



**DAV NUPPL Public School**  
**NUPPL Township, Ghatampur, Kanpur Nagar, UP – 209206**  
**Summer Vacation Assignment (Session: 2024-25)**  
**Class: VI HINDI**

**प्रश्न :1 अपठित गद्यांश**

समय बहुत मूल्यावान होता है। यह बीत जाए तो लाखों-करोड़ों रुपये खर्च करके भी इसे वापस नहीं लाया जा सकता। इस संसार में जिसने भी समय की कद्र की है, उसने सुख के साथ जीवन गुजारा है और जिसने समय की बर्बादी की, वह खुद ही बर्बाद हो गया है। समय का मूल्य उस खिलाड़ी से पूछिए, जो सेकंड के सौवें हिस्से से पदक चूक गया हो। स्टेशन पर खड़ी रेलगाड़ी एक मिनट के विलंब से छूट जाती है। आजकल तो कई विद्यालयों में देरी से आने पर विद्यालय में प्रवेश भी नहीं करने दिया जाता। छात्रों को तो समय का मूल्य और भी अच्छी तरह समझ लेना चाहिए, क्योंकि इस जीवन की कद्र करके वे अपने जीवन के लक्ष्य को पा सकते हैं।

(क) उपरोक्त गद्यांश में कीमती किसे माना गया है?

- (i) जीवन को      (ii) अनुशासन को      (iii) समय को      (iv) खेल को

(ख) किसने सुख के साथ जीवन गुजारा

- (i) जिसने दुनिया में खूब धन कमाया      (ii) जिसने मीठी बाणी बोली  
(iii) जिसने समय की कद्र की      (iv) जिसने समय को बर्बाद किया

(ग) सेकंड के सौवें हिस्से से पदक कौन चूक जाता है

- (i) खिलाड़ी जिसने मामूली अंतर से पदक गंवा दिया हो      (ii) वह यात्री जिसकी ट्रेन छूट गई  
(iii) उपर्युक्त दोनों लोग      (iv) इनमें कोई नहीं

(घ) छात्रों को समय की कद्र करने से क्या लाभ होता है?

- (i) वे स्वस्थ हो जाते हैं।      (ii) वे मेधावी बन जाते हैं।  
(iii) वे सभी विषयों में 100% अंक प्राप्त करते हैं।      (iv) वे लोकप्रिय हो जाते हैं।

(ङ) इस गद्यांश का उपयुक्त शीर्षक होगा

- (i) समय का मूल्य      (ii) जीवन का लक्ष्य  
(iii) विद्यार्थी जीवन में समय का महत्त्व      (iv) अनुशासन

प्रश्न :2 पाठ 1 "साथी हाथ बढ़ाना" गीत A4 साइज पेपर पर लिखकर स्मरण करें।

प्रश्न :3 "चिट्ठी के अक्षर" नामक पाठ को पढ़कर, प्रश्न उत्तर अभ्यास पुस्तिका में लिखें।

प्रश्न :4 "बरसते जल के रूप अनेक" नामक पाठ का सारांश 100-120 शब्दों में लिखो।

प्रश्न :5 पाठ 3 को पढ़ कर स्वयं प्रश्न उत्तर निर्माण कीजिये।

प्रश्न :6 व्याकरण हिन्दी वर्णमाला को स्वर व्यंजन के भेद से लिखकर चार्ट बनाइए। (रोल नम्बर 01-13)

प्रश्न :7 "वर्षा जल संरक्षण के उपाय" को आधार बनाकर चित्र निर्माण करके चार्ट तैयार कीजिए। (रोल नम्बर 14-26)

प्रश्न :8 पाठ्य पुस्तक "ज्ञान सागर" के पाठ 2 एवं 3 में से 20-20 शब्दों को चुनकर वर्ण विच्छेद करके चार्ट तैयार कीजिए। (रोल नम्बर 27-40)

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

जब कोई वीर पुरुष किसी को क्षमा करता है तो वह सुनने और देखने में अच्छा लगता है। लेकिन जब कोई कायर और कमजोर व्यक्ति किसी को क्षमा करने की बात करता है, तो यह उपहास की बात हो जाती है। यदि हम अपने आप को बड़ा मानते हैं, हम बलशाली और विद्वान हैं,

हम बड़े प्रबुद्ध हैं, तो फिर यही क्षमा हमारे जीवन का अलंकार बन जाता है। शिक्षक बच्चों को पढ़ाते हैं, बच्चों का काम होता है- भूल करना। यदि शिक्षक उनकी भूलों को क्षमा कर देते हैं तो यहाँ शिक्षक की गरिमा बढ़ती है, मर्यादा बढ़ती है, लेकिन यदि बच्चों को उनकी किसी प्रकार की छोटी मोटी भूलों के लिए सजा दी जाए, उन्हें पीटा जाए, डाँटा-फटकारा जाए, उन्हें नीचा दिखाने का प्रयास किया जाए तो उस व्यक्ति या शिक्षक को हम क्षमाशील नहीं कह सकते। ऐसा करना हमारी भूल ही होगी। यह हमारी कौन-सी महानता होगी कि किसी ने कुछ भूल कर दी और हमने उसके बदले उसे दो हाथ लगा दिए। मनुष्य के समान कोई दूसरा आत्मघाती जीव इस संसार में खोजना मुश्किल है। इस संसार में सिर्फ मनुष्य ही एक ऐसा प्राणी है, जो सिर्फ अपना ही नुकसान करने के पीछे पड़ा रहता है। इसके सिवा संसार में ऐसा और कोई दूसरा जीव नहीं है, जो अपना नुकसान करने की ताक में लगा रहता हो। हम जो भूल करते चले जा रहे हैं, उससे हमारे ही शरीर का क्षय होता है, हमारा ही शरीर टूटता है, विकृत होता जा रहा है। फिर भी मनुष्य गलती पर गलती करता चला जा रहा है।

(क) कायर और कमजोर व्यक्ति का कौन-सा कार्य उपहास का कारण बन जाता है?

(ख) क्षमा हमारे जीवन का अलंकार कब बनती है?

(ग) शिक्षक की गरिमा और मर्यादा कब बढ़ती है?

प्रश्न-1 मेहनत के दम पर हम क्या हासिल कर सकते हैं?

प्रश्न-2 सागर और पर्वत किस के आगे सिर झुकाते हैं?

प्रश्न-3 महिपाल ने किस को घर में आने का निमंत्रण दिया?

प्रश्न-4 महिपाल सिंह की लिखावट कैसी थी तथा वह किस हाथ से लिखते थे?

प्रश्न-5 नीचे दिए गए शब्दों के उल्टे अर्थ वाले शब्द लिखिए-

अर्थ, लाभ, प्रतिकूल, आय

## **ENGLISH** **READING SKILLS**

### **1. Read the passage carefully and answer the questions that follow:**

Unlike the usual rain that is refreshing and useful, acid rain is one type of rain that causes a great deal of harm to the environment. Acid rain can come in wet and dry forms based on how acidic materials fall from the atmosphere. When the materials are wet, they fall as rain, sleet, snow, or fog; in dry form, they fall as gases or particles. Acid rain affects human health badly by creating particles in the air that can cause respiratory problems. This can also cause building materials to decay more rapidly and paint more likely to peel off. It can erode stone statues, making them appear more dull and older and reducing their value. This is known to have caused damage to the magnificent Taj Mahal. The Black Forest in Germany is a result of acid rain that caused the trees to drop their needles. These trees have black trunks and branches. Acid rain flows into rivers and lakes, where it causes severe damage to the plant and animal life in aquatic systems.

**Based on your understanding of the passage, answer the following questions:**

a. Which type of problem is created by Acid rain on human health?

(i) Immunization

(ii) Obesity

(iii) Neurological

(iv) Respiratory

b. Which famous building is affected because of acid rain?

(i) The Taj Mahal

(ii) The Burj Khalifa

(iii) The Victoria Memorial

(iv) The Red Fort

c. In which region of Germany has acid rain caused damage?

(i) The Alps

(ii) The Red Forest

(iii) The Black Forest

(iv) The Harz

d. Fact 1: Usual rain is refreshing and useful

Fact 2: Acid rain is refreshing and useful

(i) Both the facts are correct.

(ii) Fact 1 is correct; Fact 2 is incorrect.

- (iii) Fact 1 is incorrect; Fact 2 is correct.
- (iv) Both the facts are incorrect.
- e. When the acidic materials are in wet form, they fall as –
  - (i) only rain and smoke
  - (ii) gases or particles
  - (iii) rain, sleet, snow, or fog
  - (iv) smoke

**2. Read the passage carefully and answer the questions that follow:**

1. Water is a vital renewable natural resource. Three-fourths of the earth's surface is covered with water. It is therefore appropriately called the 'Water Planet'. It was in the primitive oceans that life began almost 3.5 billion years back. Even today, the oceans cover two-thirds of the earth's surface and support a rich variety of plant and animal life. The ocean water is however saline and not fit for human consumption. Fresh water accounts for only about 2.7 percent. Nearly 70 percent of this occurs as ice sheets and glaciers in Antarctica, Greenland, and mountain regions. Due to their location, they are inaccessible. Only one percent of freshwater is available and fit for human use. It is found as groundwater, as surface water in rivers and lakes, and as water vapour in the atmosphere. Fresh water is therefore the most precious substance on earth.
2. Humans use huge amounts of water not only for drinking and washing but also in the process of production. Water for agriculture, industries, and generating electricity through reservoirs of dams are the other usages. Increasing population, rising demands for food and cash crops, increasing urbanization, and rising standards of living are the major factors leading to shortages in the supply of fresh water either due to the drying up of water sources or water pollution. There is a scarcity of water in many regions of the world. Most of Africa, West Asia, South Asia, parts of the western USA, North-West Mexico, parts of South America, and entire Australia are facing shortages in freshwater supply. Access to clean and adequate water sources is a major problem facing the world today. Steps have to be taken to conserve this dwindling resource.

**On the basis of your understanding of the passage, answer the following questions.**  
**[12x1=12]**

- (i) The Earth is called the "Water Planet" as –
  - (a) The oceans cover two-thirds of the earth's surface
  - (b) Three-fourths of the earth's surface is covered with water
  - (c) One-fourth of the earth's surface is covered with water
- (ii) State whether the following statement is true or false.  
The oceans support a rich variety of plant and animal life.
- (iii) Fresh water accounts for only about –
  - (a) 2.7 percent
  - (b) 3.7 percent
  - (c) 1 percent
- (iv) Why is ocean water not fit for human consumption?
- (v) It was in the primitive \_\_\_\_\_ that life began almost 3.5 billion years back.
  - (a) rivers
  - (b) lakes
  - (c) oceans
- (vi) Freshwater is found as \_\_\_\_\_.
  - (a) only groundwater
  - (b) only surface water in rivers and lakes
  - (c) groundwater, surface water in rivers and lakes, and water vapour in the atmosphere

- (vii) According to the passage, which of the following regions is not facing a shortage of freshwater supply?
- Australia
  - North-West Mexico
  - Europe
- (viii) What are the main usages of water?
- (ix) Two major factors leading to shortages in the supply of freshwater are –
- \_\_\_\_\_.
  - \_\_\_\_\_.
- (x) According to the passage, one of the major problems facing the world today is access to
- saline water
  - clean and adequate water sources
  - adequate nutritious food
- (xi) Find the word from the passage which means the same as ‘**very important**’. (Paragraph – 1)
- (xii) The word from the passage which means the opposite of ‘**abundance**’ is \_\_\_\_\_.
- adequate
  - scarcity
  - conserve

### **Grammar & Creative Writing Skills**

1. Rearrange the following words to make meaningful sentences.

**certainly/the/laughter/is/medicine/best**

**Laughter is certainly the best medicine.**

- ensures/life/it/longer/and/healthier/a
- it/fact/is/in/a/panacea/for/diseases/all
- lowers/pressure/by/circulation/it/blood/increasing/blood
- decreases/and promotes/it/stress/well-being/a sense of

2. Complete the following sentences with appropriate parts of speech.

(a) You must \_\_\_\_\_ between good and evil.

(decision/decide/decisive/decisively)

(b) He is a \_\_\_\_\_ writer.

(creation/create/creative/creatively)

3. Fill in the blanks with a/an/the/x.

(a) She is ..... untidy girl.

(b) She scored ..... highest marks in the examination.

(c) April is ..... fourth month of the year.

(d) Sunil, ..... watchman of our colony, has gone home.

(e) Which is ..... nearest railway station from here?

4. Write a Letter to your friend Rudra inviting him to spend the Summer Vacation at your place in Hamirpur. You are Sakshi/Saksham.
5. Write a Letter to your brother living in a hostel to balance playing games and studying to make the most productive use of his time.

### Literature

1. Read the following extract and answer the questions that follow.

*The forester had cunningly noted landmarks while riding back to Benaras and he led the trainers to the lake where the white elephant was gathering bamboo stem for his mother's evening meal.*

- (a) What sort of a man was the forester? How do you know?
- (b) Why did the forester want to capture the white elephant?
- (c) How was the forester able to lead the trainers to the white elephant?
- (d) What was the white elephant doing when the trainers reached there?

*'Don't fear me, stranger,' he said. 'Tell me how I can help you.' The forester told the white elephant that he had been lost for seven days and nights and could not find his way back to Banaras where he lived.*

- (a) Who is the stranger?
- (b) Where had the stranger come from?
- (c) How did the elephant help the stranger?
- (d) Did the forester deserve the elephant's kindness and help? Why/ Why not?

*'Ah my son!' she said when he told her his story. 'You should have listened to me. Human beings have always brought harm to our race.' 'Not all of them, mother' he said triumphantly. The king is noble and generous or I should still be in captivity. Let's forget the treachery of the forester and think only of the king's goodness!'*

- (a) What is the opinion of the mother about human beings?
- (b) Is the mother right in her assessment of human beings?
- (c) What is the opinion of the white elephant about the king?

2. Answer the following questions in about 30 – 40 words.

- (a) Where did the great herd of elephants live? What specialty did they have?
- (b) Why did the white elephant's mother depend on him for food?
- (c) When the white elephant did not return for a long time, what did his poor mother feel?

3. Answer the following questions in about 80 – 100 words.

- (a) Animals can teach human beings some lessons about love and care for parents and the ideals of willingness to help others. Comment.
- (b) The world is made up of good and evil people. Elucidate the statement concerning the story 'The White Elephant.'
- (c) 'There is a marked difference between the mother's and son's attitude towards life and man.' Discuss.
- (d) Human beings must be the true caretakers of Nature and Wildlife. Do you agree? Why?

## Creative work

1. Create a portfolio file for the academic year 2024-2025.

### SCIENCE

#### Ch- 4 Separation of substances

1. The student should look around his house and make a list of mixture he is able to find in his house.
2. Go to the kitchen note down the different mixture used by your mother in the kitchen and different method used by your mother to separate the different components of the mixture.
3. Geeta bought rice from the market and when there were some pebbles and some seeds of pulse mixed in it. Suggest how she could separate both pebbles and pulses from the rice.
4. Ram was carrying a bottle full of mustard oil and bucket filled with water. By chance the bottle slipped from his hand and the oil got mixed with water.
  - a) Is the mustard oil and water miscible?
  - b) How can the two be separated?
5. Differentiate homogenous mixture from a heterogeneous mixture.
6. Define the following terms
  - a) Mixture
  - b) Sublimation
  - c) Sedimentation
  - d) Filtration
7. How is the common salt obtained from the sea water?
8. Suppose I fill a glass with water from a river and water is muddy, briefly explain the different methods I should use to obtain clean water.
9. Why do we use loading during sedimentation?
10. Give reasons for the following
  - a) We churn butter from cream by churning
  - b) We can separate camphor from sugar by sublimation.
  - c) Iron nails are separated from a mixture by magnetic separation.
  - d) Two miscible liquids are separated by distillation.
11. Complete the following statements
  - a. \_\_\_\_\_ is the process of separating insoluble impurities from water.
  - b. \_\_\_\_\_ has the same composition throughout that is its components are uniformly distributed.
  - c. A farm machine \_\_\_\_\_ is used for harvesting and threshing.
  - d. In \_\_\_\_\_ the lighter components get blown away to distance while the \_\_\_\_\_ components fall down closer.
  - e. The process of solids changing directly into gaseous state on heating is known as \_\_\_\_\_.
  - f. \_\_\_\_\_ is the process that separates pure solid in form of crystal from a saturated solution.
  - g. In homes when pulses are washed before cooking the water used for washing is separated by \_\_\_\_\_ and \_\_\_\_\_.
  - h. The dust particles in the air get \_\_\_\_\_ with water and settle down.

12. How does loading help in cleaning of air more quickly?
13. Draw a labelled diagram showing the filtration of muddy water.
14. Name two things that can be used for filtration other than filter paper.
15. What is a filtrate?
16. What is the principle on which the centrifuge works?
17. Why do the shopkeepers often sprinkle water around their shops if the area around the shop is not cemented?
18. Can we separate the mixture of salt, ammonium chloride and sand by using one method? If the answer is no, state the different methods we will need to use?
19. Complete the given table

	Mixtures	Components
	Air	
		Salt, water and sand particles
	Aerated drinks	
		Lemon juice, sugar and water
	Crude oil	

20. Name 2 mixture found in

- a) Solid form
- b) Gaseous form
- c) Liquid form

21. What are different used to separate the impurities from the water used for drinking?
22. Name alum which is used for loading.
23. Why is the traditional long handle churner still used in many homes till date?
24. What is the purpose of using threshers in the farm?

### Case based questions

**A.** The process of conversion of water into its vapour is called evaporation. The process of evaporation takes place continuously wherever water is present. Salt is obtained from seawater through the process of evaporation. Sea water contains many salts mixed in it. One of these salts is the common salt. When sea water is allowed to stand in shallow pits, water gets heated by sunlight and slowly turns into water vapour, through evaporation. In

a few days, the water evaporates completely leaving behind the solid salts. Common salt is then obtained from this mixture of salts by further purification.

1. Name the process in which water is converted into its vapour on heating.  
a. Condensation.   b. Evaporation.   c. Sedimentation.   d. Decantation.
2. What does sea water contain?  
a. Vitamins          b. Proteins                  c. Salts                          d. Carbohydrates.
3. Name the process by which salt is obtained from seawater.  
a. Condensation.   b. Evaporation.   c. Sedimentation.   d. Decantation.
4. In the salt extraction process, the sea water is collected in \_\_\_\_\_.  
a. Dark pits          b. narrow pits                  c. deep pits                  d. shallow pits
5. Which of the following is obtained from the mixture of salts by the purification process?  
a. Common salt   b. Chemicals                  c. Metal                          d. sand.

**B.** You are asked to add two spoons of solid salt to some liquid water taken in a beaker. On stirring it you find that whole of the salt has disappeared and only liquid can be seen in beaker

1. After stirring the salt completely disappears and you can see only liquid in the beaker. The liquid in beaker is  
(a) water          (b) solution   (c) solute          (d) solvent
2. Which of the following processes will be useful to get salt from this solution?  
(a) Condensation   (b) Evaporation   (c) Filtration          (d) Sedimentation
3. Which process can you use to get liquid water from the water vapours if you collect them in another container?  
(a) Sedimentation   (b) Condensation   (c) Evaporation          (d) Filtration

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the given options

- a) Assertion and reason both are correct statement and reason is correct explanation for assertion.
- b) Assertion and reason both are correct statement and reason is not correct explanation for assertion.
- c) Assertion is correct statement but reason is wrong statement.
- d) Assertion is wrong statement but reason is correct statement.

1. **Assertion-** Separation of stones from rice is one of the separation method.  
**Reason** – The above separation method is handpicking method of separation.
2. **Assertion** – evaporation can be used to separate a solid dissolved in a liquid.  
**Reason-** Evaporation is the process in which liquid gets converted into its vapour.
3. **Assertion** – for separation of heavier and lighter components of a mixture by wind or by blowing air.  
**Reason** – The process which is used to separate rain from stalks are known as winnowing.



## Ch- 13: Magnets

1. I have a picture which when brought near to an iron almirah stuck to it. State why did this happen?
2. Make a list of 6 Objects used daily and predict whether they will be attracted by magnet or not.

### 3. Fill in the blanks

- a) Metals like iron, steel and cobalt and alloys can be used to make \_\_\_\_\_ magnets.
- b) A thin long piece of \_\_\_\_\_ when suspended freely is found to point in one direction only.
- c) An \_\_\_\_\_ is a coil of insulated wire wound on a soft iron core.
- d) Electromagnets are used in mobile cranes and in \_\_\_\_\_ and loud speaker.
- e) The \_\_\_\_\_ of a magnet can be determined in terms of its attractive force.
- f) At the centre the strength of a magnet becomes almost \_\_\_\_\_.
- g) The pole of bar magnet that points towards the geographical north is called its \_\_\_\_\_ pole.
- h) Two magnets kept close by with their \_\_\_\_\_ poles facing each other are seen to attract each other.
- i) \_\_\_\_\_ poles repel and \_\_\_\_\_ poles attract each other.
- j) The magnetic poles of the earth do not \_\_\_\_\_ with its geographical poles.

### 4. State whether given statements are true or false

- a) Unlike poles of magnet repel each other.
- b) The practical device based on the directive property of the bar magnet the magnetic compass.
- c) A rod or needle can acquire some magnetism when we place them near bar magnet for some time.
- d) The magnetic poles of the earth do not coincide with the geographical pole.

### 5. Multiple choice questions

- A. A device that is based on directive property of bar magnet
- a) Magnetic compass
  - b) electromagnet
  - c) telephone
  - d) loudspeaker
- B. Which ones are properties of magnet?
- a) Directive property
  - b) every magnet has 2 poles
  - c) attractive property
  - d) all the options
- C. Two magnets when close by feel a pull towards each other because
- a) Like poles repel
  - b) unlike poles attract
  - c) magnetism is lost
- D. In the centre of the magnet the strength of a magnet is
- a) Maximum
  - b) minimum
  - c) almost zero

### 6. Give reason for the following

- a) When we place iron nails near magnet most of the nails get attracted to the end of bar magnet.
- b) If we rotate a freely suspended magnet it always come to rest in a particular direction.

- c) An electromagnet loses its magnetism when we switch off current.
  - d) Loadstone is a magnet.
7. If I take 2 bar magnets and place the magnets on a paper having iron filings sprinkled on it.
- a) Place 2 bar magnets with like poles facing each other.
  - b) Place 2 bar magnets with unlike poles facing each other
- Write down the observation in both cases and explain reason for it.
8. Give examples
- a) Natural magnet
  - b) Artificial or man-made magnet
9. Differentiate permanent magnet from temporary magnet.
10. Name a commonly used form of temporary magnet. How is it made?
11. List down the special property of a bar magnet.
12. What are different ways of making magnet?
13. Which property of magnet is used by compass? What is the compass made of?
14. What happens if magnets are not properly stored?
15. How is magnetic material different from non-magnetic material?
16. Earth acts as huge magnet, explain.
17. When was the first compass invented? What was used by Chinese sailors used before that?
18. Why should not we place magnets near computer, cell phones or DVD?
19. What will happen if we place bar magnets at the two ends of a large table?
20. How can we find out the poles of a bar magnet?

### Case based questions.

**A.** A shepherd named Magnes lived in Greece used to take his herd of sheeps and goats on a mountain for grazing. He always carried a stick to control his herd. The stick had a small piece of iron attached to one end. One day he had to pull hard to free his stick from a rock on the mountain side.

1. Why has Magnes to pull hard to free his stick from a rock on the mountain side on that particular day?
- (a) His stick was stuck in the bushes on the mountain.
  - (b) He was holding his stick in such a way that the portion of stick having small piece of iron attached was held by him in his hand.
  - (c) The portion of stick having iron piece attached to it was pointing towards rock and get attracted strongly by the rock
  - (d) None of these
2. The credit for the discovery of natural magnet goes to
- (a) Mendes
  - (b) Mendel
  - (c) Magnes
  - (d) None of these
3. Magnes lived in
- (a) Ancient India
  - (b) Ancient China
  - (c) Egypt
  - (d) Ancient Greece

**B.** Magnets are pieces of iron or other materials which exhibit the properties of magnetism i.e. the ability to attract other objects that contain iron. Compass needles, fridge magnets and MRI scanners are some common examples of magnets. These days magnets come in different shapes and forms such as: horseshoe magnet, bar magnet, cylindrical or a ball-ended magnet, needle magnet etc. A great property of a magnet is that it can prove extremely helpful in navigating directions. This is because a freely suspended magnet always points in the NorthSouth direction. This property of magnet is used to make a compass. A magnetic needle is placed inside a box with directions marked on it. It is allowed to rotate freely so that when the compass is kept at the position of rest, the needle points towards the north and south direction.

1. Study the given statements.

i) A compass is used to show directions.

ii) The needle of a compass is magnetic.

iii) The needle of a compass always indicates the N and the S directions of the earth.

Identify the correct statements.

a) only i) and ii)

b) only ii) and iii)

c) only i) and iii)

d) all the three.

2. Which property of magnet is used to make a magnetic compass?

a) A magnet attracts magnetic materials.

b) Like poles repel.

c) A magnet can induce magnetism.

d) A freely suspended magnet aligns in N-S

direction.

3. How is a compass useful to us?

a) In finding the altitude of a place.

b) In finding only the north of a place.

c) In finding all the directions of a place.

d) In making artificial magnets.

4. Neha is standing in the middle of a cross road with a compass. The red portion of the compass needle is pointing towards her. She wants to go towards the east, then she should turn:

a) Right and then go straight

b) Left and then go straight

c) Right and then turn left

d) Left and then turn right

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the option (a), (b), (c) and (d) as given below

a) Both A and R are true and R is correct explanation of the assertion.

b) Both A and R are true but R is not the correct explanation of the assertion.

c) A is true but R is false.

d) A is false but R is true

1. **Assertion (A):** Heat can destroy magnetic properties of a magnet.

**Reason (R):** There is maximum attraction in the middle of the bar magnet.

2. **Assertion (A):** An iron piece is placed along poles of horse shoe magnet while storing.

**Reason (R):** Magnets become weak if they are not stored properly.

3. **Assertion (A):** Materials that are not attracted towards magnet are called non-magnetic.

**Reason (R):** Each magnet has two magnetic poles-North and South.

**Creative work**

Roll no. 1- 8: Make a model of photosynthesis with the help of waste materials.

Roll no. 9-16: Make rain water harvesting model with waste materials.

Roll no. 17-24: Prepare organic compost with the help of kitchen waste materials.

Roll no. 25-32: Make a model showing Earth as a magnet.

Roll no. 33-40: Make a model to show the arrangements of particles in the three states of matter.

## **MATHEMATICS**

### **CHAPTER-2: FACTORS AND MULTIPLES**

#### **CHOOSE THE CORRECT ANSWER: -**

1. A composite number has \_\_\_\_\_ factors.  
a) one b) two c) more than two d) none of these
2. A number is divisible by 5 if the digit at one's place is \_\_\_\_\_.  
a) 1 or 3 b) 0 or 5 c) 1 or 2 d) 4 or 8
3. Two prime numbers whose difference is 2 are called \_\_\_\_\_.  
a) co-prime b) twin prime c) even number d) none of these
4. A number is divisible by 6 if it is divisible by \_\_\_\_\_ factors of six.  
a) prime b) co-prime c) composite d) even
5. LCM of co-prime numbers is the \_\_\_\_\_ of the numbers  
a) sum b) difference c) product d) quotient
6. The HCF of two numbers is 24. The number which can be their LCM is  
-----  
a) 84 b) 120 c) 128 d) 148

#### **FILL IN THE BLANKS**

7. HCF of 12 and 36 is \_\_\_\_\_.
8. The first even multiple of 13 is \_\_\_\_\_.
9. When two or more integers are multiplied, each integer is called a \_\_\_\_\_  
of the product.
- 10.. LCM of co-prime numbers is the \_\_\_\_\_ of the numbers.
11. The smallest 3-digit odd composite number is \_\_\_\_\_.
- 12.. A number less than the sum of its factors except itself is called an \_\_\_\_\_.

#### **DO THE FOLLOWING:-**

13. Write the prime factorization of 64.
14. Are 16 and 21 co-prime?
15. Write down the last four 2-digit multiples of 12.
16. By what smallest digit the \* will be replaced to make 2346\*1 divisible by 9
17. Test the divisibility of 6790852 by 11.
18. Find the greatest number that will divide 120, 160 and 145 leaving remainder 2 in each case.
19. The wall of a room is 5 m 75 cm long and 7 m high. It is to be decorated with square photo frames leaving no gaps. Find the largest size of frame needed.

20. Express the predecessor of the smallest 5-digit number as the product of primes.
21. Find all the numbers less than 50 that are the common multiples of 3 and 4.
22. What least number should be added to 423987 to make it divisible by 8?
23. Can 40 and 160 be the HCF and LCM of two numbers respectively? Give reasons.
24. Find the least length of a rope which can be cut into whole number of pieces of lengths 45cm, 75cm and 81cm.
25. Find the smallest number which when increased by 20 is exactly divisible by 90 and 144.
26. A terrace of dimension 10m x 7m is to be fitted with square tiles of largest possible size. What should be the size of the tiles and how many such tiles are required?
27. LCM of two numbers is 12 times their HCF. The product of the numbers is 3072. Find their HCF and LCM.
28. The product of two numbers is 2028 and their HCF is 13. Find the number of such pairs.
29. Determine the greatest 3-digit number exactly divisible by 7, 9 and 12.
30. If the ratio of two numbers is 4:5 and their HCF is 4, then find their LCM.
31. Six bells commence tolling together and toll at intervals of 2, 4, 6, 8, 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together?
32. How many numbers less than 20 can be written as the sum of two prime numbers?
33. What are the two numbers nearest to 20000 which can exactly divisible by 4, 7, 8, 6 and 5.
34. Three numbers are in the ratio of 3:4:5 and their LCM is 2400. Find their HCF.
35. The LCM of two numbers is 12 times their HCF. The sum of the HCF and LCM is 403. If one number is 93, then find the other.
36. What will be the least number which when doubled will be exactly divisible by 12, 18, 21 and 30?
37. Three numbers which are co-prime to each other are such that the product of the first two is 551 and that of the last two is 1073. Find the sum of the three numbers.
38. Find the HCF of 910, 1225, 1835 and 2140
39. Find the prime factorisation of the following:  
 (i) 284 (ii) 393 (iii) 7084 (iv) 5595 (v) 23356 (vi) 50034 (vii) 3487  
 (viii) 18720 (ix) 2267 (x) 450 (xi) 3487 (xii) 380 (xiii) 191
40. Find the highest common factor of 34, 42 and 58.
41. Find the common prime factors of the following:  
 a) 25, 65, and 55 b) 134 and 345 c) 36, 48, and 58 d) 256 and 156 e) 152 and 76
42. Find the lowest common multiple of the following:  
 a) 34 and 45 b) 45, 24, and 16 c) 32, 16, and 18. d) 45, 75, and 125
43. Find HCF of the following numbers using division method:-  
 i) 170, 238 ii) 96, 240, 336 iii) 90, 144 iv) 66, 72, 84 v) 18, 54, 81  
 vi) 135, 225
44. Find the common factors of the following numbers.  
 i) 6 and 8 ii) 9 and 15 iii) 16 and 18 iv) 16 and 28 v) 51 and 68 vi) 27 and 45

vii) 8 and 12    viii) 12 and 15    ix) 18 and 30    x) 30 and 40    xi) 56 and 42    xii) 27 and 63

45. Find the common factors and the highest common factor of the given numbers.

i) 12 and 28    (ii) 15 and 12    (iii) 14 and 21    (iv) 18 and 24    (v) 40 and 50

vi) 12 and 8    vii) 10 and 6    viii) 8 and 10    ix) 6 and 15

46. Which pairs are co-prime?

i) 16, 18    ii) 15, 14    iii) 27, 28    iv) 8, 15    v) 11, 12    vi) 45, 49

47. Find the H.C.F. of the following by prime factorization method.

i) 24 and 36    ii) 56 and 72    iii) 21 and 35    iv) 56 and 70    v) 45 and 81

vi) 42 and 49    vii) 44, 66 and 110    viii) 48, 64 and 120

ix) 12, 15 and 18    x) 75 and 125    xi) 64 and 78    xii) 27, 36 and 54

48. Find the H.C.F. of the following by Long Division Method.

i) 32 and 68    ii) 45 and 180    iii) 56 and 72    iv) 96 and 218

v) 8, 16 and 36    vi) 9, 18 and 27    vii) 20, 80 and 128    viii) 60, 80, 90

ix) 25, 75, 95    x) 12, 24, 88

### CREATIVE HOME WORK

Instructions:

- One A4 sheet which should be designed using geometrical shapes.
- Complete your work with neat and clean handwriting.

1. Make a grid of numbers from 1 to 100. Eg: On it, shade all the multiples of 6 by colour blue and all the multiples of 7 by colour yellow. Do this question in A4 sheet.

(The common multiples will be the one shaded both colours i.e. green.)

The highest common multiple will be the highest of these numbers.)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

(From the table, we observe that 42 and 84 are common multiples of 6 and 7.

The lowest common multiple is therefore 42.)

Find the common multiple:

Roll no. 1 to 10 : lowest common multiple of 2, 3 and 4

Roll no. 11 to 20 : lowest common multiple of 5, 6 and 7

Roll no. 21 to 30 : lowest common multiple of 5, 7 and 9

Roll no. 31 to 40 : lowest common multiple of 4, 6 and 8

2. Make a wall clock using Roman Numerals. ( Use ecofriendly material )(interested students)

3. Make a short Formula Notebook. ( Use A4 or A3 size sheet ) (all the students)

## **SOCIAL SCIENCE**

### **Assignment: Representation of the Earth**

#### **Multiple Choice Questions (MCQs):**

1. Which of the following represents a three-dimensional model of the Earth?  
a) Map    b) Globe    c) Compass    d) Atlas
2. What is the main purpose of a map?  
a) To represent the Earth as it is                      b) To navigate from one place to another  
c) To predict the weather                                      d) To measure the height of mountains
3. Which of the following is not a type of map?  
a) Political Map    b) Topographic Map    c) Climatic Map    d) Volcano Map

#### **Assertion-Reason Question:**

4. **Assertion:** Maps are a two-dimensional representation of the Earth's surface.  
**Reason:** It is easier to carry and refer to maps compared to globes.  
a) Both the assertion and reason are true, and the reason is the correct explanation of the assertion.  
b) Both the assertion and reason are true, but the reason is not the correct explanation of the assertion.  
c) The assertion is true, but the reason is false.  
d) Both the assertion and reason are false.

#### **Short Answer Type Questions:**

5. Define the term 'scale' as used in maps. Give an example.
6. Explain the significance of different color schemes used in maps.
7. What are cardinal directions? Name them.
8. **Why is a globe considered a perfect representation of the earth? Give any three reasons.**

#### **Case-Based Question:**

9. **Case:** A group of students is planning a hiking trip in a forest area. They have a map of the region but are unsure about reading it accurately.

**Question:** How would you explain the concept of map reading to the students? Provide step-by-step guidance on interpreting the map, identifying key landmarks, and using cardinal directions.

#### **Project:**

Roll no 1-10: Design a museum exhibit showcasing the daily life of people for ancient civilizations. Include artifacts, tools, coins, buildings, etc. (Use clay, paper mache, foam board, etc. to make these things)

Roll no 11-20: On a chart paper, create a timeline for your own life, including important events such as your birth, first day of school, any other memorable vacation or achievement. Paste pictures in support.

Roll no 21-30: Construct a 3D relief map of a specific region using materials such as clay, foam board or paper mache. Accurately depict mountains, rivers, plains and other landforms.

Roll no 31-40: Draw a weather forecast map on a chart paper. Imagine you are a weather reporter presenting a forecast for different regions. Write a script to deliver a weather report for your chosen location.

### संस्कृतम्

प्रश्न :1 मञ्जूषायाः सहायतया रिक्तस्थानानि पूरयित्वा अनुच्छेदपूर्तिं कुरुत।

मर्यादापुरुषोत्तमः श्रीरामः।

श्रीरामः ..... आसीत् । ..... आज्ञा पालयितुम्। सः चतुर्दशवर्षाणि यावत् वने ..... अकरोत्। तेन सह तस्य ..... सीता भ्राता लक्ष्मणः चापि ..... अगच्छताम्। वने ..... सीताम् अपाहरत्। रामः ..... हत्वा सीताम् आनयत्। सः ..... विभीषणाय अयच्छत्। रामायणे श्रीरामस्य जीवन-कथा अस्ति।

**मञ्जूषा- रावणः, रावणम्, मर्यादापुरुषोत्तमः, पितुः, वनम्, निवासम्, लंका-राज्यम्, पत्नी**

प्रश्न :2 प्रथम पाठस्य पूर्णवाक्येन प्रश्नोत्तराणि शब्दार्थसहितं अभ्यास पुस्तिकायां लिखन्तु पठन्तु च।

प्रश्न :3 द्वितीय पाठे आगतानां शब्दार्थानां लिखन्तु स्मरणं च कुर्वन्तु।

प्रश्न :4 द्वितीय पाठस्य पूर्णवाक्येन प्रश्नोत्तराणि लिखन्तु।

प्रश्न :5 संस्कृत-वर्णमालां स्मरणं कुर्वन्तु।

प्रश्न :6 तत् एवं किम् शब्दयोः प्रथमा द्वितीया विभक्तेः त्रिषु वचनेषु सर्वनाम शब्दरूपाणि लिखित्वा चार्ट निर्माणं कुर्वन्तु। (रोल नंबर 1-13)

प्रश्न :7 राष्ट्रीयध्वजस्य निर्माणं कृत्वा प्रथमपाठं चार्टस्योपरि (चार्ट के ऊपर) लिखन्तु। (रोल नंबर 14-26)

प्रश्न :8 चार्ट पत्रे विद्यालयस्य सुन्दरचित्रनिर्माणं कृत्वा "मम प्रियः विद्यालयः" इति पाठात् पञ्च वाक्यानि लिखन्तु। (रोल नंबर 27-40)