PM SHRI KV NO. 2 AFS HINDAN SESSION 2025-26

SUMMER VACATION HOME WORK

CLASS-VI

SUB- SCIENCE

SUMMER VACATION HOMEWORK

Q1. Give names of two plant which have tap root and fibrous root.

Q2. Write the differences between between tap and fibrous root.

Q3. Write names of any two herb, shrub, creeper, climber, trees and medicinal plants. Q4- Write

two examples of each-

(i) Seeds used as pulses- (ii) Seeds used as cereals - (iii) Seeds used as spices- (iv) Seeds

used to get oil - Q5. Write any 5 slogans to save energy.

(Instruction- 2 slogan in Hindi and 3 in English)

Q6. Observe and draw given diagram of water cycle. Find out and write the meaning of

following terms-

(i) Evaporation (ii) Condensation (iv) transpiration (iii) Precipitation

Q6. Find out who invented (Inventor Scientist name) these everyday item-

(Bicycle, clock, telephone, calculator, ball point pen, refrigerator, washing machine, television)

Q7. Collect information about these two great Scientist and write their contribution for Society.

Q8- This is the picture of our Solar system.

Now answer the following questions-

i. Arrange the names of planets in ascending order of their distance from the Sun. ii. Which is

the planet nearest to the Sun?

iii. Which is the planet farthest from the Sun?

iv. Name the hottest planet in our solar system.

v. Can you name the largest planet in our solar system? vi. Can you name the smallest planet in

our solar system?

vii. Which is the coldest planet in our solar system?

viii. Which planet is also called the Red Planet?

Q9- Here are some names of famous National Park of India. Learn and locate them in map.

NATIONAL PARK

1. Kanha National Park

2. Periyar National Park

3. Sunderbans National Park 4. Jim Corbett National Park 5. Kaziranga National Park 6. Gir

National Park

LOCATION Madhya Pradesh Kerala

West Bengal Uttarakhand Assam

Gujara Q10- Observe the color of dustbins for particular waste disposal and answer-

Draw the above bins in the copy and write -

(i) Blue dustbin is used for the disposal of - (ii) Green dustbin is used for the disposal of - (iii)

Red dustbin is used for the disposal of - (iv) Yellow dustbin is used for the disposal

Sub- Social science

all work should be done in Seprate thin notebook.

1. Map work

(1) Label and locate states and union territories on India Map and paste in notebook.

(ii) Label and locate Continents and Oceans on World Map and paste in your notebook.

2. What is a Map? What are the different types of Maps? Explain.

3. Write about a tourist place of India which you like the most.

4. What are the three components of Maps? Explain with examples.

5 What are the Latitudes and Longitudes.

6.Dethi's and Bengaluru's latitudes are 29°N and 13°N; their longitudes are almost the same. 77°E.

How much will be the difference in local time between the two cities? the name of India's neighboring

nations

7.Write the names of all the states and onion territories of India and their capitals

8.Write about the fundamental rights of Indian citizens ghen by the Indian Constitation

9.Write about on a local historical place nearby you.

NOTE – MDP topic of mdp will be shared in class group.

विषय- हिंदी

1. मानव शरीर के 15 अंगों के नाम हिंदी में लिखिए।

2. शरद एवं ग्रीष्म ऋतु की पाँच- पाँच सब्जियों के नाम लिखिए और चित्र चिपकाइए ।

3. एक से पचास तक हिन्दी में गिनती लिखिए।

4. ग्रीष्मकालीन अवकाश के दौरान अपने द्वारा की गई किसी यात्रा का वर्णन कीजिए।

5. अपने परिवार के बारे में एक अनुच्छेद लिखिए।

6.10 पृष्ठ सुलेख लिखिए ।

7. 50 शब्द जिनकी आपको सही वर्तनी नहीं आती है उन्हें लिखकर पूरा पृष्ठ अभ्यास कीजिए।

8.सप्ताह में दो बार अपने अभिभावक को वर्तनी की परीक्षा दीजिए।

9. बड़े भाई के विवाह में शामिल होने हेतु प्राचार्य को 4 दिन के अवकाश हेतु प्रार्थना पत्र लिखिए।

10. दोनों creative writing अपनी कॉपी में कीजिए।

(ग्रीष्मकालीन अवकाश गृह कार्य हेतु अलग से पतली उत्तर पुस्तिका बनानी है।)

SUB- MATH

Q.1. Learn and write the tables from 2 to 20:

Q.2. Solve:

☐☐) 3946+ 6579 + 389

⬜⬜) 4179 − 2103+ 837

⬜⬜) 1289 × 137

⬜⬜) 682592÷16

Q.3. Write the following numbers in words:

⬜⬜) 145307

⬜⬜) 91307

⬜⬜) 2123270

⬜⬜) 1001373

Q.4. Which number will be next in this pattern:

(a) 18, 36, 54, 72, …………..

(b) 20, 18, 15, 11, ………….

(c) 6, 7, 9, 12, 16, …………..

(d) 4, 9, 16, 25, ………………

Q.5. Find the difference between the smallest number of 5 digits and the largest

number of 3 digits.

Q.6. Find the difference between the place value of two 6's in 6523689.

Q.7. Write each of the following numbers in numerical form:

a) Three lakh fifty-three thousand five hundred sixteen

b) Forty –one lakh one thousand seventy

c) seventy-three thousand five hundred forty

d) one Lakh ninety-three thousand five hundred sixty

Q.8. Identify and draw 5 pictures who have line symmetry and 3 pictures who have

rotational symmetry.

Q.9. Make two magic squares with the help of numbers.

Q.10. Find the perimeter of each of the following shapes:

Q.11. Draw a rectangle of 9cm length and 7cm width, then find its area.

Q.12. Draw a square of 9cm length, then find its area.

Q.13. Make a Rangoli (Geometry art project) with the help of shapes, lines and

angles.

Q.14. Draw a map of your Dream House.

Q.15. Download and watch the movie "The man who knew Infinity". Write the 10

things that you liked the most. Write two ideas which inspired you to study

Mathematics.

SUB- ENGLISH

Q.1 Write 3 stories on- 1) The thirsty crow

2) Greedy dog 3) Fox and the crow.

Q.2 Write applications on-

1) Write an application requesting your principal to grant you three days leave as you were

Q.3. Write letters on-

1) Write a letter to your friend inviting him on your birthday

2) Every day write one page about your daily routine and talk about it with your

parents

Q.5. Write Notice on LOST

You have lost your 1) Waterbottle 2) Tiffin Box 3) Watch. Draft notice for each giving details.

6)Do loud reading of stories and poems from POORVI (one page)daily.

NOTE- DO HOLIDAY HOMEWORK IN SEPARATE NOTEBOOK.

SUB- SANSKRIT

कक्षा लेखात्मक परियोजना पाठात्मक अभ्यास स्मृतिविषयक

VI अकारांत पुल्लिंग, स्त्रीलिंग, नपुंसक लिंग शब्दों का चित्र बनाकर संग्रह करें |

10 फलों एवं फूलों का चित्र बनाकर संस्कृत में लिखें।

संस्कृत में शरीर के अंगों के नाम लिखें (चित्र बनाकर)

पढाये गए पाठों के प्रश्नों का वर्गीकरण करके लिखें और अभ्यास करें |

जैसे - रिक्त स्थान वाले प्रश्न,

एकपद में उत्तर वाले प्रश्न |

परीक्षा कि तैयारी के लिए प्रश्नों को

लिखकर उसका अभ्यास करें |

संस्कृत में छात्र प्रतिज्ञा और प्रार्थना सभा के

निर्देश लिखे व् याद करें।

लिखे गए प्रश्नों का अभ्यास करें | संस्कृत के ऑडियो वीडियो को सुने | संस्कृत के एक स्तोत्र या गीतों को सुने और याद करें।

दो श्लोक याद करें

कोई एक लेख कविता विद्यालय / कक्षा पत्रिका के लिए तैयार करें |

जनवरी और फरवरी माह में आने वाले त्योहारों तथा जयंतियों पर संस्कृत में कार्ड बनायें

पंचतंत्र से कोई कथा पढकर लिखें।

प्रतिदिन संस्कृत समाचार सुनें |

CLASS-VII

Sub:SST

1. On a political map of India show states and union territories of our country and write their names.

2. Show all the monuments on the map of your state which you belong.

3. What is universal adult franchise, ask your parents, for which election they used it.

4. What are public facilities, list any 10 public facilities provided by government.

5. On may 7 2025 government is conducting mock drill in the country, what is mock drill? List few actions we follow during this drill.

6. Draw water cycle and write about it .

SUB : SCIENCE

NOTE: Make Separate holiday homework copy.

1.Make a rangoli design in your copy using acidic ,basic substances and indicators.

2. Perform the activity no.2.3 and 2.4 of page no.12 and13 investigation complete the table of activity 2.3.

3. On a map of India, mark the states where iron, gold, aluminium and other metals are found.Paste it in HHW copy

4. Explore the metals and non-metals found in smartphones and write how they help the phone to work properly.of your book and after

5. Ravi accidentally spills hydrochloric acid on his hand. He feels a burning sensation. a. What should be the immediate action taken?

b. Explain why this action helps.

c. Describe the chemical reaction that takes place when the remedy is applied. d.Differentiate between acids and bases:

6. Rahul went to Arjun's house. He saw that every room in Arjun's house is lit up with electric bulbs. Ravi suggested him to use CFLs and LED tube lights. He also suggested him to check for the ISI mark on the bulbs and tubes before buying them.

Based on the above information, answer the following questions.

a. Why CFLs are better sources of light than electric bulbs?

b. What is the importance of ISI mark on the electric bulbs and tubes?

7. Make a simple electrical circuit using LED,switch,cell or battery and wires. OR By Using a solar panel as a source of electrical energy, make a circuit to run a toy fan.

8. Create a three-dimensional model of the human digestive system using materials like clay, cardboard, or waste materials. Label each part and explain its function.

9. Learn all the completed syllabus till vacations.

Sub : ART

VII	अरुणाचल प्रदेश के प्रमुख तीन लेखक, और दो कवि के बारे में लिखे तथा इस प्रदेश की खुबसुरती को चित्र के माध्यम से दर्शाये।	अरुणाचल प्रदेश की वेशभूषा में अधिकतर किस डिज़ाइन पैटर्न का प्रयोग करते है। विभिन्न रेखाऐ , आकार आदि के चित्र के माध्यम से दर्शाये।	**History:** Make Travelogue / brochure on the Historical places of Arunachal Pradesh. **Civics:** Create Poster on the festivals celebrated in Arunachal Pradesh. **Geography –** Make a model of Terrace farming illustrations or create poster / painting.	Study different weaving patterns of Arunachal Pradesh by making painting sketching.

Sub : Hindi

1.सावन, कार्तिक, फाल्गुन में कौन-कौन से त्योहार आते हैं सूची बनाइए तथा किन्हीं दो त्योहारों पर अनुच्छेद लिखिए।

2.पुनः, हरा - हरा, सुख- दुख, बोल- बोलकर, सुंदर, कल्पना, अचानक, ईमानदारी, चल- चलकर, देख - देखकर निम्न शब्दों से दो दो वाक्य बनाइए ।

3.एक से 100 तक गिनती हिंदी में लिखिए।

4.ग्रीष्मकालीन अवकाश के दौरान अपने द्वारा की गई किसी यात्रा का वर्णन कीजिए।

5. आपको शिमला घूमने जाना है अतः 4 दिन के अवकाश हेतु प्राचार्य को प्रार्थना पत्र लिखिए।

6. 'सातवीं कक्षा में आपका पहला दिन ' विषय पर दस वाक्य लिखिए।

7.15 पृष्ठ सुलेख लिखिए ।

8. 30 शब्द जिनकी आपको सही वर्तनी नहीं आती है उन्हें लिखकर पूरा पृष्ठ अभ्यास कीजिए।

9.सप्ताह में एक बार अपने अभिभावक को वर्तनी की परीक्षा दीजिए।

(ग्रीष्मकालीन अवकाश गृह कार्य हेतु अलग से पतली उत्तर पुस्तिका बनानी है।)

Sub :Maths

Q.1. Fill in the blanks:

(i) $(-5) + (-8) = (-8) + ($……………….$)$

(ii) $-53 + $……………….$ = -53$

(iii) $17 + $……………….$ = 0$

(iv) $[13 + (-12)] + ($……………….$) = 13 + [(-12) + (-7)]$

(v) $(-4) + [15 + (-3)] = [-4 + 15] + $……………….

(vi) ………………. is the additive identity and is the………………. multiplicative identity of integer

(vii) For any integer a ; $a \div 0$ is ……………….

Q.2. Multiple Choice Questions:

(i) Smallest integer is:

(a) 0   (b) - 1   (c) we cannot write   (d) – 10000

(ii) Which of the following numbers is to the right of -3 on number line ?

(a) -4   (b) -2   (c) -5   (d) -6

(iii) The number of integers between -2 and 2 is:

(a) 5   (b) 4   (c) 3   (d) 2

(iv) Sum of two negative integers is always:

(a) Positive   (b) Negative   (c) 0   (d) 1

(v) In addition and subtraction of the integers the sign of answer depends upon:

(a) Smaller Number (b) Their Difference (c) Their Sum (d) Greater numerical value

(vi) Which of the following statement is false:

(a) $-7 + (-6) = -13$ (b) $-5 + 1 = 4$ (c) $2 + (-1) = 1$ (d) $8 + (-9) = -1$

(vii) What will be the additive inverse of -1 ?

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

Q.3.

Q.4. Write a pair of integers whose sum gives:

(i) zero;

(ii) a negative integer;

(iii) an integer smaller than both the integers;

(iv) an integer greater than both the integers;

(v) an integer smaller than only one of the integers.

Q.5. Find each of the following products:

(a) $9 \times (-3) \times (-6)$

(b) $(-18) \times (-5) \times (-4)$

(c) $(-1) \times (-2) \times (-3) \times 4$

(d) $(-3) \times (-6) \times (-2) \times (-1)$

Q.6. Evaluate each of the following:

(i) $[(-36) \div 12] \div 3$

(ii) $[(-6) + 5)] \div [(-2) + 1]$

Q.7. In a test (+5) marks are given for every correct answer and (−2) marks

are given for every incorrect answer.

(i) Radhika answered all the questions and scored 30 marks though she got 10 correct answers.

(ii) Jay also answered all the questions and scored (−12) marks though he got 4

correct answers. How many incorrect answers had they attempted?

Q.8. An elevator descends into a mine shaft at the rate of 6 m/min. If the descent starts from 10 m above the ground level, how long will it take to reach – 350 m.

Q.9. Revise the properties of integers.

Q.10. Download and watch the movie "The man who knew Infinity". Write the 10 things that you liked the most. Write two ideas which inspired you to study Mathematics.

Sub: English

MAKE A SEPARATE COPY FOR HOLIDAY HOME WORK:

1. Reading Activity:

Read any one of the following story of Author Enid Blyton :

1. *The Famous Five*

2. The Secret Seven

3. The Magic Faraway Tree

Write a book review including:

● Title and author

● Main characters

● Summary of the story (in about 200–250 words)

● Your favorite part of the story

2. Writing Skills:

Prepare five diary entries (one for each week of the vacation) describing:

● Your daily activities

● Your feelings and experiences

3. Grammar Practice:

Make 10 sentences each using:

Adjectives

Adverbs

Conjunctions

Class – VII

Subject – English   (contd…….)

4. MDP (Multi-disciplanery project):

   A) Read the poster given below and answer the questions that follow:

   1. What are the things you can observe in the poster?

   2. Why do you think the girls look happy?

   3. Dignity means 'self respect'. What is the relation between 'dignity' and happiness?

   4. How does a Nation prosper when its daughters are happy?

The Government has launched many schemes for the education of the girl child. Some of them are 'Beti Bachao Beti Padhao', Balika Samridhi Yojna', Samagra Shiksha Scheme - Kasturba Gandhi Balika Vidyalayas, etc.

Find out more such schemes from the internet or from your teacher and spread awarness in your neighbourhood.

5. Subject Enrichment Activity:

   1. Learn a Poem from your book and recite in the class room.

   2. Transform the chapter "The Day the River Spoke" in the form of dialogues.

Subject: Vocational Education (Class 7)

Theme: Becoming Independent and Responsible

Instructions:

Complete the following tasks during your vacation. Write about each activity in 4–5 lines in your Vocational notebook and stick some photos of doing each activity. You can add more activity by your side.

Activities like:

1. Time Table Planning:

Create a weekly timetable for your vacation (study, help at home, play).

2. Healthy Habits:

Follow a personal hygiene routine.

Write about your daily habits (brushing, bathing, handwashing).

3. Cooking Assistance:

Help in preparing a simple dish (e.g., sandwich, fruit salad). Write the recipe and what you learned.

4. Digital Literacy:

Learn to open, save, and type a document in MS Word or Google Docs. Type a short paragraph about your vacation plan.

5. Self-Evaluation: Mandatory (अनिवार्)य What did you learn from these tasks? How will it help you in real life?

SUBJECT – MATHEMATICS

CLASS – VIII

Q.1. Fill in the blanks:

(i) (−5) + (− 8) = (− 8) + (……………………)

(ii) −53 + …………………… = −53

(iii) 17 + …………………… = 0

(iv) [13 + (− 12)] + (……………………) = 13 + [(−12) + (−7)]

(v) (− 4) + [15 + (−3)] = [− 4 + 15] + ……………………

(vi) …………………… is the additive identity and is the …………………… multiplicative identity of integer

(vii) For any integer a ; a ÷ **0** is …………………….

Q.2. Multiple Choice Questions:

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(iv) Sum of two negative integers is always:

(a) Positive   (b) Negative   (c) 0   (d) 1

(v) In addition and subtraction of the integers the sign of answer depends upon:

(a) Smaller Number (b) Their Difference (c) Their Sum (d) Greater numerical value

(vi) Which of the following statement is false:

(a) −7 + (−6) = −13   (b) −5 + 1 = 4   (c) 2 + (−1) = 1   (d) 8 + (−9) = −1

(vii) What will be the additive inverse of -1 ?

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

Q.3. *If $a = -8, b = -7$ and $c = 6$, verify that $a + (b + c) = (a + b) + c$*

Q.4. Write a pair of integers whose sum gives:

(i) zero;

(ii) a negative integer;

(iii) an integer smaller than both the integers;

(iv) an integer greater than both the integers;

(v) an integer smaller than only one of the integers.

Q.5. Find each of the following products:

(a) 9 × (−3) × (− 6)

(b) (−18) × (−5) × (− 4)

(c) (−1) × (−2) × (−3) × 4

(d) (−3) × (−6) × (−2) × (−1)

Q.6. Evaluate each of the following:

(i) [(−36) ÷ 12] ÷ 3

(ii) [(− 6) + 5)] ÷ [(−2) + 1]

Q.7. In a test (+5) marks are given for every correct answer and (−2) marks

are given for every incorrect answer.

(i) Radhika answered all the questions and scored 30 marks though she got 10 correct answers.

(ii) Jay also answered all the questions and scored (−12) marks though he got 4

correct answers. How many incorrect answers had they attempted?

Q.8. An elevator descends into a mine shaft at the rate of 6 m/min. If the descent starts from 10 m above the ground level, how long will it take to reach − 350 m.

Q.9. Revise the properties of integers.

Q.10. Download and watch the movie "The man who knew Infinity". Write the 10 things that you liked the most. Write two ideas which inspired you to study Mathematics.

Q. 11. Write down the square & square root of first 20 numbers.

Q.12. Write down the cube and cube root of first 20 numbers.

Q. 13. Choose a calendar of any month of the year and find the odd numbers, even numbers, square numbers & cube numbers from it.

Q. 14. Make different types of polygons using chart paper.

Q. 15. Make 5 stacked square patterns & 5 stacked triangle patterns using chart paper.

SCIENCE HOLIDAY HOMEWORK

CLASS-VIII

CASE-BASED MCQs

Case 1

Reena's diet mostly includes rice and potatoes. She often feels tired and complains of frequent infections. Her doctor advised her to include proteins and vitamins in her diet.

1.What does Reena's current diet lack?

• A. Carbohydrates

• B. Proteins and Vitamins

• C. Fats

• D. Minerals

Case 2

Millets are considered nutritious and are now being promoted for a healthier lifestyle. They are rich in fiber, iron, and other micronutrients.

2.Which of the following is NOT a type of millet?

• A. Bajra

• B. Jowar

• C. Ragi

• D. Barley

Case 3

Ravi has poor night vision and his doctor prescribed him vitamin A-rich foods like carrots and leafy vegetables.

3.Which deficiency disease is Ravi likely suffering from?

• A. Beriberi

• B. Scurvy

• C. Night Blindness

• D. Rickets

Case 4

A community health report showed many children with delayed growth and weak immunity. Experts suggested they were not getting a balanced diet.

4.Which of the following is most essential to address the issue?

• A. Junk food

• B. Balanced diet

• C. Carbonated drinks

• D. Processed food

Case 5

Seema read a health article saying millets are good for diabetic patients due to their low glycemic index and high fiber content.

5.Why are millets recommended for diabetics?

• A. They are rich in sugar

• B. They digest quickly

• C. They have high glycemic index

• D. They release sugar slowly

Case 6

Ria observed water droplets on the outside of a cold water bottle after taking it out of the fridge.

6.What process leads to the formation of water droplets?

A. Evaporation

B. Condensation

C. Melting

D. Sublimation

7.The water vapor in the air turns into liquid because:

A. It loses heat

B. It gains heat

C. It reacts with oxygen

D. It is cooled by the bottle's label

Case 7

During a nature walk, students saw moss, mushrooms, and a flowering plant in the same area.

8.The above organisms show:

A. No diversity

B. Only animal diversity

C. Diversity in the living world

D. Physical diversity

9.Mushrooms belong to which group?

A. Plants

B. Fungi

C. Protists

D. Algae

Case 8

A student left some milk uncovered. It turned sour the next day.

10.This change is due to:

A. Freezing

B. Condensation

C. Bacterial activity

D. Evaporation

11.Which type of organism is responsible for the change in milk?

A. Protozoa

B. Fungi

C. Algae

D. Bacteria

Case 9

Seema read the label on a packet of biscuits: "Contains carbohydrates, fats, and proteins."

12.Carbohydrates mainly provide:

A. Energy

B. Growth

C. Immunity

D. Repair

13.Which nutrient is responsible for body-building?

A. Fats

B. Proteins

C. Water

D. Vitamins

Case 10

During winter, droplets appear on window glass inside the room.

14.This process is called:

A. Freezing

B. Melting

C. Condensation

D. Boiling

15.Which state change is involved here?

A. Gas to solid

B. Gas to liquid

C. Solid to gas

D. Liquid to gas

Case 11

During winter, droplets appear on window glass inside the room.

16.This process is called:

A. Freezing

B. Melting

C. Condensation

D. Boiling

17.What state change is involved here?

A. Gas to solid

B. Gas to liquid

C. Solid to gas

D. Liquid to gas

SHORT ANSWER QUESTIONS

18. Rohan noticed that after playing for hours, he felt very tired. His mother gave him a banana and a glass of milk to eat. Soon after eating, Rohan felt more energetic and was able to continue playing.

a) Which mineral found in milk is important for bones?

b) Which nutrient is known as the body's quick energy provider?

c) What is the most common nutrient found in bananas?

19. Observe the activities in your house for a day. Identify the activities that involve evaporation. How does understanding the process of evaporation help us in our daily activities?

20..We see green coloured plastic grass at many places these days. Space around natural grass feels cooler than space around the plastic grass. Can you find out why?

21.Manu's mother maintains a kitchen garden. One day, she was digging out radish from the soil. She told Manu that radish is a kind of root. Examine a radish and write what type of root it is. What type of venation would you observe in the leaves of radish plant?

22.. What is the role of vitamins in our diet?

23.Mention two characteristics of living organisms that show diversity.

LONG ANSWER QUESTIONS   (Case-Based Question)

I.Read the passage below and answer the questions that follow:

Rohan was helping his grandmother in her garden. He noticed that some plants, like the tomato and rose plants, had soft and green stems, while others, like the mango tree, had thick and woody stems. His grandmother explained that plants are classified into different categories based on their stem structure. Rohan also observed that some plants had flowers with distinct petals, while others had tiny, less noticeable flowers.

a). Which type of plant has a soft and green stem?

_____

b). What type of stem does a mango tree have?

_____

c) Which of the following is a characteristic of a shrub?

A. Very tall and has a single hard stem

B. Medium height with multiple woody stems

C.Small and has a soft stem

D. Grows horizontally along the ground

II.Riya was helping her father in sorting materials in their home workshop. She observed that some materials were shiny, could be drawn into wires, and produced a ringing sound when struck. Others were dull, brittle, and did not conduct electricity well. Riya got curious and asked her father about the differences.

Based on the above case, answer the following:

a) Identify which materials Riya observed are likely to be metals and which are non-metals.

b) List any four physical properties of metals and two of non-metals observed in the case.

c) Give one example each of a metal and a non-metal from daily life that fit the observations made by Riya.

d) Why are metals used for making utensils and electrical wires?

II Prepare learners' diary as per the format and availability of textbooks

III Prepare MDP on the following topic

Natural resources and its classification

Air pollution in Delhi, Its consequences, Concept of AQI

Role of citizens to curb it and initiatives taken by the government to minimise its effect

O.P.Upadhyay

A K Sharma

Holiday Homework (Summer Vacation)

Subject: Vocational Education (Class 8)

Theme: Practical Skills for Daily Life Instructions:

Complete the following tasks during your vacation.

Write about each activity in 4–5 lines in your Vocational notebook and stick some photos of doing each activity. You can add more activity by your side.

Activities like: 1. Home Management: Clean your study space and organize books/clothes. Write before and after steps and results.

2. Basic Cooking: Prepare any 1–2 simple dishes (tea, poha, salad, fruit juice, sandwich, etc...). Write the ingredients, process, and safety tips followed while making.

3. Computer Practice: Create a short PowerPoint presentation on "My Summer Vacation Plan." Include text and pictures.

4. Community Work: Do something helpful for your family or neighbourhood (e.g., donate old items, help a younger sibling, etc…). Describe the activity and your experience.

5. Self-Evaluation: Mandatory (अनिवार्य) What did you learn from these tasks? How will it help you in real life?

<p style="text-align:center">ENGLISH</p>

<p style="text-align:center">***For class:- 8***</p>

1. Write two words daily ,with their meaning in your copy.

2. Take an interview of your parents or grandparents and write a paragraph.
Your question should include following:-

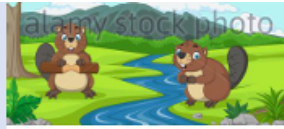= Food Habits

= School life

= Family

= Games they played

After taking interview, you will compile a paragraph on the lifestyle you are leading and what is the difference?

3. Prepare a poster and write slogans on the topic "How to boost our immunity".
5-MDP-PREPARE MDP USING THE FOLLOWING HINTS.

TOPIC -PLANTS AND ANIMAL LIFE

Write a notice asking for the volunteer animals to make the bridge again. (Term-1)

3. *The doe was killed to save Jody's father life.*
Write a letter to editor about sharing your views on illegal killing of animals. (Term-1)

www.clipartof.com · 1093822

They will understand loss of animals by illegal killing.

Students will develop good writing skills. They will know how to write dialogues.

4. Read the poem Duck and the Kangaroo again and write at least 15 dialogues between the Duck and the Kangaroo. (Term-2)

They will learn about different kinds of Flora and Fauna.

5. Write a paragraph in about 80-100 words comparing flora and fauna of Uttrakhand and Rajasthan. (Term-2)

They will know how to write diary entry.

ART INTEGRATED (PEER STATE – ARUNACHAL PARDESH)

CLASS	HINDI ACTIVITY	ENGLISH ACTIVITY	MATHS ACTIVITY	SOCIAL SCIENCE ACTIVITY	SCIENCE ACTIVITY
VI	अरुणाचल प्रदेश के लोक नृत्य के प्रकार व् विशेषताए बताये । लोक नृत्य एवं वाद्ययंत्रो के चित्र दर्शाते हुये वहां का एक लोकगीत लिखो (चित्र बनाना /रंगीन पेपर से क्राफ्ट करना ।)	Draw or depict using art form the traditional Attire of Arunachal Pradesh. (Depiction of Various Costumes (Painting).) Write few lines about it in English.	अरुणाचल प्रदेश के प्रमुख हस्त कौशल कौन - कौन से है ? उनके नाम लिखो ? उनका डिज़ाइन पैटर्न जयामितिय पर आधारित है । उसको चित्र	**History** : Write an article about Jewellery of Arunachal Pradesh. **Civics :** Draw or depict using art form "A couple Wearing traditional attire using	Write an article based on study of Butterflies found in Arunachal Pradesh. Also Draw or depict the same using art form (Painting sketching) .

			बनाते हुये दर्शाये ।	waste material".	
VII	अरुणाचल प्रदेश के प्रमुख तीन लेखक, और दो कवि के बारे में लिखे तथा इस प्रदेश की खुबसुरती को चित्र के माध्यम से दर्शाये ।	Make Travel Brochure / Tourism (Brochure) of Arunachal Pradesh.	अरुणाचल प्रदेश की वेशभूषा में अधिकतर किस डिज़ाइन पैटर्न का प्रयोग करते है । विभिन्न रेखाऐं , आकार आदि के चित्र के माध्यम से दर्शाये ।	**History:** Make Travelogue / brochure on the Historical places of Arunachal Pradesh. **Civics:** Create Poster on the festivals celebrated in Arunachal Pradesh. **Geography –** Make a model of Terrace farming illustrations or create poster / painting.	Study different weaving patterns of Arunachal Pradesh by making painting sketching.
VIII	अरुणाचल प्रदेश के प्रमुख त्यौहार कौन कौन से है संकेत बिंदु निम्न है १. कब मनाया जाता है । २. क्यों मनाया जाता है । उस त्यौहार पर पहने जाने वाली वेषभूषा- त्योहारों से जुड़े चित्र बनाओ ।	Write about Various Dance forms of Arunachal Pradesh and make illustrations/Mask Drawing (Sketching/ Painting).	Write down about "How many lakes, rivers, Ponds are there in the state of Arunachal Pradesh. Write a paragraph about which material is used in making houses. Make 2D / Painting Collage work.	Study any one of the wild life Sanctuary in Arunachal Pradesh and prepare a brochure on it.	Study the various types of birds and animals of Arunachal Pradesh and write a small paragraph. Make Painting / creative art on the above mentioned topic.

CLASS	HINDI ACTIVITY	ENGLISH ACTIVITY	MATHS ACTIVITY	SOCIAL SCIENCE ACTIVITY	SCIENCE ACTIVITY
IX	मेरी द्रष्टि में अरुणाचल प्रदेश - इस पर एक निबन्ध लिख कर चित्र / कोलाज / द्वारा वंहा की प्रकृति को (रंगों से) चित्रित करो ।	Depict of Scenic beauty through Collage / Painting. Write few lines about it in English.	Make 3 dimensional shape like cylinder using any thick sheet. On its Faces depict the art form of Arunachal Pradesh. स्थानीय जन जाति, आदिवासी के Face मास्क , मुखौटा बनाओ ।	अरुणाचल प्रदेश का इतिहास विभिन्न पर्यटन स्थलों के नाम, प्रसिद्ध / देखने योग्य एतिहासिक इमारतों के बारे में लिखे तथा उनको रंगों के द्वारा चित्र में दिखाये पेंटिंग / 2D या 3D आदि द्वारा दर्शाये ।	इस राज्य में किस देवी देवता की पूजा / आराधना की जाती है । उसका वर्णन करों । Clay work / Painting से भगवान बुद्धा Buddha का सुंदर चित्रण करों ।
X	1. सूर्योदय पर आधारित कोई कविता लिखो पेंटिंग करते हुये सूर्योदय दर्शाये । 2. अरुणाचल प्रदेश आपके प्रदेश से किस किस आधार पर भिन्नता रखता है व् किस किस आधार पर समानता । चित्र बनाते हुये निबंध लिखो - संकेत बिंदु निम्न है लोकनृत्य , लोकगीत , वर्षा, फसलें, चट्टानें निष्कर्ष ।	Write a paragraph about famous poets and writers of the state. And Explain the name of state. Make a beautiful hands cape.	यंहा के कुटीर Cottage Industry,लघु उधोग का वर्णन करें । बेत एवं वांस से बनने वाले फर्नीचर के विषय में बताते हुये उनको चित्रों द्वारा, दर्शाये Waste material आदि से 2D Painting को चित्रित करें ।	अरुणाचल प्रदेश की वास्तुकला पर एक अनुच्छेद / पेराग्राफ लिखे । चित्र बनाते हुये इस राज्य के आर्किटेक्ट (वास्तुकला) को सुंदर रंगों से चित्रित करे (Collage / Painting आदि)	इस राज्य में पाये जाने वाले पशु पक्षी का नाम लिखों । और रंगों द्वारा चित्रण करते हुये उनकी विशेषता बतायें । (Collage / Painting Photo. Etc.)

Sub- Social science

all work should be done in Seprate thin notebook.

1. Map work-

(1) Label and locate states and union territories with their capitals on India Map and paste in your notebook.

(ii) Label and locate Continents and Oceans on World Map and paste in your notebook.

2. Write the Fundamental Rights and Fundamental Duties of the Indian Constitution.

3. Write about a tourist place of India which you like the most.

4. Describe a few major types of soils found in India.

5. Define Human Resources. Why are they important for a country?

6. What are public facilities? Why are they important for society?

7.Write a paragraph on World Environment Day (5 June).

8.What are the differences between a monarchy and a democracy?

9. Write about on a local historical place nearby you

10. Write and learn the Preamble of the Indian Constitution

MDP- topic of mdp will be shared in class group .

SUBJECT-MATHS   CLASS-9TH

Instructions for Submission:

- Use Homework note for solving and don't write solutions from the google/internet.

- Graphs must be drawn on proper graph paper (if required).

- Submission Date: First day after summer vacation.

- All work must be handwritten.

- Marks will be awarded for neatness, completeness, and creativity.

- If any question is not clear students can leave that question or ask to me on WhatsApp.

1.Classify the following as rational or irrational numbers:

$\sqrt{2}$, 1.5, 0.333..., $\sqrt{49}$, π, $-\frac{3}{4}$

2.Write five rational numbers between:

(a) 1 and 2

(b) −1 and 0

3.Represent √3 and √5 on the number line using geometrical construction. *(Use compass and scale.)*

4.Write the decimal expansions of:

(a) $\frac{1}{8}$

(b) $\frac{22}{7}$

(c) $\frac{1}{3}$

And State whether the decimals are terminating or non-terminating recurring.

5.Create a table showing five irrational numbers and explain how each is identified as irrational.

6.Without actual division, state whether the decimal representation of the following will terminate or not:

(a) $\frac{7}{20}$

(b) $\frac{23}{90}$

(c) $\frac{5}{16}$

(d) $\frac{4}{11}$

7.True or False (with reason):

(a) √2 is a rational number.

(b) Every real number is either rational or irrational.

(c) The product of two irrational numbers is always irrational.

8.Express the following as a rational number in $\frac{p}{q}$ **form**:

(a) 0.666...

(b) 1.272727...

(c) 0.818181...

9.Insert three irrational numbers between √2 and √3

10.On the number line, mark the positions of:

0, 1, √2, √4

*PORTFOLIO

Portfolio must be prepared as per the given format.

*PROJECT

П a mysterious number : Make a project on this topic on A-4 sheets. Make it as informative and interesting as possible. Can use pictures wherever required. Must contain at least 15 pages.

Class – IX
Subject – English
Session - 2025-26

1. Read any one book from the following and write a book review including title and author:

Gulliver's Travels

The Story of My Life

The Diary of a Young Girl

Book Review Points:

- Main characters

- Summary

- Your favourite part of the story

2. Write Five Diary entries ONE in a week describing your activities and why it is special.
3. Find out 20 phrases from the lessons you have read in Class-IX and write their meanings then use them in your own sentences.
4. Prepare a collage on Indian Musical Instrument along with famous Musicians then write bio-sketch (brief   descriptions of any five musicians). **(Do it in a scrap book)**.
5. Prepare a model on any one grammar topic.
6. Write an Article on importance of education.
7. Do any two any unseen passages in holiday home work copy.

Holidays home work class 9 science
Matter in our surrounding
MCQ4

1.CO_2 can be easily liquified and even solidified because
   (a) It has weak forces of attraction
   (b) It has comparatively more force of attraction than other gases
   (c) It has more intermolecular space
   (d) It is present in atmosphere.
2. Which of the following has heighest kinetic energy?
   (a) Particles of ice at 0 °C
(b) Particles of water at 0 °C

(c) Particles of water at 100 °C

(d) Particles of steam at 100 °C

3. Bose-Einstein Condensate have

    (a) Very low kinetic energy

(b) Low kinetic energy

    (c) High kinetic energy

(d) Highest kinetic energy.

4. Which of the following is most suitable for summer?

    (a) Cotton

(b) Nylon

(c) Polyester

(d) Silk.

5. Which of the following is incorrect about plasma?

    (a) Fluorescent tube and neon sign bulbs consist of plasma.

    (b) The gas gets ionised when electrical energy flows through it.

    (c) It consists of super-energetic and super-excited particles.

    (d) The plasma glows with colour which does not depend upon nature of gas.

6. The colour of vapours formed on sublimation of iodine solid is

    (a) Purple (violet)

    (b) Colourless

    (c) Yellow

    (d) Orange

7. Under which of the following conditions we can boil water at room temperature?

    (a) At low pressure

(b) At high pressure

    (c) At very high pressure

(d) At atmospheric pressure

8. Which of the following is not endothermic process?

    (a) Fusion

(b) Vapourisation

    (c) Temperature

(d) Insoluble heavy impurities

9. Which of the following does not affect rate of evaporation?

    (a) Wind speed

(b) Surface area

    (c) Temperature

(d) Insoluble heavy impurities

10. Kinetic energy of molecules is directly proportional to

    (a) Temperature

(b) Pressure

    (c) Both (a) and (b)

(d) Atmospheric pressure

1. Why do we see water droplets collected on the outer surface of a glass container, containing ice?

2. Explain why solids have fixed shape but liquids and gases do not have fixed shape.
3. Why is it advisable to use pressure cooker at higher altitudes?
4. What are fluids?
5. Why is water liquid at room temperature?
6. Cotton is solid but it floats on water. Why?
7. Why are solids generally denser than liquids and gases?
8. Name the factors that affect evaporation.
9. How is the high compressibility property of gas useful to us?
10. With the help of an example, explain how diffusion of gases in water is essential?
11. On a hot sunny day, why do people sprinkle water on the roof or open ground?
12. Why to people perspire a lot on a hot humid day?
13. A balloon when kept in sun, bursts after some time. Why?
14. Pressure and temperature determine the state of a substance. Explain this in detail.
15. Explain giving examples the various factors on which rate of evaporation depends.

Assertion and Reason

1.) ASSERTION-Sugar and Salt both are easily dissolved in water.
REASON   – Sugar and Salt are solid hence it is easily dissolved in water.
a.) Both Assertion and Reason are correct, and reason is the correct explanation for assertion.
b.) Both Assertion and Reason are correct, and Reason is not the correct explanation for Assertion.
c.) Assertion is true but Reason is false.
d.) Both Assertion and Reason are false.
ANS-Assertion is true but Reason is false.
2.) ASSERTION-When sugar pour in water, then taste of water became a sweet.
Reason-sugar completely dissolved in water with giving its own character.
3. **ASSERTION-ice is float on water.**
REASON-ice is solid in nature
4. ASSERION-Dilution of any colored compound in water shows light color than original color of compound.) (hint- potassium permanganate dissolve in water)
REASON-when dilution is done by water the quantity of particle getting decreases by dilution hence it shows light color.
5.ASSERTION- Particles in liquid state shows motion.
REASON-It possess kinetic energy
6. ASSERTION-Particles of matter held together by making any state.
REASON-intermixing of particles of two different type of matter on there own is called diffusion.

CELL THE FUNDAMENTAL UNIT OF LIFE

Colourless plastids are known as
    (a) Chromoplasts
(b) Chloroplasts
(c) Leucoplasts
(d) Protoplast
2. Animal cell lacking nuclei would also lack in
    (a) Ribosome

(b) Lysosome

(c) Endoplasmic reticulum

   (d) Chromosome

3. The phenomenon by which protoplast of a cell shrinks from the wall is

   (a) Osmosis

(b) Plasmolysis

(c) Diffusion

(d) Glycolysis

4. Which of the following are examples of prokaryotes?

   (a) Algae

(b) Fungi

(c) Bacteria

(d) Protozoa

5. The barrier between the protoplasm and the outer environment in an animal cell is

   (a) Cell wall

(b) Plasma membrane

(c) Nuclear membrane

(d) Cytoplasm

6. Ribosomes are the site of

   (a) Photosynthesis

(b) Respiration

(c) Protein synthesis

(d) Absorption

7. Which is the largest cell organelle present in plant cell?

   (a) Nucleus

(b) Chloroplast

(c) Endoplasmic reticulum

   (d) Mitochondria

1. What is cell theory? Who formulated it?

2. Write the full form of DNA and ATP.

3. What is the importance of nucleus?

4. Explain the process of osmosis through an example.

5. Draw and label a Plant cell neatly.

6. Why is Plasma Membrane a selectively permeable membrane?

7. What is the function of chromosome?

8. Name the cleansing organelle in the cell.

9.   Explain the process of osmosis and give an example.

10. What are the functions of plastids?

11. Explain the difference between Prokaryotic cell and Eukaryotic cell

12. What are genes? What is the difference between genes and chromosomes?

13. Why are lysosomes called suicidal bags?

14. Draw a neat diagram of a plant cell.

15. Write a short note on Plasma Membrane.

16. Why is the inner membrane of Mitochondria folded?

17. Name the smallest and the longest cell in human body.

18. Define nucleoids.

1. **ASSERTION-All plants and animals are composed of cells.**
REASON-Plants and animals made up of DNA.
2.**ASSERTION-All plants and animals are composed of cells.**
REASON-Cell is the basic unit of life.

3.**ASSERTION-All non-living things composed of cells.**
REASON-Cell is the basic unit of non- living things.
4.**ASSERTION-All plants and animals are composed of cells.**
REASON-Cell is the basic unit of non-living things.
5. **ASSERTION-Some cells like amoeba have changing shapes.**
REASON-Unicellular organisms show change in their structure.
6.**ASSERTION-Some cells like amoeba have changing shapes.**
REASON-Prokaryotic cells born with some specific character like change of shape.
7.**ASSERTION-Plasma membrane is present outside the cell**
REASON-Plasma membrane protects the cell and separates the contents of the cell from its external environment.

II) Prepare a working model for science exhibition on health and hygiene or environmental factors.

Holidays homework of class VI A, B SCIENCE

Class – IX Subject - Social science

Q1 Make a project file on the CBSE topic: DISASTER MANAGEMENT include all natural and man made disaster with picture.

Points to note for submitting the project :

(a) Do it in preferably A4 Size paper.   (b) It should be a handwritten project.

 (c) You can use newspaper clippings, maps, graphs, diagrams and material from the web.
 (d) Follow the sequence as
Acknowledgments,   Index,   Content ,   Bibliography
Q2 (I) outline political map of India mark the following:

A. Longitudinal and latitudinal extent of India   B. Neighbouring countries of India

C. States lying on the tropic of cancer.   D.States and capitals of India and union Territories

E. Standard Meridian of India

 (II) outline map of France mark the following:

a. Ports of France related to the slave trade: (i) Nantes (ii) Bordeaux
b. Capital of France.
c. A place from where volunteers sang national anthem of France. Marseilles

Q.3 Prepare 20-20 MCQS from each lesson. And learn these chapter for PT-1 exam

History chapter-1,   Geography chapter-1, Political chapter -1,   Economics chapter-1

Q.4 Explain the roll of philosopher in French revolution.

Q.5 Write a note on Napoleon Bonaparte.

Q.6 How have the ancient and much older land routs contributed to exchange of ideas and goods?

Q.7 What is time lag between Arunachal Pradesh and Gujarat? How is a uniform time set at all places?

Q.8 What is the aim of production?state any four requirements needed for production.

Q.9 What are the different ways of increasing production on the same piece of land? Use examples to explain.

 # Prepare a Portfolio file – prepare 1st page biodata with photo and paste geography Chapter-1 map work

 # Activity work : Inter Disciplinary Project of CBSE

Topics   History Chapter – Forest, Society and Colonialism   Geography Chapter - Natural Vegetation and Wildlife

Guidelines related this project will be send later in class group..

NOTE – Both projects of CBSE are mandatory

ARTIFICIAL INTELLIGENCE (SUB. CODE 417) CLASS – IX

Unit 1: AI Reflection, Project Cycle and Ethics

Session: Session: Introduction to AI.

Competency based questions Question no 1 to 5

Session: Introduction to AI Project Cycle

Competency based questions Question no 1 to 5

Session: Problem Scoping

Competency based questions Question no 1 to 5

Session: Data Acquisition

Competency based questions Question no 1 to 5

Session: Modeling

Competency based questions Question no 1 to 5

Session: Evaluation

Competency based questions Question no 1 to 5

Session: Deployment

Competency based questions Question no 1 to 5

Important Links

● https://cbseacademic.nic.in/web_material/Curriculum21/publication/secondary/Python_Content_Manual.pdf ●
https://drive.google.com/drive/folders/1qRAckDculA5i164OUFDlilxb8mT65MMb

ग्रीष्मावकाश गृहकार्य (2025- 26)

विषय- हिंदी

कक्षा - नवीं

1. अनुच्छेद लेखन- संकेत बिंदुओं के आधार पर अनुच्छेद लिखें -

क. विद्यार्थी जीवन में अनुशासन का महत्व

ख. डिजिटल इंडिया

ग.पर्यावरण संरक्षण

घ.समय का महत्व

2.पत्र लेखन दो औपचारिक पत्र और दो अनौपचारिक पत्र ।

3. समास: परिभाषा, भेद तथा प्रत्येक के आठ-आठ उदाहरण लिखिए।

4.अर्थ के आधार पर वाक्य भेद, आठ भेद और चार-चार उदाहरण लिखिए।

कला एकीकृत परियोजनाः

'झारखंड: एक सांस्कृतिक और प्राकृतिक धरोहर' पर 100 शब्दों में निबंध लिखें।

जनजातीय जीवन से जुड़ी 12-16 पंक्तियों की एक कविता चित्र सहित लिखें।

परियोजना कार्य (फाइल में)

1. तिब्बती समाज से संबंधित परियोजना कार्य -तिब्बती समाज की भौगोलिक स्थिति, खान-पान, रहन-सहन, भाषा शैली, धार्मिक स्थल, कानून व्यवस्था

2. मुंशी प्रेमचंद के व्यक्तित्व एवं कृतित्व परियोजना कार्य ।

SUBJECT-MATHS   CLASS-10TH

Instructions for Submission:

- **Use Homework note for solving and don't write solutions from the google/internet.**

- **Graphs must be drawn on proper graph paper (if required).**

- **Submission Date: First day after summer vacation.**

- **All work must be handwritten.**

- **Marks will be awarded for neatness, completeness, and creativity.**

- **If any question is not clear students can leave that question or ask to me on WhatsApp.**

1.Prove that:

  a) $\sqrt{2}$ is an irrational number.
  b) $\sqrt{3}$ is an irrational number.

2.Write 5 examples each of:

- Linear polynomial

- Quadratic polynomial

- Cubic polynomial

3.Find the HCF and LCM of 56 and 72 using prime factorization.

4.For the quadratic polynomial x² - 5x + 6, find its zeros and verify the relationship between the zeros and the coefficients.

5. Verify that:

- HCF × LCM = Product of the two numbers for (48, 84).

6.Find the prime factorisation of 360 and express it as a product of primes.

7. Prove that 3 + 2√5 is irrational.

8.Prove that 7√2 is irrational.

9.Write the degree and number of terms in the following polynomials:

- $4x^3 - 3x^2 + 2x - 7$
- $x^2 + 2x$
- 7
- **10.Find the zero(s) of the following polynomials:**

    - $x^2 - 7x + 10$

    - $x^2 + 2x - 15$

    - $x^2 - 9$

11.If α and β are the zeros of the polynomial x² - 3x + 2, find:

- α + β

- αβ

- Verify the relationship with coefficients.

12.Form a quadratic polynomial whose sum and product of zeroes are:

- (a) 4, 1

- (b) −3, 2

13.If one zero of the polynomial x² + kx + 6 is 2, find the value of k and the other zero.

14.Form a pair of linear equations in two variables using the following information and solve it graphically: Five years ago, Sheela was twice as old as Tina. Ten year later Sheela's age will be ten years more than Tina's age. Find their present ages. What was the age of Sheela when Tina was born?

15. Madhu went to a bank to withdraw 10000. He asked the cashier to give her 100 and 200 notes only. Madhu got 60 notes in all. Find how many notes of 100 and 200 she received.

16. PORTFOLIO

- Make your portfolio in the given format.

17.PROJECT :

Make a mathematical magazine of at least 20 pages. It should have a beautiful cover page. Make it informative and interesting , include pictures wherever possible.

Note : HW to be done in the maths notebook. Portfolio and Project to be done on separate A-4 sheets.

SUBJECT :ENGLISH   *For CLASS :-10*

1. *Prepare a power-point presentation of the lesson 'CHAPTER ONE OR TWO OF LITERATURE READER India". (Minimum 10 slides)*

2. *Write a short charactersketch of the following characters:-*

a) *MRS PACKLETIDE*

b) *MISS MEBIN*

3. *Find out two example of given figure of speeches and write them with explanation. (A4 size paper)*

a) *Simile*

b) *Metaphor*

c) *Personification*

d) *Alliteration*

e) *Refrain*

(Each page will have explanation as well as example)

4. *Write one complain letter regarding defective mobile phone.*

5. *Write a letter to the editor on problem of stray animal.*

6. *SOLVE ONE SAMPLE PAPER ON BOARD PATTERN.*

PREPARE YOUR PORTFOLIO ON THE GIVEN FORMAT

ART INTEGRATED (PEER STATE – ARUNACHAL PARDESH)

CLASS	HINDI ACTIVITY	ENGLISH ACTIVITY	MATHS ACTIVITY	SOCIAL SCIENCE ACTIVITY	SCIENCE ACTIVITY
X	1. सूर्योदय पर आधारित कोई कविता लिखो पेंटिंग करते हुये सूर्योदय दर्शाये। 2. अरुणाचल प्रदेश आपके प्रदेश से किस किस आधार पर भिन्नता रखता है व् किस किस आधार पर समानता। चित्र बनाते हुये निबंध लिखो - संकेत बिंदु निम्न है लोकनृत्य , लोकगीत , वर्षा, फसलें, चट्टानें निष्कर्ष।	Write a paragraph about famous poets and writers of the state. And Explain the name of state. Make a beautiful hands cape.	यंहा के कुटीर Cottage Industry,लघु उधोग का वर्णन करें। बेत एवं वांस से बनने वाले फर्नीचर के विषय में बताते हुये उनको चित्रों द्वारा, दर्शाये Waste material आदि से 2D Painting को चित्रित करें।	अरुणाचल प्रदेश की वास्तुकला पर एक अनुच्छेद / पेराग्राफ लिखे। चित्र बनाते हुये इस राज्य के आर्किटेक्ट (वास्तुकला) को सुंदर रंगों से चित्रित करे (Collage / Painting आदि)	इस राज्य में पाये जाने वाले पशु पक्षी का नाम लिखों। और रंगों द्वारा चित्रण करते हुये उनकी विशेषता बतायें। (Collage / Painting Photo. Etc.)

विषय-- हिंदी   कक्षा---10

1-सुभाष चंद्र बोस व्यक्तित्व एवं कृतित्व (परियोजना कार्य फाइल में)

2 पांच अपठित गद्यांश और पांच अपठित पदयांशों को प्रश्नोत्तर सहित फाइल में कीजिए।

3-सूरदास के पद कंठस्थ करेंगे और कक्षा में आकर सुनाएंगे।

4-जीवन में माता-पिता की भूमिका बताते हुए अपने माता-पिता के संबंध में एक-एक अनुच्छेद सचित्र लिखें। (परियोजना फ़ाइल में)

5-प्रतिदिन समाचार पत्र को विस्तार से पढ़ेंगे और पांच वस्तुओं के विज्ञापन बनाकर प्रोजेक्ट फाइल में चिपकाइए।

6-पांच प्रमुख महिला कहानी कारों के नाम (सचित्र)और उनकी प्रसिद्ध कहानियों के नाम भी लिखिए।

7-पोर्टफोलियो बनाएं।

8- अब तक पढ़ाए गए सभी पाठों को ध्यानपूर्वक पढ़कर प्रश्नोत्तर याद कर लिखने का अभ्यास करें।

SUBJECT: SOCIAL SCIENCE

1.Project Guidelines CBSE

Every student has to compulsorily undertake any one Project on the following topics:

 Consumer Rights OR,   Social Issues OR,   Sustainable Development

Points to note for submitting the project :

(a) Do it in preferably A4 Size paper (15-20 pages)   (b) It should be a handwritten project.

  (c) You can use newspaper clippings, maps, graphs, diagrams and material from the web.

 (d) Follow the sequence as : Acknowledgments,   Index,   Content ,   Bibliography.

The project must include: cover page, acknowledgement, certificate, index, bibliography, supporting images, graph, data etc should be included. (Note: Do it in preferably A4 Size paper.)

2. Interdisciplinary Project – do it on A4 size pages and make a file

History CH-3 Making of Global World,   Economics CH-4 Globalization and Indiana Economy

The project must include: cover page, acknowledgement, certificate, index, bibliography, supporting images, graph, data etc should be included. (Note: Do it in preferably A4 Size paper. 15-20 pages)

Note: marks of the H.W will be added in internal marks of CBSE board exam

3. Map Work (Activity File)

Locate all major soil types (India) on the suitable map of India. **(Paste in Portfolio File)**

1.Alluvial   2. Black   3. Red and Yellow   4. Laterite   5. Arid   6. Forest and Mountains

5. Board Model Questions

Write the answers of following questions in A4 size pages and add portfolio file.

(I)What is power sharing? Why power sharing is essential for democracy?

(II) Describe any three demands of the Sri Lankan Tamils. How did they struggle for their demands?

(III) What are some of the basic elements of the Belgium model of power sharing?

(IV)What are the Different forms of power sharing in modern democracies? Give an example of each of these.

(V) Give an account of ethnic composition of Sri Lanka and Belgium.

(VI) Differentiate horizontal and vertical power sharing in modern democracies.

(VII) What is per capita income? Mention any two limitations of per capita income as an indicator of

development.

(VIII) "Money cannot buy all the goods and services that one needs to live well" Do you agree with this

statement? Justify your answer with any three suitable arguments.

 (IX) What are the main criteria used by the World Bank in classifying different countries? What are the

limitations of this criteria, if any?

(X) Why the issue of sustainability is an important for development?

IMP >Both project of CBSE are compulsory

SUBJECT – SCIENCE

Q1. Write symbols of elements and their name in given your textbook (ch. 1and learn them)

Q2. Write the name of compounds and their name in given your test book . (ch.1)

Q3. What is a balanced chemical equation? Why should chemical equations be balanced?

Q4.Write the balanced equation for the following chemical reactions.

   (i) Hydrogen + Chlorine → Hydrogen chloride

   (ii) (ii) Barium chloride + Aluminium sulphate → Barium sulphate + Aluminium chloride

   (iii) Sodium + Water → Sodium hydroxide + Hydrogen

Q5. Write a balanced chemical equation with state symbols for the following reactions.

   (i) Solutions of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and the solution of sodium chloride.

   (ii) Sodium hydroxide solution (in water) reacts with hydrochloric acid solution (in water) to produce sodium chloride solution and water.
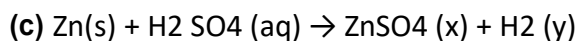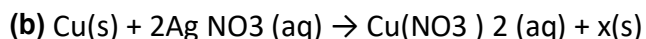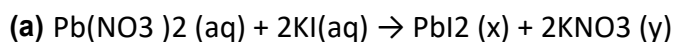
Q6. Why are decomposition reactions called the opposite of combination reactions? Write equations for these reactions.

Q7.What is the difference between displacement and double displacement reactions? Write equations for these reactions.

Q.8. Write the balanced chemical equations for the following reactions and identify the type of reaction in each case.

(a) Nitrogen gas is treated with hydrogen gas in the presence of a catalyst at 773K to form ammonia gas.

(b) Sodium hydroxide solution is treated with acetic acid to form sodium acetate and water.

(c) Ethanol is warmed with ethanoic acid to form ethyl acetate in the presence of concentrated H2 SO4 .

(d) Ethene is burnt in the presence of oxygen to form carbon dioxide, water and releases heat and light.

Q9. Complete the missing components/variables given as x and y in the following reactions

    (a) $Pb(NO_3)_2$ (aq) + 2KI(aq) → PbI_2 (x) + $2KNO_3$ (y)

    (b) Cu(s) + 2Ag NO_3 (aq) → $Cu(NO_3)_2$ (aq) + x(s)

    (c) Zn(s) + H_2SO_4 (aq) → $ZnSO_4$ (x) + H_2 (y)

    (d) $CaCO_3$ (s)→x CaO(s) + CO_2 (g)

Q11. On heating blue coloured powder of copper (II) nitrate in a boiling tube, copper oxide (black), oxygen gas and a brown gas X is formed

    (a) Write a balanced chemical equation of the reaction.

    (b) Identity the brown gas X evolved.

    (c) Identity the type of reaction.

    (d) What could be the pH range of aqueous solution of the gas X?

Q12.Which among the following are physical or chemical changes?

    (a) Evaporation of petrol

    (b) Burning of Liquefied Petroleum Gas (LPG)

    (c) Heating of an iron rod to red hot.

    (d) Curdling of milk

    (e) Sublimation of solid ammonium chloride

Q13. Name the following

    (a) The process in plants that links light energy with chemical energy

    (b) Organisms that can prepare their own food

    (c) The cell organelle where photosynthesis occurs

    (d) Cells that surround a stomatal pore

    (e) Organisms that cannot prepare their own food

    (f) An enzyme secreted from gastric glands in stomach that acts on proteins.

Q14. How do the guard cells regulate opening and closing of stomatal pores?

Q15. Differentiate between an autotroph and a heterotroph.

Q16. How does aerobic respiration differ from anaerobic respiration?

Q17. Differentiate between an artery and a vein.

Q18. Why is the rate of breathing in aquatic organisms much faster than in terrestrial organisms

Q19. Mention the major events during photosynthesis.

Q20. Draw labeled diagram of the following

 (a) Human digestive system

 (b) Human respiratory system

 (c) Stomatal pore –Open and closed

 (d) Double circulation in humans

Q21. Make a working model for a science exhibition

 .

Case study questions

Q22.Read the following and answer any four questions from (i) to (v).
Heterotrophic nutrition is a mode of nutrition in which organisms obtain readymade organic food from outside sources. The organisms that depend upon outside sources for obtaining organic nutrients are called heterotrophs. Heterotrophic nutrition is of three types: saprophytic, parasitic and holozoic nutrition.

 (i) In which of the following groups of organisms food material is broken outside the body and absorbed?
 (a) Mushroom, green plants, Amoeba

 (b) Yeast, mushroom, bread mould

 (c) Paramecium, Amoeba, Cuscuta

 (d) Cuscuta, lice, tapeworm

 (ii)Which of the following is a parasite?

 (a) Yeast

 (b) Taenia

 (c) Amoeba

 (d) Earthworm

 (iii) Which of the following is an example of saprotroph?

 (a) Grass

 (b) Mushroom

 (c) Amoeba

 (d) Paramecium

(iv) Heterotrophic nutrition involves

> **(a)** production of simple sugar from inorganic compounds
>
> **(b)** utilisation of chemical energy to prepare food
>
> **(c)** utilisation of energy obtained by plants
>
> **(d)** all of these.

(v) In Amoeba, food is digested in

> **(a)** mouth
>
> **(b)** pseudopodia
>
> **(c)** cilia
>
> **(d)** food vacuole

Q23. *Read the following and answer any four questions from (i) to (v).*

Rishaan experienced muscular cramps during the training session for his upcoming football match. Mr. Sen, his coach advised him on a schedule of some aerobic exercises to overcome his problem of muscular cramps. Rishaan followed his coach's advice and did not face the problem of muscular cramps again during his match

(i) Which life process is depicted by the above passage?

> **(a) Respiration**
>
> **(b) Digestion**
>
> **(c) Lutrition**
>
> **(d) Excretion**

(ii) lack of oxygen in muscles often leads to cramps due to

(a) Conversion of pyruvate to ethanol

(b) Conversion of glucose to pyruvate

(c) Conversion of pyruvate to glucose

(d) Conversion of pyruvate to lactic acid

(iii) Is lactic acid produced by anaerobic respiration in yeast?

(a) YES

(b) NO

(iv) Why there is an increase in lactic acid concentration in the blood at the beginning of the exercise?

(a) Yack of oxygen

(b) Excess of oxygen

(c) Yack of carbon dioxide

(d) Excess of carbon dioxide

(v) Is carbon dioxide produced by anaerobic respiration in yeast?

(a) YES   (b) NO

Q24. *Read the following and answer any four questions from (i) to (v).*

A reaction in which twoor more reactants combine to form a single product is called a combination reaction. For example, calcium oxide reacts vigorously with water to form calcium hydroxide. The reaction is highly exothermic in nature, as lots of heat is produced during the reaction.

$CaO(s) + H_2O(l) \rightarrow Ca(OH)_2(aq) + Heat$ $CaO(s) + H_2O(l) \rightarrow Ca(OH)_2(aq) + Heat$ Calcium oxide Water Calcium hydroxide

Solution of $Ca(OH)_2$ is used for white wash the walls. Calcium hydroxide reacts slowly with carbon dioxide in air to form a thin layer of calcium carbonate on the wall which gives a shiny appearance to wall. Calcium carbonate will form after two or three days of white wash.
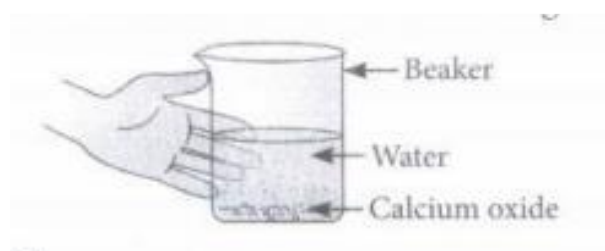
(i) What is the chemical name of quick lime?

(a) Calcium oxide

(b) Calcium carbonate

(c) Calcium hydroxide

(d) Carbon dioxide

(ii) **When carbon dioxide is passed through lime water,**

(a) calcium hydroxide is formed

(b) white precipitate of CaO is formed

(c) lime water turns milky

(d) colour of lime water becomes green.

(iii) Following observations are observed when calcium oxide reacts vigorously with water.

Identify the incorrect observations

(I)	**It is an endothermic reaction**
(II)	**Slaked lime is produced.**
(III)	**Quick lime is produced.**
(IV)	**It is an exothermic reaction.**
(V)	**It is a combination reaction**

(a) (I) and (II)

(b) (III) and (IV)

(c) (I) and (III)

(d) (II), (IV) and (**V**)

(iv) Quick lime combines Vigorously with water to form (A) which reacts slowly with the carbon dioxide in air to form (B) Identify the compounds(A) and (B)

	(A)	(B)
(a)	Calcium carbonate	Calcium hydroxide
(b)	Calcium hydroxide	Calcium carbonate
(c)	Calcium	Calcium bicarbonate
(d)	Calcium bicarbonate	Calcium

(v) **Among the following, the endothermic reaction is**

(a) combination of carbon and oxygen to form carbon monoxide

(b) combination of nitrogen and oxygen to form nitrogen monoxide

(c) combination of glucose and oxygen to form carbon dioxide and water

(d) combination of zinc and hydrochloric acid to form zinc chloride and hydrogen

Q25. Reactions in which one element takes place of another element in a compound, are known as displacement reactions. In general, more reactive elements displaces a less reactive element from its compound. In all single displacement reactions, only one element displaces another element from its compound. The single displacement reactions are, however, written as just displacement reactions. The displacement reaction between iron (III) oxide and powdered aluminium produces so much heat that iron metal obtained is in molten form
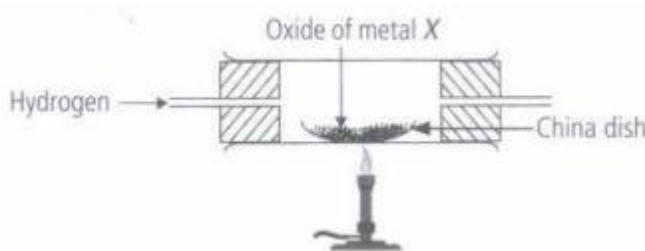
(i) Copper displaces which of the following metals from its salt solution?

  (a) ZnSO4   (b) FeSO4   (c) AgNO3   (d) NiSO4

(ii) When zinc reacts with dilute sulphuric acid, the gas evolved is

    (a)   red in colour and have a sweet smelling

    (b)   green in colour and have a foul smell

    (c)   colourless, odourless and burns with a pop sound

    (d)   colourless, pungent smelling and burns with a pop sound

(ii) When dry hydrogen is passed over a heated oxide of metal X using the apparatus shown below, a reddish brown residue is obtained

The reddish -brown residue could be

  (a) copper (b) lead (c) silver (d) zinc

(iv)   Which of the following reactions is a displacement reaction?

    (a)   CaO+H2O⟶Ca(OH)2

    (b)   MgCO3⟶Mg+CO2

    (c) Mg+CuSO4⟶MgSO4+

    (d) H2+Cl2⟶2HCl (d) H2+Cl2⟶2 HCl

(v) When dilute hydrochloric acid is added to granulated zinc placed in a test tube, the observation made is

    (a)   the surface of the metal turns shining

(b)   the reaction mixture turns milky

(c)   greenish yellow gas is evolved

(d)   the colourless and odourless gas evolves with a pop sound

ARTIFICIAL INTELLIGENCE (SUB. CODE 417)

Unit 1: Introduction to Artificial Intelligence (AI)

Session: What is Intelligence?

Competency based questions Question no 1 to 5

Session: Decision Making.

Competency based questions Question no 1 to 5

Session: Introduction to AI and related terminologies.

Competency based questions Question no 1 to 5

Session: Applications of AI.

Competency based questions Question no 1 to 5

Session: AI Ethics.

Competency based questions Question no 1 to 5

Important Links

• **https://cbseacademic.nic.in/web_material/Curriculum21/publication/secondar**

y/Class10_Facilitator_Handbook.pdf

• **Link to AI Activities & Jupyter Notebooks (including sample projects)**

https://bit.ly/class_X_activities_jupy

Instructions for Portfolio Work (Summer Vacation)

Dear Students,

You are required to complete the following portfolio work during the summer vacation. This portfolio will reflect your understanding, interests, and achievements related to English and other subjects. Kindly follow the instructions below:

1. Neatness and Presentation:

- Use a file or folder to compile your portfolio pages.

- Write neatly using blue/black ink.

- Paste photographs wherever required. You may use colour printouts or clear photographs.

2.Content Guidelines:

-         My Thoughts on the Subject: Write your honest opinion about English as a subject. What do you enjoy or find challenging?

- One Area I Can Improve Upon and How: Reflect on your weaknesses and describe how you plan to improve.

- Most Liked Topics/Chapters in English: Mention 5 topics/chapters you enjoyed most. Give a brief reason or description for each.

3. My Activities Section:

- List at least 2-4 creative/academic activities you did or plan to do during the holidays (e.g., reading a novel, recording a poem, writing an article, acting, singing, etc.).

- Attach photographs and include the links (if any) to videos, audio files, or digital content.

4. Other Achievements:

- Record your achievements in Olympiads, competitions, or other school/national events.

- Give a brief description of each.

5. 5. My Wish/Desire/Expectation:

- Mention 2-3 things you wish to do or learn in the subject (English or any other).

- Explain how it can help you grow.

6. Teacher's Remark Section:

   - Leave this section blank. It will be filled by the teacher after submission.

7. Submission:

- Submit the completed portfolio on the first day after summer vacation.

- Ensure your name, class, and roll number are clearly mentioned on the cover page.

Have a happy and productive vacation!

KENDRIYA VIDYALAYA NO-2 AFS HINDAN GZB (PORTOFLIO FORMAT)

NAME OF STUDENT : _____

CLASS: _____

SUBJECT:_____

PORTFOLIO

SECOND TERM

PHOTOGRAPH OF STUDENT

DETAIL OF STUDENT

NAME OF STUDENT: _____

DATE OF BIRTH: _____

AGE: _____

CLASS & SECTION: _____

ROLL NO.: _____

NAME OF SCHOOL: _____

ADMISSION NO.: _____

YEAR OF ADMISSION: _____

HEIGHT: _____

WEIGHT: _____

BLOOD GROUP: _____

WEIGHT:_____

AADHAR NO.:

FAMILY DETAIL

MOTHER'S NAME: _____

OCCUPATION: _____

CONTACT NO.: _____

FATHER'S NAME: _____

OCCUPATION: _____

CONTACT NO.: _____

RESIDENTIAL ADD.: _____

STUDENT'S OWN RESPONSES

1. THINGS YOU ARE INTERESTED IN:

ANS. _____.

2. WHICH IS YOUR FAVOURITE GAME?

ANS. _____.

3. WHAT IS YOUR STRENGTH?

ANS. _____.

4. WRITE NAME OF YOUR BEST FRIEND.

ANS. _____.

5. THE QUALITY YOU LIKE IN YOUR FRIEND.

ANS. _____.

6. WHAT IS YOUR AMBITION/AIM IN LIFE?

ANS. _____.

7. WHO IS YOUR ROLE MODEL?

ANS. _____.

8. WHICH IS YOUR FAVOURITE BOOK?

ANS. _____.

9. WRITE YOUR ACHIEVEMENT SO FAR.

ANS. _____.

10. WHICH PLACE YOU WANT TO VISIT DURING HOLIDAYS?

ANS. _____.

AN INCIDENT THAT I CANNOT FORGET (100-150 WORDS)

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WRITE TWO POEMS ON 'RAIN'

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WRITE NAMES OF 10 ENGLISH POETS/AUTHOR

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WRITE FIVE TOURIST PLACE OF INDIA AND STATES

PLACE STATE
1.
2.
3.
4.
5.

XII (2025-26) Science Stream

PHYSICS

BEFORE STARTING HOLIDAY HOME WORK, READ ALL INSTRUCTIONS CAREFULLY.

Instructions :

1. Holiday Home Work should be neat and clean and do in HW Register.
2. Do not forget to write units at proper places and in answer. You can hope to get full marks in numericals only if units are given both data and with answer.
3. Use pencil for figures and diagram.

Questions:

Q1. Assignment based on Unit –I ELECTROSTATICS (attached below).

Q2. NCERT Questions of Ch-1 and Ch-2, both solved and unsolved in home

work

Q3: Prepare one investigatory Project according to Syllabus and as per CBSE

guidelines.

SUBMIT HOLIDAY HOMEWORK ON 19-06-2025

ASSIGNMENT: ELECTROSTATICS AND CURRENT ELECTRICITY

NUMERICALS

1. Estimate the total number of electrons present in 100g of water. How much is the total negative charge carried by these electrons? Avogadro's number = 6.023×10^{23} and molecular mass of water = 18u.
   (Ans = 5.35×10^6 C)

2. It is now believe that protons and neutrons are themselves built out of more elementary units called quarks. A proton and neutrons consists of three quarks each. Two types of quarks, the so called up quarks (u) of charge (+2/3) e and down quarks (d) of charge (-1/3) e, together with electrons build up ordinary matter. Suggest a possible quark composition of a proton and neutron.
   (Ans= uud, udd)

3. A free pith ball A of 8g carries a positive charge of 5×10^{-8}C. What must be the nature and magnitude of charge that should be given to a second pith ball B fixed 5cm below the former ball so that the upper ball is stationary.   (Ans= 4.36×10^{-7}, repulsive)

4. A particle of mass m and carrying charge $-q_1$ is moving around a charge $+q_2$ along a circular path of radius r. Prove that the period of revolution of the charge $-q_1$ about $+q_2$ is given by

$$T = \sqrt{(16r^3 \varepsilon_0 m\pi^3)}$$

$$\overline{q_1 \, q_2}$$

5. Two identical charges, Q each are kept at a distance r from each other. A third charge q is placed on the line joining above two charges such that all the three charges are in equilibrium. What is the magnitude, sign and position of the charge q?   (Ans : Q=q4, opposite, x=r/2)

VERY SHORT ANSWER QUESTIONS

6. Define the term electric dipole moment.
7. Sketch the electric field lines due to two equal positive charges placed near each other.
8. Give the units of i) line integral of electric field and ii) surface integral of electric field.
9. What would be the work done if a point charge +q, is taken from a point A to B on the circumference of a circle drawn with another point charge +q at the centre.
10. An uncharged insulated conductor A is brought near a charged insulated conductor B. What happens to charge and potential of B?
11. Why does the electric field inside a dielectric decrease when it is placed in an external field?
12. In a parallel plate capacitor, the capacitance increases from $4\mu f$ to $80\mu f$, on introducing a dielectric medium between the plates. What is the dielectric constant of the medium?

SHORT ANSWER QUESTIONS

13. Derive an expression for the electric field intensity at any point along the axial line of an electric dipole.
14. Two point electric charges of unknown magnitude and sign are placed a distance 'd' apart. The electric field intensity is zero at a point, not between the charges but on the line joining them. Write two essential conditions for this to happen.
15. Derive an expression for the energy stored in a parallel plate capacitor with air as the medium between its plates.
16. Find the ratio of linear momenta acquired by a α-particle and a proton accelerated through the same potential.
17. Using Gauss's law, show that no electric field intensity exists inside a hollow charged conductor.
18. An electric dipole is free to move in a uniform electric field. Explain its motion when it is placed i) parallel to the field and ii) perpendicular to the field.
19. Calculate the distance between two protons such that the electrostatics repulsive force between them is equal to the weight of either.
20. Two point charges q and 2q are kept at a distance d apart from each other in air. A third charge Q is to be kept along the same line in such a way that the net force on q and 2q is zero. Calculate the position of Q in terms of q and d.
21. An electric flux of -6×10^3 NM^2/C passes normally through a spherical Gaussian surface radius 10cm, due to point charge placed at the centre. What is the charge enclosed by the Gaussian surface? If the radius of Gaussian surface is doubled, how much flux would pass through the surface?
22. Is electric flux a scalar or vector quantity? Give its SI units.
23. (i) A charge of 2micro coulomb is placed at the center of a sphere of radius 1m. What is the electric flux passing through sphere if another charge of -2microcoulomb is placed at a distance of
   (a) 0.5m   (b) 1.5m from its center.

24. Two equal charges each of $-\sqrt{2}\mu C$ are placed 2m apart and a third charge $2\sqrt{2}\mu C$ is placed at mid point of line joining them. Calculate total electric field intensity at a distance of 1m from third charge on perpendicular bisector of the line joining the charges.

25. An electric dipole is held in a uniform electric field.
    (a) Show that no translatory force acts on it.
    (b) Derive an expression for the torque acting on it.

26. Express ohm law in vector form

27. What happens to drift velocity of electrons ,when
    i) length of conductor is doubled

    ii) Potential difference is half

    iii) Temperature of conductor is increased.

28. Distinguish between ohmic and non ohmic conductor by showing variation between potential difference & current for them

PM SHRI KENDRIYA VIDYALAYA NO 2 AFS HINDON HOLIDAYS
HOME WORK

CLASS –XII-CHEMISTRY(2025-26)

Solution

Q.1 Some liquids on mixing form 'azeotropes'. What are 'azeotropes'?

Q-2. Calculate the boiling points of solution when 2 gm of Na_2SO_4 (molecular mass 142 gm/mol) was dissolved in 50 gm of water assuming Na_2SO_4 undergoes complete ionization. Kb for water = 0.512 K Kg mol-1
(ANS : 0.439K , 373.589K)

Q-3. Explain why aquatic species are more comfortable in cold water rather than in warm water. Q-4 Calculate the freezing point of an aqueous solution containing 10.5g of magnesium bromide in 200g of water assuming complete dissociation of magnesium bromide .(Molar mass of magnesium bromide= 184 g/mol & Kf for water is 1.86 KKgmol-1.)
(ANS :1.59 K,271.56K)

Q-5 Calculate the boiling point of solution containing 4.0 g of magnesium sulphate in 100g of water assuming complete dissociation of magnesium sulphate.(Molar mass of magnesium sulphate = 120 g/mol Kb for water = 0.52 K Kg mol-1.)
(ANS :373.49 K.)

Q-6 State Henry's law and mention two of its important applications.

Q-7. Calculate the mass of NaCl (molar mass =58.5) must be dissolved in 37.2 g of water to lower the freezing point by 20C assuming complete dissociation of NaCl. Kf for water is 1.86 KKgmol-1 .
(ANS: 1.17 g)

Q-8 What mass of NaCl (molar mass =58.5) must be dissolved in 65g of water to lower the freezing point by 7.50C ? Assume Van't Hoff's factor =1.87
(ANS: 8.199g)

Q-9.Calculate the freezing point depression for 0.711m aqueous solution of sodium sulphate if it is completely ionised in solution.If this solution actually freezes at -0.3200C ,What is the value of Van't Hoff factor for it at the freezing point. (ANS:i =2.42)

Q-10. What happens when blood cells are placed in water?

Q.11 (i) Out of 1 M glucose and 2 M glucose, which one has a higher boiling point and why?

(ii) What happens when the external pressure applied becomes more than the osmotic pressure of solution?

Q.12 Determine the amount of $CaCl_2$ (i = 2.47) dissolved in 2.5 litre of water such that its osmotic pressure is 0.75 atm at 27° C. (ANS: 3.42 g)

Q.13 Write Raoults law for binary solution.

Q.14 What type of non-idealities are exhibited by cyclohexane –ethanol and acetone-chloroform mixtures? Give reasons for your answer.

Q.15 Why a mixture of carbon disulphide and acetone shows positive deviation from Raoult's law?

What type of azeotropic mixture will be formed by this solution.

Q.16 What is Osmotic pressure and how is it related to the molecular mass of a non volatile substances.

Q.17.What advantage the osmotic pressure method has over the elevation of boiling point method for determining molecular mass.

Q.18.Sodium chloride or calcium chloride is used to clear snow from the roads. Why?

Electrochemistry

Q.1 A voltaic cell is set up at 250C With the following half cells :Al(s)/Al3+(0.001M) and Ni2+(0.50)/Ni(s) ,Write the equation for the cell reaction that occurs when the cell generates an electric current and determine the cell potential (givenEoNi2+/Ni = -0.25V, Eo Al3+/Al(=-1.66V)

Q.2 One half cell in a voltaic cell is constructed from a silver wire dipped in silver nitrate solution of unknown concentration .The other half cell consists of a zinc electrode in a 0.10M solution of Zinc nitrate .A voltage of 1.48V is measured for this cell.Use this information to calculate the concentration of silver nitrate solution.(EoZn2+/Zn = -0.763V, EoAg+/Ag = + 0.80V)

Q.3 A voltaic cell is constructed at 25oC with the following half cell Ag+(0.001M)/Ag and Cu+2 (0.01M)/Cu what would be the voltage of this cell? Given EoAg+/Ag = + 0.80V, EoCu2+/Cu =
+0.34V).

Q.4 Calculate the emf of the cell . The following chemical reaction is occurring in an electrochemical cell. Mg(s) +2Ag+ (0.0001 M)→ Mg2+(0.10M) + 2 Ag(s) The electrode values are Mg2+ / Mg = – 2. 36 V Ag+ / Ag = 0.81 V.

Q.5 Calculate the potential of hydrogen electrode in contact with a solution whose pH is 10.

Q.6. Can CuSO4 be kept in Zn container?why?

Q.7. How much charge in terms of Faraday is required for reduction of 1 mole of Cu2+ ions to Cu?

Q.8. State Kohlraush's law.

Q.9. Define conductivity and molar conductivity. Give their units. Q.10.How can you determine cell constant?

Q.11. The resistance of a conductivity cell containing 0.01 M KCl is 1500 ohm. The cell constant is 0.9 cm^{-1}. Calculate the conductivity.

Q.12. How for weak and strong electrolytes, molar conductivity changes with concentration of Solute?

Q.13. Calculate the mass of Ag deposited at cathode when a current of 2 amperes was passed through a solution of AgNO3 for 15 minutes.
[Given: Molar mass of Ag = 108 g mol-1 1F = 96,500 C mol-1)

Q.14 Calculate the molar conductivity at infinite dilution of acetic acid if $\Lambda^0(H^+)$ = 349.8 Scm²mol^{-1} and $\Lambda^0(CH3COO^-)$ = 40.9 S cm² mol^{-1}

Chemical kinetics

Q.1 What is the difference between molecularity and order of a reaction?

Q.2 Express the rate of the following reaction in terms of the formation of ammonia. N2(g) + 3H2(g) —---> 2NH3(g)

Q.3 The conversion of molecules X to Y follows the second order of kinetics. If concentration of X is decreased 3 times, how will it affect the rate of formation of Y.

Q.4 If a reaction has s-1 as the unit of the rate constant. What will be the order of the reaction?

Q.5 If the decomposition of nitrogen oxide as $2N_2O_5 \rightarrow 4NO_2+O_2$ follows a first order kinetics. (i)Calculate the rate constant for a 0.05 M solution if the instantaneous rate is 1.5 x 10- molL-1s-1?

ii) What concentration of N2O5 would give a rate of 2.45 x 10-5mol l-1s-1?

Q.6 What is the effect of temperature on reaction rate?

Q.7 Define rate of reaction.

Q.8 Write the unit of rate constant for a first-order reaction.

NOTE:

1. DO COMPLETE CHEMISTRY PRACTICAL NOTEBOOK PROPERLY WITH PROPER INDEX AND WHITE COVER.
2. PREPARE ONE INVESTIGATORY PROJECT OF CHEMISTRY (HAND WRITTEN)

Computer Science Class XII A Holiday homework

Q1. Prepare a presentation and prepare yourself for Class Presentation topic Revision of Python topics covered in Class XI..

Q2. Create a project :- the aim of the class project is to create something that is tangible and useful using Python file handling/ Python-SQL connectivity. This should be done in groups of two to three students and submit before the submission deadline. The aim here is to find a real world problem that is worthwhile to solve.

Q3. Write the Answer of the following Questions in Computer science Notebook

1:Identify the Domain name and URL from the following:

http://www.income.in/home.aboutus.hml

2: What is web hosting?

3.Write two characterstics of Wi-Fi.?

4.Which protocol is used to creating a connection with a remote machine?
5.Which protocol is used to create a connection to a remote machine? Give any two advantages of using optical fibers?

6.Expand the following:

1. GSM
2. GPRS

7. What is the difference between packet and message switching

8. What is the difference between packet and message switching

9. Which type of network (out of LAN, PAN and MAN) is formed, when
10. you connect two mobiles using Bluetooth to transfer a video?
11. Write one characterstic each for 2G and 3G mobile technologies.
12. What is the difference between Packet switching and circuit switching techniques?
13. Write two advantages of using an optical fibre cable over an
14. Ethernet cable to connect two service stations, which are 200 m away
from each other.
15. Write one advantage of bus topology of network. Also illustrate how
four (4) computers can be connected with each other using bus topology
of network.
16. Give one suitable example of each URL and Domain Name.
17. Write one advantage of star topology network? Also, illustrate how five
(5) computers can be connected to each other using star topology of
network.
18. What is the function of Modem?
19. Explain the purpose of a router.
20. Name any two components required for net-working.
21. What are repeaters?
22. Mention one advantage of star topology over bus topology in networking?
23. Differentiate between packet swiching and message switching
technique in network commu-nication.
24. Differentiate between Bus and Star topology of network.
25. What is VoIP?
26. In networking, what is WAN? How is it different from LAN?
27. Define the term bandwidth. Give any one unit of bandwidth

28. What was the role of ARPANET in the computer network?
29. Write any two differences between twisted pair and co-axial pair cable.
28. Write one advantage of Bus Topology of network, also, illustrate how 4
computers can be connected with each other using star topology of
network.

MATHS Summer Vacation Home Work.

1.ALL EXAMPLES FROM NCERT BOOK , AND PREVIOUS 5 YEARS CBSE QUESTIONS ON THE TOPICS.

A) RELATION AND FUNCTIONS.

B) INVERSE TRIGONOMETRIC FUNCTIONS

C)MATRICES AND DETERMINANTS

English Homework for Class 12

1. Complete all the pending work of copy in all respect.

2. Attempt 4 questions of Notice. Invent your own topics related to school events.

3. Write Three questions of letter to Editor concerning social and civics issues.

4. Write four ariticles on variety of topics related to Education, sports, science, social awareness etc.

5. Start preparing ALS project on an age appropriate topic individually. Not to repeat topics of class 11.

SUMMER VACATION HOMEWORK
CLASS- XII
SUBJECT-BIOLOGY

Q.1 Complete your investigatory project on given allotted topic.

Q.2 Draw the following diagram

(i) young anther (ii) megasporangia (iii) monocot and dicot seed(iii) Double fertilization (iv)

Seminiferous tubules (v) T S of testis (V**) Schematic representation of Spermatogenesis and**

Oogenesis

Q.3Diffrentiate between

(i)Geitonogamy and xenogamy

(ii) perisperm an endosperm

(iii) vegetative cell and generative cell

Q. 4 Draw a label diagaram of human female reproductive system.

5 Draw a section view of human ovary showing the different stages of development

6 Draw the label diagram of mature sperm and label it and also explain function of each parts.

7 Explain the different page of menstrual cycle.

8 why is copper T act as an effective contraceptive for human female?

9 write a short notes on different methods of contraceptive methods.

10 Complete notes of principal and inheritance

11 learn and revise MCQs and PYQs of firsfirst four chapters.

12 Why is saheli a well accepted contractive pills?

13 What are the suggestive reasons for population explosion?

<div align="center">

CLASS-12 वर्ग - B एवं C

विषय: हिन्दी

ग्रीष्मकालीन प्रदत्त गृहकार्य: मई 2025

</div>

1. संचार किसे कहा जाता है? संचार के साधनों के नाम लिखिए।

2. प्रिंट मीडिया से आप क्या समझते हैं? उदाहरण देकर स्पस्ट कीजिए ।

3. निम्नलिखित में से किसी एक विषय पर आलेख लिखिए- (क) शिक्षा और बेरोजगारी

(ख) योग और स्वास्थ्य

4. निम्नलिखित में से किसी एक विषय पर फीचर लिखिए

(क) बढ़ती गर्मी का प्रकोप

(ख) घटती हरियाली और बढ़ता प्रदूषण

5. समाचार से आप क्या समझते है? समाचार लेखन की उल्टा पिरामिड शैली को समझाइए।

6. किसी लोकप्रिय समाचार के संपादक के नाम पत्र लिखिए जिसमें आपके क्षेत्र में बिजली की समस्या पर अधिकारियों का ध्यान आकृष्ट करने की प्रार्थना की गई हो ।

7. परियोजना कार्य:- (क) कला समेकित कार्य-युग्मित राज्य अरुणाचल प्रदेश की भौगोलिक स्थिति, इतिहास, खानपान, नृत्य, वेशभूषा, भ्रमण स्थल, ऐतिहासिक स्थान, कवि, लोक संगीत, स्वतंत्रता सेनानी, भाषाएं, साहित्यकार आदि में से किसी एक का छायाचित्रों के साथ वर्णन करें।

(ख) किसी कवि / लेखक का जीवन परिचय व साहित्य में उसका योगदान, जल का महत्व और संरक्षण के उपाय, नारी शक्ति का समाज में योगदान, भारतीय सिनेमा का इतिहास, स्वतंत्रता संग्राम का इतिहास, जनसंचार संचार के साधन, किसी स्वतंत्रता सेनानी का जीवन परिचय, आधुनिक जीवन शैली, विज्ञापन और हमारा जीवन, नई शिक्षा नीति, एक भारत श्रेष्ठ भारत, आजादी का अमृत महोत्सव, अंतरिक्ष में भारत के बढ़ते कदम, पर्यावरण के प्रति हमारा दायित्व, किसी खिलाड़ी या वैज्ञानिक का जीवन परिचय, दैनिक जीवन में बढ़ता मोबाइल का महत्व,
(इनमें से कोई एक)

8. पढ़ाए गए पाठ्यक्रम का अध्ययन करना व याद करना।

9. "सिल्वर वैडिंग" कहानी अध्ययन हेतु (वितान भाग 2)

10. आत्म विश्लेषण और अपनी क्षमताओं और कमजोरियों पर चिंतन।

5 खूबियों और 5 कमियों को लिखना और उनको सुधारने के उपाय।

धन्यवाद

Happy summer vaction

CLASS- 12C COMMERCE

विषय: हिन्दी

ग्रीष्मकालीन प्रदत्त गृहकार्य: मई 2025

1. संचार किसे कहा जाता है? संचार के साधनों के नाम लिखिए।

2. प्रिंट मीडिया से आप क्या समझते हैं? उदाहरण देकर स्पस्ट कीजिए ।

3. निम्नलिखित में से किसी एक विषय पर आलेख लिखिए- (क) शिक्षा और बेरोजगारी

(ख) योग और स्वास्थ्य

4. निम्नलिखित में से किसी एक विषय पर फीचर लिखिए

(क) बढ़ती गर्मी का प्रकोप

(ख) घटती हरियाली और बढ़ता प्रदूषण

5. समाचार से आप क्या समझते है? समाचार लेखन की उल्टा पिरामिड शैली को समझाइए ।

6. किसी लोकप्रिय समाचार के संपादक के नाम पत्र लिखिए जिसमें आपके क्षेत्र में बिजली की समस्या पर अधिकारियों का ध्यान आकृष्ट करने की प्रार्थना की गई हो ।

7. परियोजना कार्य:- (क) कला समेकित कार्य-युग्मित राज्य अरुणाचल प्रदेश की भौगोलिक स्थिति, इतिहास, खानपान, नृत्य, वेशभूषा, भ्रमण स्थल, ऐतिहासिक स्थान, कवि, लोक संगीत, स्वतंत्रता सेनानी, भाषाएं, साहित्यकार आदि में से किसी एक का छायाचित्रों के साथ वर्णन करें।

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8. पढ़ाए गए पाठ्यक्रम का अध्ययन करना व याद करना।

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10. आत्म विश्लेषण और अपनी क्षमताओं और कमजोरियों पर चिंतन।

5 खूबियों और 5 कमियों को लिखना और उनको सुधारने के उपाय।

Home Work. MATHS

1.ALL EXAMPLES FROM NCERT BOOK , AND PREVIOUS 5 YEARS CBSE QUESTIONS ON THE TOPICS.
A) RELATION AND FUNCTIONS.
B) INVERSE TRIGONOMETRIC FUNCTIONS
C)MATRICES AND DETERMINANTS
English Homework for Class 12
1. Complete all the pending work of copy in all respect.
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4. Write four ariticles on variety of topics related to Education, sports, science, social awareness etc.
5. Start preparing ALS project on an age appropriate topic individually. Not to repeat topics of class 11.

Subject: Accountancy

1. Solve all previous year examination question of 'Introduction to Partnership' from Text Book (T S Grewal)
2. Prepare Chapter 1 of Accountancy thoroughly.
3. Keep all work complete and your copies upto date.

Subject: Business Studies

Do following Previous Year Examination Question in Copy.

1. ***Nature and Significance of Management***

Previous Years' Examination Questions

Three Marks Questions

Q.1. State any four functions of operational management. **[CBSE Sample Paper 2016]**

Q.2. Mita has a successful ice cream business at Bikaner, namely 'Smartflavours'. Her ice creams are utterly delicious. She makes ice creams from fresh milk and the same are available in a wide range of flavours and packs. She sets viable business objectives and works with the same in mind in order to ensure that the customers will come back for purchasing.

Having the first mover advantage, her business was doing well. To earn higher profits, she started cutting down costs. This would sometimes lead to delay in delivery and the ice cream was not reaching the market in time. Over a period of time, the demand for her ice cream declined and because of it the competitors entered the market. She lost some of her market shares to competitors.

At the beginning of summer season, she got back to back orders for supply of 4,000 ice cream packs of different flavours for special occasions. To ensure that the task was completed and orders delivered in time she hired additional workers. She was, thus able to produce and deliver the ice cream packs but at a high production cost.

While completing activities and finishing the given task for achieving goals, Mita realised that she was ignoring one of the important aspects of management.

Identify the aspects of management that has been ignored by Mita. Also explain the same with the help of an example. **[CBSE 2019 (66/1/1)]**

Q.3. 'Science is a systematized body of knowledge that explains certain general truths or the operation of general laws.' In the light of this statement, describe management as a science. **[CBSE 2019 (66/1/1)]**

Q.4. Management is a complex activity that has three main dimensions. Explain these dimensions. **[CBSE 2019 (66/1/1)]**

Q.5. Hitesh is the Chief Executive Officer of 'Kids Garments Ltd.' Due to festive season, Hitesh got an additional order of 10,000 garments which he had to supply within two days. Due to his goodwill in the market, he did not want to lose the order. So, he decided to achieve the target by operating on double shifts. He achieved the target and supplied the order within two days. But due to double shifts, his cost of production was higher than the regular production cost.

Identify and give the meaning of the two concepts of management discussed in the above para. **[CBSE 2023 (66/1/1)]**

Q.6. Praveen and Naveen are friends. Praveen became a professional after completing his MBBS from 'Hindu Medical College'. Naveen completed his MBA from IIM, Bangalore. In a discussion with Praveen, Naveen said that he too is a professional and is working with a multinational company as a senior manager getting a good package. Praveen was not convinced about the fact that Naveen was a professional in spite of being aware that nowadays there is increasing emphasis on managed business concerns. Praveen gave three reasons in support of his opinion.

Explain the three reasons that Praveen might have given. **[CBSE 2023 (66/3/3)]**

Q.7. After completing his MBA degree, Aman joined a multinational company 'Zeyovya Ltd.'. His job demands long hours and commitment to the organisation. He is responsible for integrating diverse elements and coordinating all the activities of the business and for its impact on society. His job is complex and stressful. **[CBSE 2023 (66/4/1)]**

(a) Identify the level of management at which Aman joined the organisation.

(b) State any two functions to be performed by Aman at this level other than those discussed in the para.

Q.8. Monika, Rashmi and Garima are childhood friends. After completing their education, Monika joined a school as a teacher. Rashmi joined a firm as a Chartered Accountant and Garima as a General Manager in a Multi-National Company. After a long time in a re-union function of the school, they met each other. Rashmi said that they were all professionals now.

Garima told Rashmi that she can say this about Monika and herself, but not about her since Manager is not considered a full fledged professional.

Why did Garima say that she was not a professional? State any three points in support of your answer. [CBSE 2023 (66/5/3)]

Four Marks Questions

Q.9. What is meant by 'Management'? State any three objectives of management.
[CBSE (AI) 2015]

Q.10. Explain any four points of importance of management. [CBSE (D) 2016]

Q.11. Explain any four features of management. [CBSE (F) 2016]

Q.12. Chandrika Bhattacharya is working in Olax Ltd., a company manufacturing room heaters. She is responsible for all the activities of the business and for its impact on the society. Her job demands long hours and commitment to the organisation.

    (a) Identify the level at which Chandrika Bhattacharya is working.

    (b) State three more functions required to be performed by Chandrika Bhattacharya at this level. [CBSE (F) 2017]

Q.13. What is meant by 'Management'? Explain its any three features that establish it as an Art. [CBSE (AI) 2017]

Q.14. State any four characteristics of management. [CBSE 2024 (66/1/1)]

Q.15. State any four function performed by top level management. [CBSE 2024 (66/1/1)]

Five/Six Marks Questions

Q.16. Mega Ltd. was manufacturing water-heaters. In the first year of its operations, the revenue earned by the company was just sufficient to meet its costs. To increase the revenue, the company analysed the reasons of less revenues. After analysis the company decided:

    (i) to reduce the labour cost by shifting the manufacturing unit to a backward area where labour was available at a very low rate.

    (ii) to start manufacturing solar water-heaters and reduce the production of electric water-heaters slowly. This will not only help in covering the risks, but also help in meeting other objectives too.

    Identify and explain the objectives of management discussed above. [CBSE 2014]

Q.17. Describe any four characteristics of 'co-ordination'. [CBSE (AI) 2016, 2019 (66/5/1)]

Q.18. What is meant by co-ordination? State its any four features. [CBSE 2018 (66/1-2-3)]

Q.19. Explain any five characteristics of 'Co-ordination'. [CBSE 2019 (66/2/1), (66/4/1)]

Q.20. Explain any five characteristics of 'Management'. [CBSE 2019 (66/2/1)]

Q.21. Explain any five points of importance of management. [CBSE 2019 (66/4/1)]

Q.22. Explain any three points that highlight the importance of Management'. [CBSE 2023 (66/2/1)] [CBSE 2023 (66/4/1)]

Q.23. Explain the following characteristics of management:

    (i) Management is a goal-oriented process

    (ii) Management is a continuous process

    (iii) Management is all pervasive

Q.24. Explain the following characteristics of management: [CBSE 2023 (66/4/3)]

    (i) Management is a group activity

    (ii) Management is a dynamic function

    (iii) Management is multidimensional

2. *Principles of Management*

Previous Years' Examination Questions

Three Marks Questions

Q.1. Explain briefly 'Unity of Direction' and 'Order' as principles of general management.
[CBSE (AI) 2017]

Q.2. Explain 'unity of command' and 'equity' as principles of general management.
[CBSE (D) 2017]

Q.3. Explain briefly 'discipline' and 'scalar chain' as principles of general management.
[CBSE (D) 2017]

Q.4. Explain 'order' and 'initiative' as principles of general management. **[CBSE (D) 2017]**

Q.5. Explain briefly 'Initiative' and 'Esprit de Corps' as principles of general management.
[CBSE (AI) 2017]

Q.6. Explain briefly 'Remuneration of Employees' and 'Scalar Chain' as principles of general management. **[CBSE (D) 2017]**

Q.7. The students of Class XII of 'NK Senior Secondary School' visited the factory of 'Jaipur Exports Private Limited', a company manufacturing readymade garments. They observed that different workers were allocated different tasks like cutting the fabric as per specification, stitching dresses, putting buttons, ironing the finished dresses, packing them and putting labels. The Chief Executive Officer told the students that this results in efficient and effective output. They also observed orderliness in the factory as there was a fixed place for everything and it was present there.

The students later discussed with their Business Studies teacher and understood that principles of management given by Fayol were being followed in the factory.

Identify and explain the two principles of management that have been discussed in the above case. **[CBSE 2023 (66/2/1)]**

Q.8. 'Yellow Pumpkin' is an Italian restaurant in Delhi, well known for its fresh and authentic dishes including pasta, pizza, etc. It has been serving its customers for the last 20 years. It had been winning various awards and recognition for its services.

During Covid-19, it suffered huge losses. As the effect of Covid reduced and the business started picking up, the management of 'Yellow Pumpkin' also decided to go in for home delivery service to increase its revenue and profit. For this they needed support of their workers to work overtime. 'Yellow Pumpkin' entered into an agreement with its workers to put in extra hours without additional payment to revive it out of losses. In return, they promised to increase the wages of the workers when the mission is accomplished. The workers put in extra hours as committed and in just three months, the restaurant's business turned around and it became profitable again. 'Yellow Pumpkin' honoured its commitment and not only increased the wages of the workers but also gave them bonus as an additional incentive.

Identify and explain the principle of management followed by Yellow Pumpkin.

[CBSE 2023 (66/4/1)]

Q.9. Vibhu joined as a Chief Executive Officer. (CEO) of 'Mega Marut Ltd.', a firm manufacturing cars. On the first day he addressed his subordinates saying that organisations should have a chain of authority and communication that runs from top to bottom and should be followed by managers and the subordinates. He also added that for routine matters a worker cannot directly contact the CEO but in an emergency he/she may contact directly.

(a) Vibhu discussed an important principle of management.

(b) Identify and explain the principle with the help of an example. **[CBSE 2023 (66/5/3)]**

Four Marks Questions

Q.10. State any four features of 'Principles of Management'. **[CBSE 2015]**

Q.11. What is meant by principles of management? State any three points of their importance. **[CBSE 2015]**

Q.12. 'Aapka Vidyalaya' believes in holistic development of students and encourages team building through a mix of curricular, co-curricular and sports activities. On its founders day a stage performance had to be put up. A committee of ten prefects was constituted to plan different aspects of the function. They all decided to use recycled paper for decoration. There was a spirit of unity and harmony and all members supported each other. With mutual trust and belongingness the programme was systematically planned and executed. Kartik, one of the prefects realized that unknowingly the group had applied one of the principles of management while planning and executing the programme. He was so inspired by the success of the function that he asked his father to apply the same principle in his business. His father replied that he was already using this principle.

(a) Identify the principle of management applied for the success of the programme.

(b) State any two features of management highlighted in the above para. **[CBSE (D) 2015]**

Q.13. Damini D'souza took over the reins of 'Kinsa Retail' as its Managing Director in India. Kinsa Retail with its headquarters at Japan has been in retail business for the last 40 years. It has regional offices in many countries with each regional office taking care of the shops in that particular region. As it is a large organisation, the regional officers have been given the powers to decide and spend funds sanctioned to them by the headquarters for the welfare of the customers of their region. Kinsa Retail wants the highest possible standards of ethical conduct being followed for which a code of conduct is in place for putting values into practice. All employees as well as Board members are required to act in accordance with

the highest standards of personal and professional integrity when acting on behalf of the company. Non-compliance involves a heavy penalty including termination of employment. State two principles of general management being followed by Kinsa Retail.

[CBSE 2019 (66/3/1)]

Q.14. Define 'Management'. Explain how management is a multidimensional activity.

[CBSE 2019 (66/5/1)]

Five/Six Marks Questions

Q.15. Explain the following principles of management:
(i) Scalar chain   (ii) Harmony, not discord   [CBSE 2015]

Q.16. Karan Nath took over 'D'north Motor Company' from his ailing father three months ago. In the past the company was not performing well. Karan was determined to improve the company's performance. He observed that the methods of production as well as selection of employees in the company were not scientific.

He believed that there was only one best method to maximize efficiency. He also felt that once the method is developed, the workers of the company should be trained to learn that 'best method'.

He asked the Production Manager to develop the best method and carry out the necessary training. The Production Manager developed this method using several parameters right from deciding the sequence of operations, place for men, machines and raw materials till the delivery of the product to the customers. This method was implemented throughout the organization. It helped in increasing the output, improving the quality and reducing the cost and wastage.

Identify and explain the principles and the technique of scientific management followed by the Production Manager in the above case.   [CBSE 2018]

Q.17. Explain the following principles of management :
(a) Harmony, not discord   (b) Discipline   [CBSE (F) 2015]

Q.18. With the help of a diagram explain 'Functional Foremanship' as a technique of scientific management.   [CBSE (D) 2015]

Q.19. Explain any four characteristics of 'principles of management.'   [CBSE (D) 2016]

Q.20. Explain the following principles of management:
(a) Science, not rule-of-thumb   (b) Discipline   [CBSE (AI) 2015]

Q.21. Explain any four points that highlight the importance of principles of management.

[CBSE (F) 2016]

Q.22. Explain any five points of significance of Principles of Management. [CBSE 2019 (66/1/1)]

OR

Explain the following Techniques of Scientific Management:
(a) Fatigue Study
(b) Differential Piece Wage System   [CBSE 2019 (66/1/1)]

Q.23. Explain the following techniques of scientific management:
(a) Time Study   (b) Motion Study
(c) Functional Foremanship   [CBSE 2019 (66/2/1)]

OR

Explain the following principles of general management:
(a) Division of Work   (b) Authority and Responsibility
(c) Discipline   [CBSE 2019 (66/2/1)]

Q.24. Vishesh completed his MBA at a reputed business school in Lucknow. He was impressed by the Principles and Techniques of Scientific Management developed by F.W. Taylor. On completing his MBA, he wanted to apply scientific Management in his family's business of fast food chain of restaurants named 'Burger Mania'.

His main goal was to reduce costs with increased output. To begin with, he wanted to develop a standard method which would be followed throughout the organisation. So, he investigated traditional methods through work study and unified the best practices. The standard method, i.e., the best way of doing the job was then developed taking into account all parameters right from the procurement of raw materials till the delivery of the final product to the customer. Vishesh also believed that each person should not only be scientifically selected but should also be given the required training to increase efficiency. For this, he set up a Special Training Unit called 'Hamburger' in Bengaluru where the workers were given the required training to learn the best method and increase efficiency. At the factory, the ingredients making up a burger were strategically placed to reduce the time taken for excess movements. The standard time and other parameters were determined on the basis of work study and Vishesh rewarded the workers for meeting the standard output.

Now, 'Burger Mania' has standardised processes, raw material, time, machinery, product and working conditions that ensure the food they send out to their customers has the same high standards of excellence and level of quality in every chain or franchise. The application of Scientific Management to every aspect of restaurant operations led to "Burger Mania" widespread success. Quoting the lines from the above, explain the Principles and Techniques of 'Scientific Management' used by 'Burger Mania'.

[CBSE 2019 (66/4/1)]

Q.25. 'Scientific Management means knowing exactly what you want men to do and seeing that they do it in the best and the cheapest way.' Taylor developed various techniques for application of Scientific Management principles and was able to achieve a three-fold increase in productivity in Bethlehem Steel Company, where he worked. One of the techniques helps to determine the number of workers to be employed; frame suitable incentive schemes and labour costs. Another technique recognises those workers who are able to accomplish/exceed the fair day's work and is based on the premise that efficiency is the result of the joint efforts of the managers and the workers.

Quoting the lines from the above paragraph, identify and explain the two techniques of Scientific Management. *[CBSE 2019 (66/5/1)]*

..... the nature of principles of management.

SUBJECT ECONOMICS

1. Prepare a project file on a given topic separately / Individually against your roll number.

R.no. 1 to 4.. Basic concept of macroeconomics or Indian economy on the eve of independence

R.no 5 to 8...National income and related aggregates or Indian economy 1950 to 1990 R.no 9 to 12. Money and banking or new economic reforms   and foreign exchange rate or LPG

R.no.13 to 16. Aggregate demand and aggregate supply and related concept or Human capital formation

R.no.17 to 20. Short run equilibrium or Rural development

R.no.21 to 24 Excess demand and excess supply or environment and sustainable development

R.no. 25 to 27 . Govt budget and economy or Employment with neighbours.

R.no 28 to 32. Balance of payment or Development experience of India A comparison

R,no 33 to 37. Foreign exchange rate or Development experience of India A comparison

Guidelines for making a project file

1) The project should be handwritten.

2) Total words in the project should be 3500 to 4000 words excluding diagrams and graphs.

3) It must contain diagrams, graphs and pictures to make it attractive.

4) Use ruled sheets to make your file.

5) Write on the ruled side and use plain side for making graphs, table and fixing pictures etc.

6) Handwriting should be fair and neat.

7)You may use colored pen to make your project attractive.
8)Here is the checklist of the sequence of pages in the file:
 i)Title of the project.
 ii)Details of your name board roll number, Name of school
 iii)Acknowledgement
 iv)Certificate
 iv)Index
 v)Introduction
 vii)Conclusion
viii) Bibliography
solve these worksheet given below.

https://docs.google.com/document/d/1U6NBo6AAmYBTx3RycqjqX6C-In4TD7hLFIOp0TVaeps/edit?usp=sharing

(Copy paste it to the browser to access the link)

संस्कृत अवकाश गृहकार्य				
कक्षा	लेखात्मक परियोजना	पाठात्मक अभ्यास	स्मृतिविषयक / MDP	शिक्षणम् (नूतनम्) नया सीखें	दैनिक व्यवहार
VI	अकारांत पुल्लिंग, स्त्रीलिंग, नपुंसक लिंग शब्दों का चित्र बनाकर संग्रह करें | 10 फलों एवं फूलों का चित्र बनाकर संस्कृत में लिखें। संस्कृत में शरीर के अंगों के नाम लिखें (चित्र बनाकर)	पढाये गए पाठों के प्रश्नों का वर्गीकरण करके लिखें और अभ्यास करें | जैसे – रिक्त स्थान वाले प्रश्न, एकपद में उत्तर वाले प्रश्न | परीक्षा कि तैयारी के लिए प्रश्नों को लिखकर उसका अभ्यास करें		संस्कृत में छात्र प्रतिज्ञा और प्रार्थना सभा के निर्देश लिखे व् याद करें। लिखे गए प्रश्नों का अभ्यास करें | संस्कृत के ऑडियो वीडियो को सुने	संस्कृत के एक स्तोत्र या गीतों को सुने और याद करें | दो श्लोक याद करें	कोई एक लेख कविता विद्यालय / कक्षा पत्रिका के लिए तैयार करें | जनवरी और फरवरी माह में आने वाले त्योहारों तथा जयंतियों पर संस्कृत में कार्ड बनायें पंचतंत्र से कोई कथा पढकर लिखें।	प्रतिदिन संस्कृत समाचार सुनें | समाचार पत्र पढ़ें|

VII	सेतु पाठ्यक्रम के अन्तर्गत कराए गए कारक प्रकरण को लिखे। घडी बनाकर संस्कृत में समय लिखें।	अकारांत पुल्लिंग आकारांत स्त्रीलिंग अकारांत नपुंसक लिंग के शब्दरूपों को लिखकर उसका अभ्यास करें		संस्कृत में छात्र प्रतिज्ञा और प्रार्थना सभा के निर्देश लिखे व् याद करें। कोई एक स्तोत्र याद करने की कोशिश करें	संस्कृत में क्रियापद दिखाते हुए कम से कम 10 वाक्य लिखें	संस्कृत के ऑडियो वीडियो को सुने	उपलब्ध कराये गए गीतों को सुने और याद करें	कोई एक लेख कविता विद्यालय / कक्षा पत्रिका के लिए तैयार करें	मार्च और अप्रैल माह में आने वाले त्योहारों तथा जयंतियों पर संस्कृत में कार्ड बनायें पंचतंत्र से कोई कथा पढकर लिखें।	प्रतिदिन संस्कृत समाचार सुनें	समाचार पत्र पढ़ें	
VIII	सेतु पाठ्यक्रम के अन्तर्गत कराए गए कारक प्रकरण को लिखे।	अकारांत पुल्लिंग आकारांत स्त्रीलिंग अकारांत नपुंसक लिंग के शब्दरूपों को लिखकर उसका अभ्यास करें		संस्कृत में छात्र प्रतिज्ञा और प्रार्थना सभा के निर्देश लिखे व् याद करें। लिखे गए प्रश्नों का अभ्यास करें	कोई एक स्तोत्र गाने/ याद करें। भारत सरकार के पन्द्रह विभागों की सूची बनाएं जिनके आदर्श वाक्य जो संस्कृत में है उन्हे लिखें। जैसे यतो धर्मः ततो जयः यह सर्वोच्च न्यायालय क आदर्श वाक्य है।	संस्कृत के ऑडियो वीडियो को सुने	उपलब्ध कराये गए गीतों को सुने और याद करें	कोई एक लेख कविता विद्यालय / कक्षा पत्रिका के लिए तैयार करें	मई और जून माह में आने वाले त्योहारों तथा जयंतियों पर संस्कृत में कार्ड बनायें| पंचतंत्र से कोई कथा पढकर लिखें।	प्रतिदिन संस्कृत समाचार सुनें	समाचार पत्र पढ़ें तथा अपनी रूचि के अनुसार लघु कथा/ कविता/ व्यंग्य / सुविचार की कटिंग संग्रह|
किसी भी प्रकार की समस्या / संदेह होने पर संस्कृत शिक्षक से संपर्क करें					

संस्कृत गृहकार्य

कक्षा	लेखात्मक परियोजना	पाठात्मक अभ्यास	स्मृतिविषयक MDP	शिक्षणम् (नूतनम्) नया सीखें	दैनिक व्यवहार	निर्देश
IX	पढाये गए पाठों के प्रश्नों का वर्गीकरण करके लिखें और अभ्यास करें	जैसे – रिक्त स्थान वाले प्रश्न, एकपद में उत्तर वाले प्रश्न, कथापूर्ति।परियोजना	पाठ्यक्रम के अनुसार शब्दरूपों तथा धातुरुपों का अभ्यास करें बालक . बालिका, फलम्	संस्कृत के श्लोकों के ऑडियो सुनकर उन्हें याद करने की कोशिश करें		जुलाई अगस्त सितम्बर माह के किन्हीं पांच त्योहारों / जयंतियों पर संस्कृत में कार्ड तैयार करें	संस्कृत ट्यूटोरियल्स वेबसाइड से किड्स संस्कृत डिक्शनरी डाउनलोड करें और पढ़े	प्रतिदिन संस्कृत समाचार सुनें	समाचार पत्र पढ़ें		बनाये जाने वाले कार्ड में सम्बंधित विषय पर संस्कृत की सूक्ति लिखे	डिक्शनरी में प्रत्येक पृष्ठ में एक विषय से सम्बंधित शब्द दिए हुए हैं	उन्हें संगृहित करते हुए चार्ट बनाएं	
X	अव्यय , संधि, तथा रिक्त स्थान के प्रश्नों को लिखकर अभ्यास करो		पाठ्यक्रम के अनुसार शब्दरूपों तथा धातुरुपों का अभ्यास करें	बालक . बालिका, फलम्	संस्कृत के श्लोकों के ऑडियो सुनकर उन्हें याद करने की कोशिश करें		जुलाई अगस्त सितम्बर माह के किन्हीं पांच त्योहारों / जयंतियों पर संस्कृत में कार्ड तैयार करें	संस्कृत ट्यूटोरियल्स वेबसाइड से किड्स संस्कृत डिक्शनरी डाउनलोड करें और किसी एक विषय पर	प्रतिदिन संस्कृत समाचार सुनें	समाचार पत्र पढ़ें		