
3. ABCD is a rhombus and P, Q, R and S are the mid-points of the sides AB, BC, CD and DA respectively. Show that the quadrilateral PQRS is a rectangle.
4. In a parallelogram ABCD, E and F are the mid-points of sides AB and CD respectively(see Fig. 8.31). Show that the



line segments AF
and EC trisect the diagonal BD

9. Circle(6marks)

- 1.If the non parallel sides of a trapezium is equal, prove that it is a cyclic?
- 2.prove that a cyclic parallelogram is a rectangle?

4. In Fig. 10.38, $\angle ABC = 69^\circ$, $\angle ACB = 31^\circ$, find $\angle BDC$.

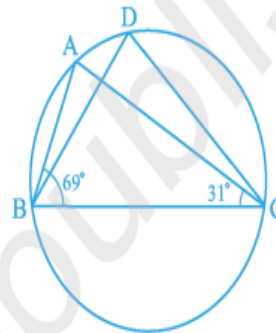
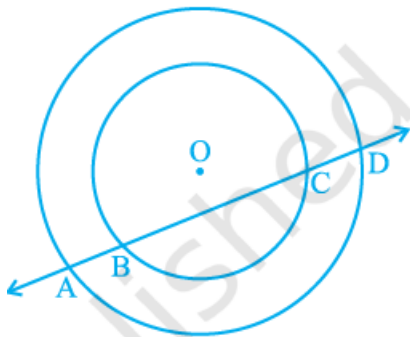
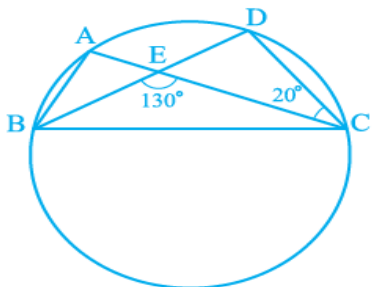


Fig. 10.38

3. If a line intersects two concentric circles (circles with the same centre) with centre O at A, B, C and D, prove that $AB = CD$



4. , A, B, C and D are four points on a circle. AC and BD intersect at a point E such that $\angle BEC = 130^\circ$ and $\angle ECD = 20^\circ$. Find $\angle BAC$.



THEOREM

1. Equal chords of a circle subtend equal angles at the Centre of the circle.
2. The angle subtended by an arc at the Centre is double the angle subtended by it at any point on the remaining part of the circle.
3. A diagonal of a parallelogram divides it into two congruent triangles.

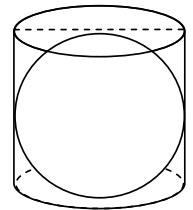
10. Herons formula(7marks)

16. Find the area of a triangle, two sides of which are 8 cm and 11 cm and the perimeter is 32 cm.
17. A triangle has sides 35 cm, 54 cm and 61 cm long. Find its area. Also find smallest of its altitudes.
18. The sides of a triangular plot are in the ratio 3 : 5 : 7 and its perimeter is 300 m. Find its area.
19. A triangle and a parallelogram have the same base and the same area. If the sides of the triangle are 26 cm, 28 cm and 30 cm, and the parallelogram stands on the base 28 cm, find the height of the parallelogram.
20. A rhombus shaped field has green grass for 18 cows to graze. If each side of the rhombus is 30 m and its longer diagonal is 48 m, how much area of grass field will each cow be getting?
21. Sides of a triangle are in the ratio of 12 : 17 : 25 and its perimeter is 540cm. Find its area.
22. The base of an isosceles triangle is 10 cm and one of its equal sides is 13 cm. Find its area.

11.Surface area and volume(7marks)

1. A conical tent is 10 m high and the radius of its base is 24 m. Find
 - (i) Slant height of the tent.
 - (ii) Cost of the canvas required to make the tent, if the cost of 1 m² canvas is ₹ 70.
2. The height of a cone is 16 cm and its base radius is 12 cm. Find the curved surface area and the total surface area of the cone ($\pi = 3.14$).

3. The radius and height of a cone are in the ratio 4 : 3. The area of the base is 154 cm^2 . Find the area of the curved surface
4. A hemispherical dome of a building needs to be painted (figure). If the circumference of the base of the dome is 17.6 m, find the cost of painting it, given the cost of painting is Rs 5 per 100 cm^2 .
5. A right circular cylinder just encloses a sphere of radius r (figure). Find
- surface area of the sphere
 - Curved surface area of the cylinder,
 - ratio of the areas obtained in (i) and (ii).



12.Statistics(6marks)

5. Draw a histogram and a frequency polygon for the following data :

Marks	10-20	20-30	30-40	40-50	50-60
No. of students	8	12	15	9	6

6. Draw a histogram for the following data :

Classes	10-15	15-20	20-30	30-50	50-80
Frequency	6	10	10	8	18

7. Find the mean of the following data :
153, 140, 148, 150, 154, 142, 146, 147
8. The mean of the following data is 37. Find x
28, 35, 25, 32, x , 40, 45, 50

27. The runs scored by two teams A and B on the first 60 balls in a cricket match are given below:
Represent the data of both the teams on the same graph by frequency polygons.

Number of balls	Team A	Team B
1 - 6	2	5
7 - 12	1	6
13 - 18	8	2
19 - 24	9	10
25 - 30	4	5
31 - 36	5	6
37 - 42	6	3
43 - 48	10	4
49 - 54	6	8
55 - 60	2	10

9. For the year 1970 – 71, weekly cost of living index was recorded from a register in the record room of the ministry of labour. The data recorded is as under :

Cost of living index :	140–150	150–160	160–170	170–180	180–190	190–200
No. of weeks	5	10	20	10	5	2

CLASS XI CHEMISTRY HOMEWORK

1. Investigatory Project
2. Techniques of separation of organic compounds
3. Exercise questions of Chapter 8 : Organic compound

A. IUPAC NAMING

B. Inductive effect

C. Resonance

D. Nucleophiles & electrophiles

E. Isomerism

F. Separation methods of mixtures

Sublimation

Distillation

Chromatography

Fractional distillation

Winter Break 2025-26 HHW- Class XI Biology

1. Complete Index part and Incomplete spotters of Record work
2. Review Investigatory Project and complete if any incomplete work.
3. Practice for PT 2 exam -Lessons
*Respiration*Growth*Breathing*Body fluids .Cover all main concepts given in class by writing and practicing in HW as HHW .
a)Writing practice to include 1. Glycolysis flow chart 2.Anaerobic Respiration 3. Citric Acid cycle 4.ETC flow chart 5. RQ
9.Amphibolic pathway
4. Read Growth chapter and practice Growth rate concept and PGRs in HW
5. Write and practice Mechanism of breathing ,Respiratory volume and capacities definitions, and Transport of O₂ and CO₂(5 M) ,Disorders in HW book
6. Read the lesson Body fluids and learn with understanding and write all concepts in CW (Learn as well as write CW)

**PM SHRI KENDRIYA VIDYALAYA ,
BOWENPALLY
CLASS XI, PHYSICS HOLIDAY HOMEWORK –
WINTER BREAK-2025-26**

- 1.State and Prove Bernoulli's Theorem? Give 2 applications of Bernoulli's Theorem?
- 2.Derive Equation for Terminal Velocity?
- 3.State Zeroth Law, 1st Law & 2nd Law of Thermodynamics.
- 4.Derive Relation between Molar specific Heats at constant Pressure and at Constant Volume(Mayer's Relation).
- 5.Derive the relation between Coefficient of Linear, Area, Volume Expansions of Solids.
- 6.Exercise Questions of Chapters
 - a) Properties of Fluids
 - b) Thermal Properties of Matter
 - c) Thermodynamics
7. Practical Record of 7 Experiments & 3 Activities

हिंदी कक्षा XI

1. शब्दकोश की परिभाषा लिखते हुए शब्दकोश के भेद लिखिए।
2. संदर्भ ग्रंथ की क्या उपयोगिता है संक्षेप में लिखिए।
3. विद्यालय में खेल दिवस मनाया गया उसपर प्रतिवेदन लिखिए।
4. परिपत्र किसे कहते हैं संक्षेप में लिखिए।
5. प्रेस विज्ञप्ति किसे कहते हैं संक्षेप में लिखिए। उसका कोई भी एक उदाहरण लिखिए।
6. कार्यवृत्त की विशेषताएं क्या हैं ?
7. विद्यालयबमेन वार्षिक समारोह के अवसर पर पारितोषिक वितरण समारोह किया जाएगा उसपर कार्यवृत्त लिखिए।

HOLIDAY HOMEWORK

SUBJECT - COMPUTER SCIENCE

CLASS - XI

Write the following programs in Python and arrange them in the form of a practical file.

1. Python Program to Add Two Numbers
2. Python Program to Calculate the Area and perimeter of a Triangle.
3. Python Program to Make a Simple Calculator
4. Python Program to Convert Celsius To Fahrenheit
5. Python Program to Convert Kilometre to Miles
6. Python Program to Swap Two Variables
7. Python Program to Find the Multiples of a Number
8. Python Program to Display the multiplication Table
9. Python Program to Swap Three Variables
10. Python Program to Check if a Number is Odd or Even

11. Write a program to input length of three sides of a triangle. Then check if these sides will form a triangle or not.

(Rule is: $a+b>c$; $b+c>a$; $c+a>b$)

12. Write a short program to input a digit and print it in words.

13. Write a short program to print the following series :

(i) 1 4 7 10 40.

(ii) 1 -4 7 -10 -40

14. A store charges ₹120 per item if you buy less than 10 items. If you buy between 10 and 99 items, the cost is ₹100 per item. If you buy 100 or more items, the cost is ₹70 per item. Write a program that asks the user how many items they are buying and prints the total cost.

15. A year is a leap year if it is divisible by 4, except that years divisible by 100 are not leap years unless they are also divisible by 400. Write a program that asks the user for a year and prints out whether it is a leap year or not.