

WINTER HOLIDAY HOMEWORK

SESSION: 2024-25

CLASS VII

General Instructions:

a) The date of submission of the assignment are as follows:

S NO.	SUBJECTS	DATE OF SUBMISSION
1.	Science & Sanskrit	7th Jan 2025
2.	Social Science & English	8th Jan 2025
3.	Hindi, IT/AI& Maths	9th Jan 2025

b) The assignment is to be attempted in class notebooks.

c) Neatness and timely submission of assignments carries extra marks.

ENGLISH

Topic: Conjunctions, Kinds of Adverbs, Wordpower and Vocabulary, Paragraph Writing

Mastering Conjunctions

Q1 Join the sentences using the given conjunctions:

(Use each conjunction only once: and, but, because, so, although)

- I wanted to go to the park. It started raining.
- She studied hard. She passed the test.
- I like apples. My brother prefers bananas.
- We missed the bus. We walked to school.
- The movie was interesting. It was very long.



THE ADVERB ADVENTURE

Q2 Identify the type of adverb in each sentence: (Manner, Place, Time, Frequency, or Degree)

- She sang the song beautifully.
- We will meet tomorrow at the cafe.
- He rarely forgets to do his homework.
- The child ran outside to play.
- It was extremely cold yesterday.



VOCABULARY CHALLENGE

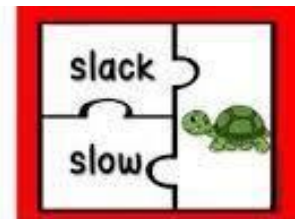


Q3 Unscramble the following words using the synonym or antonym provided in brackets. Write the correct word in the blank space.

1. eervrps (Synonym: Improve)
2. utpeqh (Antonym: Loud)
3. ieangamt (Synonym: Creative)
4. ginperesd (Antonym: Cheerful)
5. girstnchne (Synonym: Strong)

Q4 Write one synonym and antonym of the following words:

Word	Synonym	Antonym
Happy	_____	_____
Brave	_____	_____
Difficult	_____	_____
Bright	_____	_____
Fast	_____	_____



CREATIVE FUN!



Q5 Write a short paragraph (4-5 sentences) using at least 3 different conjunctions and 2 kinds of adverbs.

Example: Although it was late, we decided to go for a walk. We walked quickly because the park was closing soon. The stars shone brightly, and we felt very peaceful.

BONUS QUESTION

What is your favorite word in English and why?

Have fun learning! 🍌

Note: Write only the answers in the English Grammar notebook.

Hindi

Topic:

अपठित गद्यांश

वसंत : भोर और बरखा,

व्याकरण: अशुद्धिशोधन, पर्यायवाची शब्द, विलोम शब्द

रचनात्मक लेखन : संवाद लेखन, अनौपचारिक पत्र, चित्र वर्णन

प्रश्न-1 निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए।

नदियों की हमारे जीवन में बहुत उपयोगिता है। इनके द्वारा लाई गई उपजाऊ मिट्टी से बने हमारे खेत में हरी-भरी फसलें लहलहाती हैं। इनके ऊपर बनाए गए बाँधों से निकली नहरों से खेतों को पानी मिलता है। बाँध के निकट बने 'पावर हाउस' में बिजली बनाई जाती है। आज चाहे गाँव हो या नगर, दोनों के लिए बिजली जरूरी है। बिजली के बिना तो जैसे जीवन सूना है। नदियों से मानव का बड़ा अटूट संबंध रहा है। प्राचीन काल से ही नदियों माँ की तरह हमारा भरण-पोषण करती आ रही हैं। नदियों की वजह से सभ्यताएँ पनपती हैं, बस्तियाँ बसती हैं और कहानियाँ बनती हैं। ये नदियों का कल-कल निनाद करता हुआ जल ही है जो मनुष्य और धरती की प्यास बुझाता है। इसके अलावा, हम जब भी समस्याओं में उलझे होते हैं तो इन नदी रूपी माताओं के पास जाकर ही सुकून और शांति की तलाश करते हैं। नदियाँ सकारात्मकता में वृद्धि करती हैं, हमारे ऋषि-मुनि नदियों के किनारे एकांत में बैठकर सातों तक तपस्या करते थे। आज भी हम कई उत्सव और त्योहार अपने विशाल हृदय में सबको समेटने वाली, सभी को अपनी धन-संपदा का समान रूप से वितरण करने वाली जीवनदायिनी नदियों के साथ मनाते हैं। आज भी बहुत-से नगर नदी के किनारे पर बसे हैं। दुर्भाग्य की बात है कि हम मनुष्यों ने इस गहरे संबंध को भुलाकर नदियों के जल को बुरी तरह प्रदूषित कर दिया है। नदियों को जितना कष्ट मनुष्य ने दिया है, उतना किसी अन्य जीव ने नहीं। अच्छा हो, अगर मनुष्य नदियों के महत्त्व को समझकर उनकी भलाई के बारे में सोचे और कई ऐसे कार्य छोड़ दे, जिनसे इनका दम घुटता है।

क - हमारे खेतों में हरी-भरी फसलें किस कारण लहलहाती हैं?

ख- नदियों की तुलना माँ से क्यों की गई है ?

ग- नदियों के बारे में कौन-सा कथन सत्य नहीं है?

अ) नदियों से मानव जाति को बहुत हानि उठानी पड़ती है। ब) नदियों पर बाँध बनाए जाते हैं।

स) नदियों का मानव जाति से अटूट संबंध है। द) नदियों से खेतों को पानी मिलता है।

घ- हमें सुकून और शांति कहाँ प्राप्त हो सकती है ?

1) नदियों के पास जाकर ब) ऋषि-मुनि के पास जाकर

स) मनुष्यों के पास द) उपर्युक्त सभी

ड.- गद्यांश के लिए उपयुक्त शीर्षक दीजिए।

प्रश्न-2 निम्नलिखित प्रश्नों के उत्तर संक्षेप में लिखिए।

- 1) भोर और बरखा कविता की कवयित्री कौन हैं ?
- 2) इस कविता में किसे जगाने का प्रयास किया जा रहा है ?
- 3) कविता के प्रथम पद में गोपियाँ क्या मथ रही हैं ?
- 4) कविता में सावन की क्या-क्या विशेषताएँ बताई गई हैं ?

प्रश्न-3 दिए गए अशुद्ध वाक्यों को शुद्ध करके दोबारा लिखिए।

- 1) उसका प्राण सूख गया।
- 2) एक गीतों की पुस्तक चाहिए।
- 3) कृपया करके ध्यान दें।
- 4) मैं आपका दर्शन करने आया हूँ।
- 5) बच्चों से गुस्सा न करो।

प्रश्न-4 दिए गए शब्दों के दो-दो पर्यायवाची लिखिए।

- प्रश्न-6 फूलों की प्रदर्शनी देखने जाने के विषय में दो मित्रों के बीच संवाद लिखिए ।
 प्रश्न-7 प्रगति मैदान में विश्व पुस्तक मेला देखने का निमंत्रण देते हुए अपने बड़े भाई को पत्र लिखिए ।
 प्रश्न-8 निम्न चित्र को देखकर मन में आए विचारों को 50 से 60 शब्दों में प्रकट कीजिए ।



SANSKRIT

Topic: अपठित अवबोधनम्

रचनात्मकम् कार्यम्- पत्र-लेखनम्, चित्र वर्णनम्, संवाद पूर्ति

पठित अवबोधनम्- पाठ-9 मम परिवारः पाठ-10 आदर्शाः छात्राः पाठ-11 भारतीय-

समुद्रतटाः, पाठ-12 भारतरत्नम्- श्री अटलबिहारी वाजपेयी महोदयः पाठ-13 ग्रामस्य

यात्रा, अनुप्रयुक्त व्याकरणम्- उपपदविभक्तयः-(पंचमी, षष्ठी, सप्तमी), स्वर-संधिः- दीर्घ,

गुण, समय लेखनम्, संख्यावाचिशब्दाः (1-4, तीनों लिंगों में 21-40 सामान्य शब्द), प्रत्ययाः- क्त्वा,

तुमुन्, ल्यप्, अशुद्धि संशोधनम्

धातुरूपाणि- दा, कृ, दृश् (पांचों लकारों में), शब्दरूपाणि- छात्र, गुरु (इदम् - तीनों लिंगों में)

खण्ड 'क' अपठित अवबोधनम्

प्र01 अधोलिखित अनुच्छेदं पठित्वा प्रश्नानाम् उत्तराणि लिखत-

अहम् एकः वृक्षः अस्मि । पूर्वं मां परितः सघनं वनम् आसीत् । परं स्वार्थसिद्धये मानवाः शनैः शनैः सर्वान् वृक्षान् अकृन्तन् । अधुना एकाकी अवशिष्टः अहं संसारस्य सर्वं क्रिया-कलापः पश्यामि । वृक्षाणाम् अभावे इदानीं वर्षा अति न्यूना एव भवति । सर्वत्र वाहनानां धूमः प्रसरति कोलाहलं च भवति । चतुर्दिशि भवनानां जालम् अस्ति । अहम् आत्मनः पूर्वं सुखमयं कालं स्मृत्वा खिन्नः भवामि । ईश्वरं च प्रार्थयामि हे प्रभो! मानवेभ्यः सदबुद्धिं प्रयच्छ ।

(I) एकपदेन उत्तरत-

(क) के वृक्षान् अकृन्तन् ?

(ख) सर्वत्र केषां धूमः प्रसरति ?

(II) पूर्णवाक्येन उत्तरत-

(क) वृक्षाणाम् अभावे किं भवति?

(ख) कुत्र भवनानां जालम् अस्ति ?

(III) निर्देशानुसारं उत्तरत-

(क) 'सर्वान्'- अस्य विशेषणस्य विशेष्यं किम्?

(अ) मानवाः (ब) वृक्षान् (स) सघनम् (द) शनैः

(ख) 'समयम्' - पर्यायपदं चित्वा लिखत ।

(अ) वनम् (ब) सघनं (स) कालम् (द) वृक्षः

(ग) 'सर्वत्र वाहनानां धूमः प्रसरति'- अव्ययपदं चित्वा लिखत ।

(अ) सर्वत्र (ब) वाहनानां (स) धूमः (द) प्रसरति

- (घ) ' दुर्बुद्धिम्' – विपर्यायपदं चित्वा लिखत ।
(अ) वनम् (ब) सदबुद्धिम् (स) कालम् (द) वृक्षः

खण्ड 'ख' रचनात्मकं कार्यम्

प्र02 चित्रं दृष्ट्वा मञ्जूषायाः सहायतया त्रीणि वाक्यानि लिखत ।

जनकः, परिवारस्य, बालकः, बालिका, माता, समाचारपत्रम्, पचति, दूरदर्शनम्, पश्यति



खण्ड 'ग' अनुप्रयुक्त-व्याकरणम्

- प्र03 उचितशब्दरूपैः रिक्तस्थानानि पूरयत—
(क) मति, षष्ठी विभक्ति – मत्याः
(ख) गुरु, सप्तमी विभक्ति – गुरोः
(ग) तद् (पुल्लिङ्ग), तृतीया विभक्ति – तैः
(घ) अस्मद्, पंचमी विभक्ति – मत्
प्र04 निर्देशानुसारं रिक्तस्थानानि पूरयत ।
(क) पिता पुत्राय उपहारं । (दा धातु, लृटलकार)
(अ) यच्छति (ब) दास्यति (स) दास्यतः (द) यच्छन्ति
(ख) यूयं चित्रं । (दृश् धातु, लोटलकार)
(अ) पश्यतु (ब) पश्यताम् (स) पश्यतम् (द) पश्यत
(ग) तौ नृत्यं । (कृ धातु, लट् लकार)
(अ) करोति (ब) करिष्यति (स) अकरोत् (द) कुरुतः

प्र05 काष्ठकेषु प्रदत्तषब्देषु उचित विभक्ति प्रयोगं कृत्वा रिक्तस्थानानि पूरयत—

(क) फलम् अस्ति। (इदम्)

(ख) पुस्तकं पठन्ति। (छात्र)

(ग) श्री नमः। (गुरु)

प्र06 समयं संस्कृते लिखत।

(क) 11:15 — वादनम्

(ख) 8:45 — वादनम्

(ग) 5:30 — वादनम्

(घ) 3:00 — वादनम्

प्र07 उपपदविभक्तिमाश्रित्य उचितविकल्पेन चित्वा रिक्तस्थानानि पूरयत —

(क) पथिकः..... अधः तिष्ठति। (वृक्षात्/ वृक्षस्य/ वृक्षम्)

(ख) बहिः देवालयः अस्ति। (ग्रामात्/ ग्रामस्य/ ग्रामे)

(ग) शिक्षकः स्निह्यति। (छात्रेभ्यः/ छात्रेषु / छात्रस्य)

प्र08 प्रदत्तपदेषु शुद्धं प्रत्ययं चित्वा लिखत—

(क) परित्यज्य—

(अ) ज्य

(ब) य

(स) ल्यप्

(द) त्यज्य

(ख) गत्वा—

(अ) क्त्वा

(ब) क्त्वा

(स) त्वा

(द) क्तवा

(ग) कर्तुम्—

(अ) त्मुन्

(ब) तुमुन्

(स) तुमून्

(द) मुन्

खण्ड 'घ' पठित अवबोधनम्

प्र09 अधोलिखित अनुच्छेदं पठित्वा प्रश्नानाम् उत्तराणि लिखत—

अस्माकं देशे बहवः सुरम्याः सागरतटाः सन्ति। एतेषु मुम्बई—गोवा—दीव—विशाखापत्तनम् कोच्चिकन्याकुमारी—तटाः तु विशिष्टाः एव। विदेशिकपर्यटकेभ्यः 'गोवातटः' तु बहु रोचते। दीवतटः अतीव विस्तृतः। तत्र पर्वताकाराः तरङ्गाः उच्छलन्ति। अद्भुतं दृश्यम्। विशाखापत्तनं तटः तु वैदेशिकव्यापाराय प्रसिद्धः। तत्र विविधाः जलपोताः सन्ति। कोच्चितटः नारिकैलाफलेभ्यः प्रसिद्धः। मुम्बईस्थः जुहूतटः मनोरंजनाय विख्यातः। तत्र जनाः स्वैरं विहरन्ति।

(I) एकपदेन उत्तरत-

- (क) जुहूतटे के स्वैरं विहरन्ति ?
(ख) कः तटः विस्तृतः?

(II) पूर्णवाक्येन उत्तरत-

- (क) कुत्र जलपोताः सन्ति?
(ख) गोवातटः केभ्यः बहु रोचते ?

(III) निर्देशानुसारं उत्तरत-

- (क) 'विहरन्ति' क्रियापदस्य कर्तृपदं किम् अस्ति?
(अ) तत्र (ब) पर्यताकाराः (स) तरङ्गाः (द) जनाः
(ख) 'तटाः तु विशिष्टाः एव।' अस्मिन् वाक्ये किं अव्ययपदम्?
(अ) एव (ब) तटाः (स) स्वैरम् (द) विशिष्टाः

प्र010 अधोलिखित संवादं पठित्वा प्रश्नानाम् उत्तराणि लिखत-

संगीता - हे अशोक! त्वं ग्रीष्मावकाशे भ्रमणाय कुत्र गमिष्यसि?

अशोकः - संगीते! अहं तु स्वमातामहस्य ग्रामं गमिष्यामि।

संगीता- तत्र त्वं केन सह गमिष्यसि?

अशोकः -अहं तु परिवारेण सह तत्र गमिष्यामि।

द्विवर्ष- पूर्वम् अपि वयं तत्र अगच्छाम।

संगीता- अस्तु! त्वं तत्र किं किम् अकरोः?

अशोकः - अहं मम भगिनी अनीता च सूर्योदयात् प्राक् उत्थाय क्षेत्रं प्रति अगच्छाम। तत्र

विशालं आम्रवृक्षम् आरोहाव। पक्वानि आम्राणि त्रोटयित्वा वृक्षस्य अधः अक्षिपाव। तानि नीत्वा गृहं प्रति धावित्वा अगच्छाम।

(I) एकपदेन उत्तरत-

- (क) कः ग्रीष्मावकाशे स्वमातामहस्य ग्रामं गमिष्यति ?
(ख) कस्य भगिनी अनीता अस्ति ?

(II) पूर्णवाक्येन उत्तरत-

- (क) अशोकः केन सह ग्रामं गमिष्यति ?
(ख) अशोकः अनीता च कदा उत्थाय क्षेत्रं प्रति अगच्छताम्?

(III) निर्देशानुसारं उत्तरत-

- (क) 'अकरोः' पदे कः धातुः अस्ति?
(अ) कृ (ब) क्री (स) कर् (द) कर्ष
(ख) ' आम्राणि ' अस्य विशेष्यस्य विशेषणं किम्?
(अ) विशालं (ब) प्राक् (स) पक्वानि (द) अधः

प्र011 उचितक्रियापदैः रिक्तस्थानपूर्तिं कुरुत –

(क) त्वं योग्यः छात्रः

(अ) स्यात् (ब) स्याः (स) स्युः (द) स्यातम्

(ख) अध्यापिकाः अस्मान्

(अ) पाठयति (ब) पाठयन्ति (स) पाठयतः (द) पाठयसि

प्र012 प्रदत्तपदानां योगे का विभक्तिः प्रयुज्यते?

(क) अधः –

(ख) सह –

(ग) प्रति –

(घ) बहिः –

प्र013 प्रदत्तपदानां अर्थं लिखत–

(क) प्रत्यागत्य

(ख) आपणाः

(ग) श्रोतुम्

(घ) आसीनः

प्र014 यथायोग्यं योजयत–

स्तम्भ 'क'

स्तम्भ 'ख'

(क) सुंदराणि

वातावरणम्

(ख) विविधवर्णाः

परिवारः

(ग) सुरम्यम्

हाराः

(घ) सरलः

पुष्पाणि

प्र015 रिक्तस्थानानि पूरयत–

(क) _____ दूरदर्शनं पश्येताम्।(बालिका/मित्रे)

(ख) _____ सत्यं वदेयम्। (अहम्/युवाम्)

(ग) _____ पितामहीं प्रणमेत्।(बालिका/मित्रे)

(घ) विदेशिकपर्यटकेभ्यः _____बहु रोचते। (गोवातटः/ प्रायद्वीपः)

(ङ) भारतम् _____इति उच्यते।(महाद्वीपः/ प्रायद्वीपः)

(च) सायं _____उपविशामि।(आनीय/आगत्य)

प्र016 रेखांकित पदानि आधृत्य प्रश्न निर्माणं कुरुत–

(क) पंडितः सर्वेभ्यः प्रसादं यच्छति।

(ख) अत्रैव विवेकानन्दस्य तपस्थली अपि अस्ति।

(ग) वस्त्रपूतं जलं पिबेत्।

प्र017 अधोलिखित वाक्यानां संस्कृतभाषायाम् अनुवादं कुरुत।

(क) बन्दर पेड़ पर बैठे हैं।

(ख) वह कन्या नाचती है।

(ग) हम दोनों पाठ पढ़ेंगे।

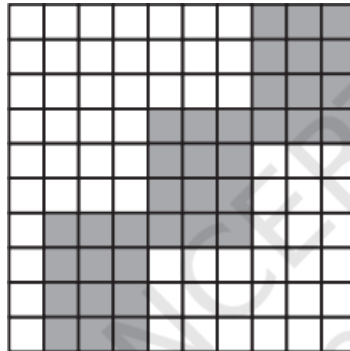
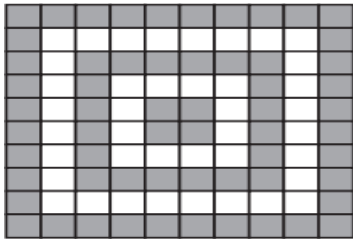
(घ) पक्षी आकाश में उड़ते हैं।

(ङ) हम सबने अध्यापिका को पत्र लिखा।

MATHEMATICS

TOPIC: COMPARING QUANTITIES

1. Find the percentage of **unshaded portions** in given pictures:



2. A bowl of sweets was placed on a table to be distributed among three brothers Rajan, Sejal and Karan.

Rajan arrived first and ate what he thought was his share of sweets and left.

Then Sejal arrived. He thought that he was the first one to arrive and ate the number of sweets, he thought was his share and left.

Lastly, Karan arrived. He again the arrive and he took what he thought was his share.

If 16 sweets are left in the bowl finally, how many sweets did the bowl contain Initially?



3. The pieces of Tangrams have been rearranged to make the given shape. By observing the given shape, answer the following questions:

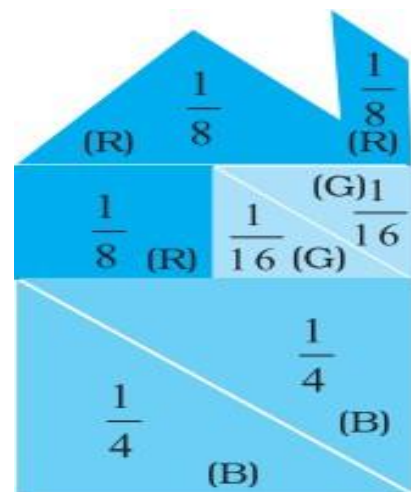
What percentage of total has been coloured?

(i) Red (R) = _____

(ii) Blue (B) = _____

(iii) Green (G) = _____

Check that the sum of all the percentages calculated above should be 100. • If we rearrange the same pieces to form some other shape, will the percentage of colours change?



Complete the table below using your knowledge of fractions, decimal and percent

4. If Rs.420 is divided between A and B in the ratio of 3:4, then

S No.	Fraction	Decimal	Percent
1.	$\frac{4}{5}$	0.80	
2.		0.375	37.5%
3.	$\frac{11}{20}$		55%
4.	$\frac{7}{8}$		
5.		0.72	

5. A's share is ____

6. 45cm as a percentage of 3m is _____

7. 20% of 300? Is It same as 300% of 20??

8. 50% of 700? is it same as 700% of 50?

Express the following ratios in the simplest form.

9. A dozen to a score = _____

10. 5 m : 600 cm = _____

11. If P = 50,000 T= 4 years, A = 70,000 Find R

12. At High School, 119 students walk to school. If this number is 35% of school enrolment, then how many students are enrolled at the school?

13. If 25% of a journey is 750 km. How long is the whole journey?

14. Dipankar invested a sum of money from March 2003 to March 2008 at the rate of 12%p.a. If the interest received is Rs.1620, find the sum.

15. The population of a village increased from 24500 to 25000. Find the percentage increase.

16. The cost of a transistor decreases from Rs.400 to Rs.380. What is the percentage of decrease?

17. A shopkeeper increased the price of a cycle by 15% , the increased price was Rs.1610.What was the original price?

18. By selling a watch for Rs.1275 Javed lost 15%. At what price should he sell to make a profit of 10%?

SCIENCE

Topics: Transportation of Materials, Light, Electric Current and Its Effects

Objective Type Questions

Chapter 1: Transportation of Materials

Fill in the blanks:

1. The process by which plants lose water through their leaves is called _____.
2. In humans, the _____ is responsible for pumping blood throughout the body.
3. The main excretory product in humans is _____, which is excreted through the _____.

Multiple Choice Questions (MCQs):

4. Which of the following is a vascular tissue in plants?
 - a. Xylem
 - b. Epidermis
 - c. Mesophyll
 - d. Guard cells
5. The blood vessels that carry blood away from the heart are called:
 - a. Veins
 - b. Arteries
 - c. Capillaries
 - d. Lymph vessels
6. What is the function of stomata in plants?
 - a. Absorption of water
 - b. Transport of nutrients
 - c. Exchange of gases
 - d. Photosynthesis

True/False:

7. Xylem transports food in plants. (True/False)
8. The human heart has four chambers. (True/False)

Chapter 2: Light

Fill in the blanks:

9. The bending of light as it passes from one medium to another is called _____.
10. A _____ mirror always forms a virtual and upright image.

Multiple Choice Questions (MCQs):

- 11. Which of the following is a source of artificial light?
 - a. Sun
 - b. Candle
 - c. Moon
 - d. Stars

- 12. The image formed by a plane mirror is:
 - a. Real and inverted
 - b. Real and upright
 - c. Virtual and upright
 - d. Virtual and inverted

- 13. A convex lens is _____ at the centre than at the edges.
 - a. Thinner
 - b. Thicker
 - c. Of the same thickness
 - d. None of these

True/False:

- 14. A concave mirror can form both real and virtual images. (True/False)
- 15. Light travels in a straight line. (True/False)

Chapter 3: Electric Current and Its Effects

Fill in the blanks:

- 16. A device that prevents excessive current flow in a circuit is called a _____.
- 17. The heating effect of electric current is used in _____.

Multiple Choice Questions (MCQs):

- 18. The SI unit of current is:
 - a. Volt
 - b. Ampere
 - c. Ohm
 - d. Joule

- 19. The filament of an electric bulb is made up of:
 - a. Copper
 - b. Iron
 - c. Tungsten
 - d. Aluminium

- 20. Which of the following is a good conductor of electricity?
 - a. Rubber
 - b. Wood
 - c. Silver
 - d. Plastic

True/False:

- 21. A circuit breaker automatically stops the flow of current in case of overload. (True/False)
- 22. A fuse wire is made of a material with low melting point. (True/False)

.....

Application-Based Questions

- Q1. Draw a diagram to show the path of light when it reflects off a plane mirror. Label the incident ray, reflected ray, and normal.
- Q2. A person observes a fish in a pond. Why does the fish appear closer to the surface than it actually is? Explain with the concept of refraction.
- Q3. What would happen if the xylem in a plant were damaged? Explain. Q4. Why do arteries have thick walls while veins have thin walls?
- Q5. Write a short note on the process of transpiration in plants.
- Q6. Draw a ray diagram showing the reflection of light by a plane mirror. Label all components.
- Q7. Why do objects appear distorted when viewed through water? Explain the concept of refraction involved.
- Q8. A person accidentally cuts the main root of a small plant. Predict and explain the effects on the transportation of water and nutrients.
- Q9. How does the heart ensure blood reaches every part of the body? Describe its working with a labelled diagram of the human heart.

Higher-Order Thinking Skills (HOTS)

Q1. A torch is shone at an angle onto a wall with a mirror placed on it. The reflected light forms a spot on another wall. Explain the path of light and how it follows the laws of reflection.



2. A patient has a blockage in one of the arteries leading to the heart. How will this affect the transport of materials in the body? Suggest a medical procedure to address this issue.

Q3. You are provided with a glass prism. Describe an experiment to show how white light splits into its constituent colors when passed through a prism.



Q4. How do plants adjust the opening and closing of stomata based on environmental conditions?

Q5. A periscope uses mirrors for its functioning. Explain how light travels in a periscope with the help of a diagram.

Q6. Design an experiment to demonstrate that light travels in a straight line. Include materials, procedure, and observations.

Q12. Explain how transportation of materials in plants differs from the circulatory system in humans. Provide at least two key differences.

SOCIAL SCIENCE

Topics: Human- Environment Interaction- The Tropical and the Subtropical region

Q.1 Which is the second longest and the largest river in terms of volume in the world?

- A) Amazon
- B) Nile
- C) Brahmaputra

Q.2 Kolkata is located on the river _____.

- A) Krishna
- B) Hoogly
- C) Bhagirathi

Q.3 One of the direct consequences of slash and burn agriculture is

- A) Forest fire
- B) Global warming
- C) Flooding
- D) Drought

Q.4 Where is the densest rainforest area in the world located?

- A) Amazon basin
- B) Congo basin
- C) Nile basin

Q.5 People of this region practice “slash and burn agriculture”. It is a way of cultivating land where farmers clear a piece of land by slashing or cutting down trees and bushes.

Which region is indicated here?

- A) Ganga-Brahmaputra Basin
- B) Amazon Basin
- C) Bay of Bengal
- D) None of these

Q.6 Which of the following creatures does not belong to the Ganga-Brahmaputra basin?

- A) Rhinoceros
- B) Tree boa
- C) Boars
- D) Toucan

Q.7 Which of the following is not a tributary of the Ganges?

- A)** Kosi
- B)** Chambal
- C)** Tista
- D)** Ghaghra

Q.8 A variety of predating fish found in Amazon:

- A)** Hilsa
- B)** Susu
- C)** Piranha
- D)** Rohu

Q.9 The temperature of Amazon is

- A)** Low
- B)** High
- C)** Medium

Q.10 Which of the following cities is not in the Ganga-Brahmaputra basin

- A)** Guwahati
- B)** Kanpur
- C)** Indore
- D)** Patna

Q-11. Silk Worms are reared in which of the following States

- A)** Punjab
- B)** Rajasthan
- C)** Kerala
- D)** Assam

Q.12 Manioc is the staple food of the people living in the

- A)** Amazon basin
- B)** Ganga basin
- C)** Sundarbans
- D)** Prairies

IT/AI

INFORMATION TECHNOLOGY

Topic : HTML 5 Webpage Designing

Create a webpage in HTML with the following specifications:

1. A table showing Max and Min temperature in Noida from 23 Dec 2024 to 30 Dec 2024.
2. An Image of Christmas and New Year celebrations
3. An ordered list of activities (any five) that you did in Winter break.

The HTML code is to be written in Notebook and screenshot of the webpage is to be submitted in the following google form.

<https://forms.gle/6qtno4X12YBPrjXA>

ARTIFICIAL INTELLIGENCE

Project: Dive into the World of Pokémon with AI!

Pokémon is one of the most beloved games among students.

- **AI Image Classification:**
Using the Machine Learning for Kids model, design an AI-based Image Classification model. Train your computer to predict the type of Pokémon based on their appearance.
- **Creative Extension:**
Take it further by designing your very own Pokémon in Scratch! Use the drawing tools to create a unique sprite.

Refer to the attached sheet for detailed guidance."

Link for machine Learning for kids platform

<https://machinelearningforkids.co.uk/>

