



# **DAV NUPPL Public School**

**NUPPL Township, Ghatampur, Kanpur Nagar, UP – 209206**

**Summer Vacation Assignment (Session: 2024-25)**

## **Class :VII ENGLISH**

### Reading Skills

1. The oldest stone buildings in the world are the pyramids of Egypt. They have stood for nearly 5000 years, and it seems likely that they will continue to stand for thousands of years. Over eighty of them are scattered along the bank of the Nile, some of which are different in shape from the true pyramids. The most famous of these are the 'Step' pyramid and the 'Bent' pyramid.

2. Some of the pyramids still look similar to the ones which were built thousands of years ago. Most of the damage suffered by the others has been at the hands of men who were looking for treasure or, more often, for stone to use in modern buildings. The dry climate of Egypt has helped to preserve the pyramids and their very shape has made them less likely to fall into ruins. These are good reasons why they can still be seen today, but perhaps the most important is that they were planned to last forever.

3. One thing is certain: there must have been months of careful planning before they could begin to build. The first thing they had to do was to choose a suitable place. You may think that this was an easy task, with miles and miles of empty desert around, but a pyramid could not be built just anywhere. Certain rules had to be followed strictly.

4. The pyramid had to be on the west side of the Nile; the side on which the sun sets. This was for religious reasons. The pyramid also had to stand well above the level of the river to protect it against the regular floods. The pyramid could not be too far from the Nile as the stones to build it needed to be carried in boats down the river to the nearest point. Water transport was, of course, much easier than land transport. The builders also had to find rock, which was not likely to crack under the great weight of the pyramid. Finally, the pyramid had to be near the capital or, near the king's palace so that he could visit it easily and personally check the progress being made on the final resting place for his body.

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

- a. The writer says 'The pyramids have stood for nearly 5000 years, and it seems likely that they will continue to stand for thousands of years yet.' His tone is:
  - (i) fascinated
  - (ii) disbelieving
  - (iii) awestruck
- b. The maximum damage caused to the pyramids was due to
  - (i) men looking for treasure
  - (ii) the dry climate
  - (iii) their shape and structure
- c. The pyramid also had to stand well above the level of the river to \_\_\_\_\_.
- d. The pyramid had to be on the west side of the Nile as
  - (i) The Egyptians worshipped the setting sun
  - (ii) The eastern bank was regularly flooded
  - (iii) Stones needed to build the pyramids were available on the western bank
- e. Find the word from the passage that means the opposite of 'ancient'.

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

- (a) Yoga is an ancient \_\_\_\_\_.
  - (i) mental and spiritual practice that originated in India
  - (ii) physical, mental, and spiritual practice that originated in India
  - (iii) spiritual practice that originated in India

(b) Yoga encourages a positive and healthy lifestyle for the \_\_\_\_\_.

- (i) physical health of children
- (ii) mental and emotional health of children
- (iii) both (i) and (ii)

(c) What is the aim of the International Day of Yoga?

(d) State whether the following statement is true or false.

The first International Day of Yoga was celebrated around the world on 11 December 2014.

(e) Find a word from the passage that means the same as "announce or declare". \_\_\_\_\_.

(Paragraph – 2)

### Grammar & Creative Writing

#### 1. Rearrange the following words to make meaningful sentences.

- a. was / Performance /impressed /with/his/I
- b. you / where have / this all / while / been
- c. games/sports/and/different/there/are/of/kinds
- d. lesson/Describe/a/you've/from/earned/a pet
- e. day/what/your/thing/favorite/do/on/a/to/sunny/is

1. Identify the subject and predicate in each sentence below.

- (a) The dog barked loudly.
- (b) Mary and John went to the park.
- (c) The sun sets in the west.
- (d) She sings beautifully.
- (e) The cat chased the mouse.

- (i) As Swami, write a Diary entry expressing your emotions when you were given the open challenge to sleep in your father's office.
- (ii) As Aisha, write a Diary entry expressing your mixed feelings of excitement and anxiety on the eve of your first day at a new school. Reflect on your hopes and apprehensions for the upcoming journey.

### Literature

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

- (a) How did Swami respond to the challenge presented by his father? What was the nature of the challenge?
- (b) Could you delve into Swami's emotional state while he was in the office room during the night?
- (c) What actions did Swami take to catch the burglar?
- (d) Do you believe that courage outweighs factors like strength and age? Why or why not?
- (e) What qualities would you associate with the term "hero," and do you think Swami embodies these qualities? Why or why not?
- (f) In your opinion, how would you characterize Swami's father's actions and demeanour?

## HINDI

#### 1. नीचे दिए गये अपठित गद्यांश को पढ़कर उत्तर दीजिये -

मानव शरीर की रचना पाँच तत्वों से मिलकर हुई है। ये तत्व हैं आकाश, वायु, जल, अग्नि और पृथ्वी। वस्तुतः ये वस्तुएँ तथा इनसे जुड़ी हुई वस्तुएँ प्रकृति के नाम से जानी जाती हैं। प्रकृति ही सारे संसार को चलाने में सहायक है। आकाश का गुण शब्द है जो कभी नष्ट नहीं होता। वायु प्राण बनकर जीवनदायिनी है। प्राण ही तो है जो हमारे जीवित होने का प्रमाण है। जल हमारे शरीर की नस नस में किसी-न-किसी रूप में विद्यमान है तभी तो कहा जाता है शरीर में 80% जल है। अग्नि का गुण तेज रूप में मानव के साथ है। पृथ्वी हमारे रहने और खाने-पीने के साधन उपलब्ध कराती है। वस्तुतः प्रकृति हमें अनेक शिक्षाएँ देती है। सूर्य

और चंद्रमा प्रतिदिन समयानुसार आकर हमें जीवन देते हैं और आनंद से भर देते हैं। वे कभी अपना नियम नहीं तोड़ते तथा इस रूप में मानव को नियमबद्धता का पाठ पढ़ाते हैं। पृथ्वी सहनशीलता का अद्भूत प्रमाण देती है। कठिनाई तब होती है जब मानव अपने अहंकार के कारण प्रकृति पर अधिकार पाना चाहता है, उसे नियंत्रित करना चाहता है। बड़े बड़े बाँध बनाकर जल के प्रवाह को अपनी इच्छानुसार चलाना चाहता है। मनुष्य को यह याद रखना होगा कि जो प्रकृति हमें जीवन देती है उसकी रक्षा करना मनुष्य का ही कर्तव्य है।

क. मानव शरीर की रचना किस पाँच तत्वों से मिलकर होती है?

- (अ) पानी, आग, पृथ्वी, हवा, बिजली (ब) आकाश, वायु, जल, अग्नि, पृथ्वी  
(स) तेल, पत्थर, लकड़ी, खाद्य, धूप (द) प्राण, चेतना, आत्मा, मन, बुद्धि

ख. प्राण का गुण क्या है?

- (अ) शब्द (ब) ऊर्जा (स) आकार (द) रस

ग. मानव शरीर में जल का प्रतिशत होता है?

- (अ) 50% (ब) 60% (स) 70% (द) 80%

घ. अग्नि का गुण क्या है?

- (अ) ठंडक (ब) गरमी (स) स्थिरता (द) भूरता

ङ. पृथ्वी हमें किसे प्रदान करती है?

- (अ) आकाश (ब) जल (स) भोजन (द) अग्नि

च. सूर्य और चंद्रमा हमें क्या प्रदान करते हैं?

- (अ) ऊर्जा (ब) प्रकाश (स) गरमी (द) वायुमंडल

छ. प्रकृति की रक्षा किसका कर्तव्य है?

- (अ) वन्यजन (ब) मनुष्य (स) पशु (द) पक्षी

ज. मानव के अहंकार के कारण किसे होती है?

- (अ) सफलता (ब) खुशहाली (स) कठिनाई (द) समृद्धि

झ. जल के प्रवाह को अपनी इच्छानुसार चलाना चाहने का उदाहरण क्या है?

- (अ) बारिश की योजना (ब) नदी के संचार की योजना  
(स) जल प्रदूषण की योजना (द) बंद कुएं की योजना

ञ. मानव के लिए प्रकृति का क्या महत्व है?

- (अ) केवल आवास (ब) केवल भोजन  
(स) सिर्फ मनोरंजन (द) जीवन और उसका संरक्षण

ट. निम्नलिखित कथन A तथा कारण R को ध्यानपूर्वक पढ़िए। उसके बाद दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए।

कथन (A): शिक्षक का स्थान कोई रोबोट नहीं ले सकता।

कारण (R): शिक्षण का काम सिर्फ शारीरिक ही नहीं, बल्कि मानसिक भी है।

(अ) कथन A तथा कारण R और दोनों गलत है।

(ब) कथन A गलत है तथा कारण R सही है।

(स) कथन A सही है, लेकिन कारण R उसकी गलत व्याख्या करता है।

(द) कथन A तथा कारण R दोनों सही है तथा कारण R और कथन A की सही व्याख्या करता है।

1. सयाल के चरित्र और निर्मला के चरित्र की विशेषता बताओ?
2. निर्मला के अजगर से फँसने पर सयाल ने क्या किया?
3. निर्मला सयाल से ईर्ष्या क्यों करती थी?
4. निर्मला को सयाल ने भाग जाने के लिए क्यों कहा?
5. मुहावरे का अर्थ लिखिए -

प्राण सूख जाना, घिग्घी बध जाना, टकटकी लगाना

6. भाववाचक संज्ञा शब्द बनाइये -

**शब्द : अमीर, बुरा, लंबा, बच्चा लड़का**

7. नीचे दिए गये शब्दों के चार-चार पर्यायवाची शब्द लिखिए-  
साँप, दैत्य, आँख, कपड़ा

8. नीचे दिए गये वाक्यांशों के लिए एक शब्द लिखिए -

किये गये उपकार को मानने वाला, जिसका मूल्य अधिक हो, जिसमे धैर्य हो, मीठा बोलने वाला

#### पाठ 4. बातूनी (ज्ञान सागर / अभ्यास सागर)

1. प्रत्यय अलग करके लिखिए -

पारिवारिक, खिलौना, चढ़ाई, गरमाहट

2. उपसर्ग जोड़कर नया शब्द बनाइये -

क्रम, कूल, यश, जीवन, देखा

3. विलोम शब्द लिखिए -

स्वच्छ, सुन्दर, द्वारा, बुद्धिमान

4. लेखक ने सज्जन को क्या करने को कहा और क्यों?

5. राजू ने लिफाफा क्यों माँगा?

6. लेखक ने घर जाने से बाहर जाने का कौन सा रास्ता लेने का फैसला किया और क्यों?

7. लेखक ने क्यों कहा आदमी सुभीता खोजने में मारा जाता है ?

#### अनुच्छेद

1. भारतीय किसान

5. संगति का महत्त्व

2. प्रदूषण की समस्या

3. विद्यार्थियों में तनाव

4. राष्ट्रीय एकता

#### पत्र

अपनी किसी बहादुरी के किस्से सुनाते हुए अपने मित्र को एक प्यारा पत्र लिखिए।

## SCIENCE

### Electric Current and Its Effects

#### MCQs:

1. The coil of wire contained in an electric heater is known as:  
(a) component (b) element (c) circuit (d) spring
2. The amount of heat produced in a wire depends on:  
(a) material (b) length (c) thickness (d) all of these
3. A thin wire in a bulb is called as:  
(a) filament (b) coil (c) element (d) fuse wire

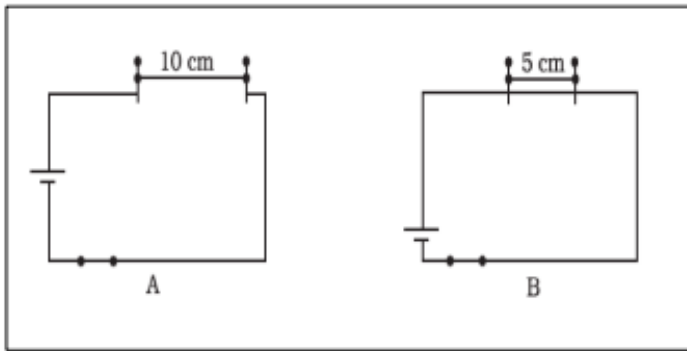
4. A glowing bulb becomes warm due to the:
  - (a) heating effect of current
  - (b) magnetic effect of current
  - (c) chemical effect of current
  - (d) none of the above
5. When electric current passes through a wire, it behaves like a:
  - (a) battery
  - (b) temporary magnet
  - (c) fuse
  - (d) compass needle
6. Who discovered magnetic effect of current?
  - (a) H.C. Oersted
  - (b) Michael Faraday
  - (c) Ohm
  - (d) Fleming
7. The most suitable material for making the core of an electromagnet is:
  - (a) iron
  - (c) aluminium
  - (d) steel
8. Electric bell works on the principle that:
  - (a) Electric energy is converted into mechanical energy.
  - (b) Mechanical energy is converted into sound energy.
  - (c) Electrical energy is converted into sound energy.
  - (d) Sound energy is converted into electrical energy.
9. The compact fluorescent electric lamp (CFL) has:
  - (a) Nichrome filament
  - (b) Chromium filament
  - (c) Tungsten filament
  - (d) No filament
10. Electromagnet loses its magnetic property when:
  - (a) current is very high
  - (b) current is switched off
  - (c) Heat is increased
  - (d) current is switched on

**Fill in the blanks :**

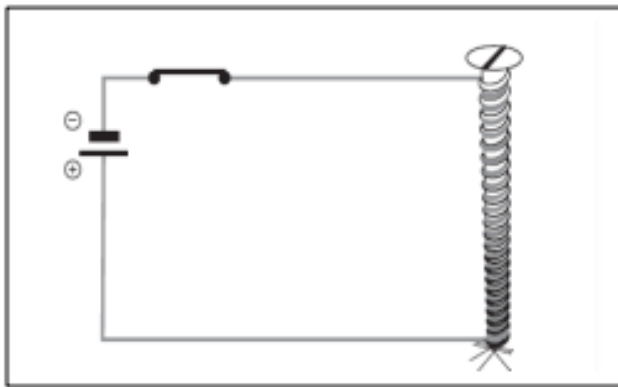
- (a) The path along which electric current flows is called an \_\_\_\_\_.
- (b) Current does not flow in an \_\_\_\_\_ electric circuit.
- (c) Name the alloy used as the heating element in an electric toaster \_\_\_\_\_.
- (d) A fuse wire has a \_\_\_\_\_ electric resistance & \_\_\_\_\_ melting point.
- (e) \_\_\_\_\_ discovered that electric currents create magnetic field.
- (f) The credit for the invention of the electric bulbs goes to \_\_\_\_\_.
- (g) A combination of two or more cells is called a \_\_\_\_\_.
- (h) Full form of MCB is \_\_\_\_\_.
- (i) Full form of CFL is \_\_\_\_\_.

**Case Study Based Questions:**

1. An electric bell consists of a coil of wire wound on an iron piece. The coil acts as an electromagnet. An iron strip with a hammer at one end is kept close to the electromagnet. There is a contact screw near the iron strip. When the iron strip is in contact with the screw, the current flows through the coil which becomes an electromagnet. It, then pulls the iron strip. In the process, the hammer at the end of the strip strikes the gong of the bell to produce a sound. However, when the electromagnet pulls the iron strip, it also breaks the circuit. The current stops flowing through the coil.
  - i) Which of the following appliances have an iron strip, a hammer, a contact screw and a gong?
    - a) Electric bell
    - b) Electric kettle
    - c) Electric bulb
    - d) Electric iron
  - ii) In an electric bell, which of these gets attracted to the electromagnet?
    - a) Hammer
    - b) Soft iron strip
    - c) Screw
    - d) none of these.
  - iii) When electric current passes through a wire, it behaves like a magnet. This is the
    - a) Magnetic effect of current
    - b) Electrical effect of current
    - c) Heating effect of current
    - d) Optical effect of current
  - iv) Electric Bell works on the principle.
    - a) Electrical energy is converted into mechanical energy
    - b) Electrical energy is converted into sound energy
    - c) Mechanical energy is converted into sound energy
    - d) Sound energy is converted into electrical energy
2. Paheli took a wire of length of 10 cm. Boojho took a wire of 5 cm of the same material and thickness. Both of them connected the wires as shown in the circuit given in the figure given below. The current flowing in both circuits is the same.



- (i) Will the heat produced in both cases be equal? Explain.  
 (ii) Will, the heat produced be the same if the wires taken by them are of equal lengths but of different thicknesses Explain.
3. Rohan has wound a long-insulated piece of wire around an iron nail in the form of a coil. The free ends of the wire are connected to a cell through a switch. The current is switched on and some pins are placed near the ends of the nail.



- (i) Why does the nail attract the pins?  
 (ii) What will happen if we connect more cells in the circuit?  
 (iii) What will happen if we use some other material like a plastic straw in place of the nail?

**For questions below , two statements are given- one labelled Assertion (A) and the other labelled Reason (R).**

**Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below i)**

**Both A and R are true, and R is the correct explanation of the assertion.**

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

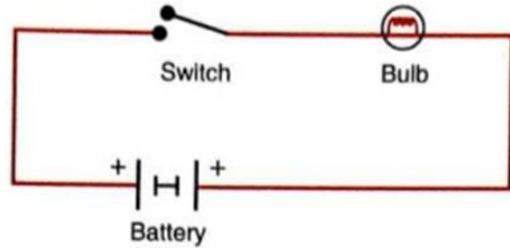
**iii) A is true but R is false.**

**iv) A is false but R is true**

- Assertion (A): Fuse is a safety device that prevents damage to electrical circuits and possible fires.  
Reason (R): The fuse wire blows off and breaks the circuit and preventing the fire and damage.
- Assertion (A): Battery is a combination of two cells only.  
Reason (R): The positive and negative terminals are generally marked on the cells. Ans (iv) A is false but R is true.
- Assertion (A): The heating up of a thin conducting wire on passing an electric current through it, is known as the heating effect of current.  
Reason(R): Various electrical appliances that are based on the heating effect of current contain a coil of wire called an element.

### **SHORT ANSWER TYPE QUESTIONS**

1. The bulb in the circuit shown in figure does not glow. Why? Redraw the circuit diagram by making the necessary changes in it, so that the bulb starts glowing.



2. Write two special characteristics of the wire needed for making the 'element' of an electric heater.
3. Give the meaning of the terms 'short circuiting' and 'overloading' in an electric circuit?
4. State any three applications of an electromagnet.
5. The same amount of current flows through the connecting wires and the bulb filament. However, it is only the filament that glows. Why?
6. Suggest an experimental set up to illustrate the action of an electric fuse.
7. Explain how to make a simple electromagnet.
8. What causes short-circuit?
9. Boojho made an electromagnet by winding 50 turns of wire over an iron screw. Paheli also made an electromagnet by winding 100 turns over a similar iron screw. Which electromagnet will attract more pins? Give reason.
10. Batteries used in tractors, trucks and inverters are also made from cells. Then why it is called a battery?

## Biology

### Nutrition in Animals and Man

#### Fill in the blanks.

1. The long, tubular beak of the humming bird helps it to suck \_\_\_\_\_.
2. Most fungi & some \_\_\_\_\_ are \_\_\_\_\_ in nutrition.
3. Roundworms and \_\_\_\_\_ are \_\_\_\_\_.
4. Process of breakdown of complex molecules into simple ones is \_\_\_\_\_.
5. Elimination of undigested food from the alimentary canal is \_\_\_\_\_.

#### Write true or false.

1. White, protective material covering the teeth is enamel \_\_\_\_\_.
2. Canines are used for grinding of food. \_\_\_\_\_.
3. Epiglottis prevents the food from entering our lungs. \_\_\_\_\_.
4. Bile juice is produced by the pancreas gland. \_\_\_\_\_.
5. Cud chewing herbivores are called ruminants. \_\_\_\_\_.

#### Match the following.

- |                   |                |
|-------------------|----------------|
| 1. Buffalo, sheep | Pseudopodia    |
| 2. Gall bladder   | Grinding teeth |
| 3. Amoeba         | Oesophagus     |
| 4. Premolars      | Bile juice     |
| 5. Food pipe      | Ruminants      |

#### Pick the correct option.

1. Enamel, the hardest substance in our body is made of  
a. Calcium      b. Magnesium      c. Keratin      d. All of above
2. Incisors are used for

- a. Tearing of food      b. Cutting of food      c. Grinding of food      d. None
3. Baby teeth are also called  
a. Permanent teeth      b. Milk teeth      c. Molars      d. Incisors
4. Bile helps in the digestion of  
a. Fats      b. Proteins      c. Carbohydrates      d. All of above
5. Which of these glands help in digestion?  
a. Liver      b. Pancreas      c. Oesophagus      d. Both a & b
6. Cud chewing animals are  
a. Omnivores      b. Herbivores      c. Carnivores      d. None of above
7. Pseudopodia help amoeba in  
a. Trap its food      b. Digest its food      c. For its movement      d. Both a & c
8. Villi in small intestine help in  
a. Digestion of food      b. Absorption of digested food      c. Ingestion of food      d. All of these
9. Caecum helps the cow in digestion as it has —— present in it  
a. Fungi      b. Algae      c. Bacteria      d. None of these
10. Blue-black colour after adding drops of iodine shows presence of  
a. Starch      b. Fats      c. Proteins      d. None of these
11. The process of chewing food is known as  
a. peristalsis      b. mastication      c. digestion      d. nutrition
12. Which of these statements is true about the permanent set of teeth of humans?  
1) It contains 32 teeth, 16 in each jaw  
2) There are 4 incisors in each jaw  
3) There are 4 canines in each jaw  
4) There are 4 molars in each jaw  
a. 1&2      b. 2&3      c. 3&4      d. 1&4
13. Which part of the alimentary canal is not involved in digestion?  
a. mouth      b. oesophagus      c. stomach      d. intestine
14. A bag-like structure in Amoeba in which the food is digested  
a. vacuole      b. gall bladder      c. Intestine      d. stomach

**For Questions no.(a) and (b),two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i),(ii),(iii)&(iv)as given below.**

- i) Both A and R are true and R is correct explanation of the assertion A.**  
**ii) Both A and R are true ,but R is not the correct explanation of the assertion A.**  
**iii) A is true ,but R is false.**  
**iv) A is false ,but R is true.**

**1. Assertion (A):**The process of digestion starts in the mouth.

**Reason (R):** Mouth contains teeth and teeth help in breaking the food into small pieces which can be easily swallowed and digested.

**2. Assertion (A):** Amoeba is a microscopic organism.

**Reason (R):** Amoeba shows its movement with the help of finger-like projections , called villi.

**3. Assertion (A) :** Tongue is fleshy muscular organ.

**Reason (R):** Tongue is used for talking.

**4. Assertion (A) :** The small intestine is about 7.5m long and highly coiled.

**Reason (R) :** It is smaller as compared to large intestine.

**5. Assertion (A) :** Digestion of carbohydrates, like starch, begins in buccal cavity.

**Reason (R) :** The digested food is absorbed in the blood vessels from small intestines.

**Answer the following questions.**

- Justify that a bear is an omnivore.
- Differentiate between a. Absorption & assimilation b. Milk teeth & permanent teeth
- Explain the role of 1)acid in the stomach 2)bile juice in the liver.
- Explain how pancreas helps as a gland during the digestion of food.



5. What is meant by rumination? How is it helpful to the herbivores?
6. Draw a well labelled diagram of the human digestive system.
7. What is the role of Saliva in the digestion of food
8. Explain what happens to digested food when it enters the blood stream ?
9. What is the role of Hydrochloric acid in the stomach of Humans?
10. Amit took some grains of boiled rice in test-tube A and shalini took boiled and chewed rice in test-tube B. Both of them poured 1-2 drops of iodine solution into the test-tubes and observed the color change. What color change would they have observed ? Give reasons for your answer.
11. The bacteria present on uncleaned teeth convert the sugar in food onto a substance 'X' , which causes tooth decay. Name the substance 'X'. Which part of the teeth does it affect ?
12. Explain the terms- digestion and egestion.
13. Explain how pseudopodia help amoeba during intake of its food.
14. Explain the need of epiglottis in the digestive system.
15. Name the four types of teeth.
16. Draw the diagram of the buccal cavity to show & label all four types of teeth.
17. Talk to five of your classmates and children of your relatives to find out at which age they started losing their milk teeth and at what age did the first new tooth arrive. Collect the data in a table form.

### Case Based Questions.

**A.** The food passes through a continuous canal which begins at the buccal cavity and ends at the anus. The canal can be divided into various compartments: (1) the buccal cavity, (2) food pipe or oesophagus, (3) stomach, (4) small intestine, (5) large intestine ending in the rectum and (6) the anus. Is it not a very long path. These parts together form the alimentary canal (digestive tract). The food components gradually get digested as food travels through the various compartments. The inner walls of the stomach and the small intestine, and the various glands associated with the canal such as salivary glands, the liver and the pancreas secrete digestive juices. The digestive juices convert complex substances of food into simpler ones. The digestive tract and the associated glands together constitute the digestive system.

- 1) The food passes through an alimentary canal which is a..... type of canal.  
(a) Discontinuous (b) Continuous (c) Straight (d) Round
- 2) Which parts or glands of the human body secrete the digestive juices which are required for the breakdown of food in the body?  
(a) Liver (b) Pancreas (c) Salivary gland (d) All of the above
- 3) .....juice convert complex food substances into simpler ones.  
(a) Digestive juice (b) Pancreatic juice (c) Liver juice (d) Salivary juice
- 4) The canal can be divided into how many compartments?
- 5) Name the glands which are associated with the canal?

**B.** The stomach is a thick-walled bag. Its shape is like a flattened J and it is the widest part of the alimentary canal. It receives food from the food pipe at one end and opens into the small intestine at the other. The inner lining of the stomach secretes mucus, hydrochloric acid and digestive juices. The mucus protects the lining of the stomach.

The acid kills many bacteria that enter along with the food and makes the medium in the stomach acidic and helps the digestive juices to act. The digestive juices breakdown the proteins into simpler substances.

- 1) The stomach is a.....bag.  
(a) Thin walled (b) Thick walled (c) Round (d) J shaped
- 2) The.....protects the lining of the stomach.  
(a) Fluid (b) Membrane (c) Mucous (d) None of the above
- 3) Which is the widest part of alimentary canal of the human digestive system that is used for churning of food in the body?  
(a) Liver (b) Intestine (c) Stomach (d) Food pipe
- 4) What is the function of acid in the stomach?

5) What does the inner lining of the stomach secrete?

### Creative work

#### Bio

Roll no. 1-8: Scrap book on nutrition in animals and man.

Roll no. 9-16: Make a model of photosynthesis in plants.

Roll no. 17-24: Make a model based on symbiotic relationship between fungi and algae.

Roll no. 25-32: Make a model of human digestive system with different food items.

Roll no. 33-40: Make a model of digestive system of cow.

#### Physics

1. Make your own static electricity. Rub an inflated balloon on your head. Observe what happens to your hair and the balloon.(Roll No:1-15)
2. Find out five tips for electrical safety. Design a poster to show how to be safe around electricity.(Roll no:16-30)
3. Go on an insulator and conductor scavenger hunt around your home. Try to find five objects that would conduct electricity and five objects that would be insulators. Make a scrapbook on it(Roll No:-31-40)

## Maths

### CHAPTER-2 : OPERATION ON RATIONAL NUMBERS

### CHAPTER -3 : RATIONAL NUMBER AS DECIMALS

#### Choose the correct answer:

1. The additive inverse of  $\frac{-7}{8}$  is \_\_\_\_\_ .  
(a)  $\frac{-7}{8}$  (b)  $\frac{7}{8}$  (c)  $\frac{8}{7}$  (d)  $\frac{-8}{7}$
2. Identify element of subtraction of rational numbers is .  
a. 1 (b) 0 (c) -1 (d) does not exist
3.  $\frac{9}{8} \times \frac{22}{3} =$  \_\_\_\_\_ .  
(a)  $\frac{22}{24}$  (b)  $\frac{31}{11}$  (c)  $\frac{33}{4}$  (d) None of these
4.  $\frac{9}{8} \div \text{-----} = \frac{-3}{2}$  .  
(a)  $\frac{-3}{2}$  (b)  $\frac{-2}{3}$  (c)  $\frac{3}{2}$  (d)  $\frac{2}{3}$
5. Identity element for multiplication of rational numbers is \_\_\_\_\_ .  
(a)1 (b)0 (c)-1 (d) does not exist
6.  $\frac{8}{3} - 1\frac{5}{7} =$  \_\_\_\_\_  
(a)  $\frac{21}{22}$  (b)  $\frac{-22}{21}$  (c)  $\frac{22}{21}$  (d) none of these

#### Fill in the blanks.

7.  $\frac{9}{4} \times \text{-----} = 1$
8. Sum of a number and its additive inverse is equal to \_\_\_\_\_.
9.  $-2\frac{1}{9} - 6 = \text{-----}$
10. Multiplicative inverse  $-1\frac{1}{7}$  is \_\_\_\_\_.
11.  $(\frac{-4}{9} + \frac{-5}{12}) \times \frac{5}{7} = (\frac{-4}{9} \times \frac{5}{7}) + (\frac{-5}{12} \times \frac{5}{7})$  which property is used here \_\_\_\_\_.
12.  $\frac{-3}{14} \times \text{-----} = \frac{5}{12}$  .

Answer the followings

13. Add  $\frac{4}{9} + \frac{7}{4}$ .
14. What is the multiplicative inverse of  $(-2\frac{1}{3})$ .
15. Simplify ;-  $\frac{5}{4} - \frac{7}{6} - (-\frac{2}{3})$
16. Verify commutative property under addition i.e.  $x+y = y+x$  for  $x = \frac{1}{2}$  &  $y = \frac{3}{5}$ .
17. Simplify  $(\frac{6}{55} \times \frac{-22}{9}) - (\frac{26}{125} \times \frac{-10}{39})$ .
18. Find the cost of  $3\frac{1}{3}$  meters of cloth at Rs  $40\frac{1}{2}$  per metre.
19. Verify that  $x \times (y \times z) = (x \times y) \times z$  for  $x = \frac{1}{2}$ ,  $y = \frac{2}{3}$  and  $z = \frac{5}{7}$ .
20. The product of two rational numbers is -9. If one of the no. is -12, find other.
21. Find x if  $\frac{9}{8} + x = \frac{-3}{2}$
22. Subtract  $6\frac{2}{3}$  from the sum of  $\frac{-3}{7}$  and 2.
23. How many pieces, each of length  $3\frac{3}{4}$  m can be cut from a rope of length 30m?
24. A car is moving at an average speed of  $54\frac{4}{5}$  km/h. How much distance will it cover in  $7\frac{1}{2}$  hours?
25. By taking  $x = \frac{-5}{3}$ ,  $y = \frac{2}{7}$  and  $z = \frac{-1}{4}$  verify that:  $x \div (y - z) \neq (x \div y) - (y \div z)$
26. By taking  $x = \frac{3}{4}$  and  $y = \frac{-5}{6}$ , verify that  $x \div y \neq y \div x$ .
27. If 24 pairs of trouser of equal size can be prepared with 54m of cloth, what length of cloth is required for each pair of trouser ?
28. Divide the sum of  $\frac{65}{12}$  and  $\frac{8}{3}$  by their difference.
29. By what rational number should  $\frac{-8}{39}$  be multiplied to obtain  $\frac{5}{26}$  ?
30. The cost of  $2\frac{1}{2}$  m of cloth is Rs.  $78\frac{3}{4}$ , then find out the cost of cloth of  $3\frac{1}{3}$  m ?
31. A drum of kerosene oil is  $\frac{3}{4}$  full. When 15liter of oil is drawn from it, it is  $\frac{7}{12}$  full. Find the capacity of the drum.
32. The perimeter of a rectangular field is 2.4m less than  $\frac{2}{5}$  of the perimeter of a square. If the perimeter of the square is 40m, find the cost of fencing the rectangular field at Rs.3.50 per metre.
33. Area of square is 4 sq. in more than  $\frac{2}{3}$  of the area of a rectangle. If the area of square is 64 sq. m., then find the dimension of rectangle, given that breadth is  $\frac{2}{5}$  of length.
34. A train travels  $\frac{1445}{2}$  km in  $\frac{17}{2}$  hours. Find the speed of the train in km/h.
35.  $\frac{2}{5}$  of total number of students of a school come by car while  $\frac{1}{4}$  of students come by bus to school. All the other students walk to school of which  $\frac{1}{3}$  walk on their own and the rest escorted by their parents. If 224 students come to school walking on their own, how many students study in that school?
36. Convert the rational number into decimal form  $\frac{-5}{13}$ .
37. Convert  $\frac{3}{7}$  to decimals by long division methods.
38. Simplify  $\frac{2}{5} + \frac{3}{10} + \frac{7}{25}$  in the decimal form.
39. The sum of two rational numbers is  $-\frac{3}{5}$ . If one of the numbers is  $-\frac{9}{20}$ , find the other.
40. Write these fractions as decimals:  
 $\frac{3}{10}$ ,  $\frac{12}{100}$ ,  $\frac{183}{1000}$ ,  $\frac{11}{100}$   $\frac{9}{1000}$   
 $\frac{1}{2}$ ,  $\frac{3}{25}$ ,  $\frac{7}{20}$ ,  $\frac{61}{200}$ ,  $\frac{9}{125}$
41. Write these improper fractions as decimal:

$7/2$ ,  $21/20$ ,  $1001/500$ ,  $16/5$ ,  $31/25$

42. Add the following :

i) 41.8, 39.24, 5.01 and 62.6      ii) 18.03, 146.3, 0.829 and 5.324

43. Find the value of :

i)  $9.756 - 6.28$       ii)  $48.1 - 0.37$       iii)  $108.032 - 86.8$

44. Find the product:

i)  $3.14 \times 17$       ii)  $0.745 \times 12$       iii)  $28.73 \times 47$       iv)  $0.0415 \times 59$

v)  $1.07 \times 0.02$       vi)  $211.9 \times 1.13$       vii)  $10.05 \times 1.05$

45. Divide

i) 0.45 by 9      ii) 217.44 by 18      iii) 319.2 by 2.28

iv) 40.32 by 9.6      v) 0.765 by 0.9

## CREATIVE HOMEWORK

### Roll number 1 to 10

1. Name 10-12 millet recipes. Collect / Search picture of these recipes and make a beautiful collage of it in A4 sheet .

Write Sustainable Development Goal cover by using Millets in Daily Life.(A4 sheet)

### Roll number 11 to 20

2. To verify the addition of whole numbers and the multiplication of whole numbers is commutative, By paper folding method.

### Roll number 21 to 30

3. To collect information about 5 mathematicians and their contributions.(A4 sheet)

### Roll number 31 to 40

4. 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.(A4 sheet)

# SOCIAL SCIENCE

## Ch 1:Components of Environment

### 1. Fill in the blanks:

- \_\_\_\_\_ is our basic life support system.
- The \_\_\_\_\_ environment includes all non-living things like land, water and air.
- The uppermost part of the \_\_\_\_\_ is composed of rocks rich in silica and aluminum called \_\_\_\_\_.
- Among the four major elements of the environment, \_\_\_\_\_ is the most dynamic element.
- The planet earth is called the \_\_\_\_\_ planet or the \_\_\_\_\_ planet.
- \_\_\_\_\_ are an important part of the biosphere.
- The government of India passed the \_\_\_\_\_ Act in 1972.
- The two components of the natural environment, that is the \_\_\_\_\_ and the \_\_\_\_\_, are largely interdependent and cannot be separated.

### 2. Multiple Choice Questions:

- The components of the natural environment is \_\_\_\_\_ .  
a) Physical      b) Biological      c) a and b      d) none
- The natural environment can be divided into \_\_\_\_\_ spheres.  
a) 2      b) 3      c) 4      d) 5
- The \_\_\_\_\_ layer of the lithosphere has rocks rich in silica and magnesium and is generally found below the bottom of the ocean basin.  
a) Sial      b) Sima      c) None of the above      d) a and b
- The planet earth is called the blue planet because

a) of mountains on its surface    b) of abundance of water    c) of rainfall    d) of plants

e. The most dynamic element of the environment is

a) Lithosphere    b) Atmosphere    c) hydrosphere    d) Biosphere

**3. Give one word or technical term for the given statements**

a. The narrow zone of contact between all the other three spheres of environment where all kinds of life exists \_\_\_\_\_

b. All non-living components like land, water and air \_\_\_\_\_

c. The earth's solid layer \_\_\_\_\_

d. A mixture of gasses that forms envelope around earth \_\_\_\_\_

e. A variety of life on earth comprising of plants, animals and microorganism \_\_\_\_\_

f. A well demarcated reserved area for protection of wildlife where human activity is not allowed \_\_\_\_\_

4. What is an environment?

5. Name the two elements the environment has.

6. Differentiate physical environment from biological environment.

7. Name the 4 spheres in which the natural environment can be divided.

8. Why are these spheres needed on earth?

9. What is lithosphere?

10. Name the two layers of lithosphere and state what each layer is made of.

11. What is the atmosphere?

12. Why is the atmosphere considered the most dynamic sphere?

13. Why is the Earth known as the Blue Planet?

14. The distribution of water is not uniform in both the Northern and the Southern Hemispheres. Explain.

15. What is the biosphere?

16. Why are human beings considered an important part of the biosphere?

17. What has created biodiversity on earth?

18. When did the government pass the Wildlife Protection Act? What provision has been made in the Act?

19. Being an important part of the environment, what are human beings equipped with?

20. Name three critically endangered species of animals in India. What has been done to protect them?

21. Why do we need to live in harmony with our surroundings?

## **Chapter 2: The Earth and the Changes on It**

**1. Fill in the blanks:**

a. The sudden changes originate inside the earth, due to \_\_\_\_\_ or \_\_\_\_\_ activities.

b. Any process working on earth's surface and bringing changes on it, is known as \_\_\_\_\_.

c. \_\_\_\_\_ refers to the process that breaks rock into smaller pieces.

d. \_\_\_\_\_ is the loose material found on the surface of the earth.

e. Over growing population and \_\_\_\_\_ has disturbed the natural population to a large extent.

f. Along the sea shore, sea waves are the most powerful agent of \_\_\_\_\_.

g. Human beings need to take care of \_\_\_\_\_ for maintaining ecological balance

h. The \_\_\_\_\_ present in the soil contributes to the fertility of soil.

2. Name the activities that bring about sudden changes on the Earth originating from inside.

3. What brings about slow and gradual change on the Earth surface?

4. How do humans play an important role in changing the surface of the earth?

5. How can external processes affect the level of land?

6. What is weathering? What causes it?

7. List the various agents of gradation.

8. What happens to a river before it meets the sea?

9. What is a glacier? Where do you find glaciers in India?

10. Where does the wind act as the gradation agent and why?
11. How are the steep sided cliffs facing the sea formed?
12. How is soil formed? What does the soil include?
13. Draw a diagram showing the layers of soil.
14. How can the soil erosion be checked?

## Chapter- 9: Medieval Period

### 1. Fill in the blanks:

- a. In Europe the period from the fifth to the Fifteenth Century is known as the \_\_\_\_\_ period.
- b. In India, the period from the Eight to the \_\_\_\_\_ Century CE marks the beginning and the end of the Medieval Period.
- c. In ancient India, Indian \_\_\_\_\_ had remained aloof from the outside world.
- d. The main sources of information of the Medieval Period are \_\_\_\_\_ and archaeological findings.
- e. Prithviraj Raso written by \_\_\_\_\_ throws light on administration and life of people during the reign of Prithviraj Chauhan.
- f. \_\_\_\_\_ or biography of Akbar was written in Persian.
- g. The significant achievement of the medieval period was the popularity and the availability of \_\_\_\_\_.
- h. \_\_\_\_\_ records of the Medieval Period exist in a variety of languages.

### 2. Multiple Choice Questions:

- A. The Medieval Period in India was from
  - a) Fifth to Thirteenth century
  - b) Fifth to Fifteenth century
  - c) Eighth to Eighteenth Century
  - d) None of the above
- B. Prithviraj Raso by Chand Bardai throws light on
  - a) Administration
  - b) life of people under the reign of Prithviraj
  - c) a and b
  - d) none of the above
- C. The historical accounts were written in \_\_\_\_\_ under the Muslim rulers.
  - a) Urdu
  - b) Persian
  - c) English
  - d) none of the above
- D. Which of the following give us information about the different aspects of the society and culture?
  - a) Excavation of towns
  - b) paintings
  - c) coins
  - d) all the above
3. Name the three periods in which history is divided.
4. Was the Medieval Period of history in India and Europe at the same time? Specify the period.
5. In the ancient period what kind of culture did India have?
6. How is it evident that Indian culture was influenced during the Medieval Period?
7. What are the main sources of information of this period?
8. What does literature of this period consist of?
9. What gives us information about the social, the economic and political condition of that time?
10. The autobiographies, orders of rulers and letters written during this period also help us to understand the life of people. Explain with examples.
11. How can it be said that Muslim rulers encouraged the writing of historical accounts?
12. Name foreign travelers whose accounts are an important source.
13. Which significant achievement encouraged writing?
14. What kind of historical records exist? What are the various changes they have undergone?
15. What provides information to the historians? Why is their job tough in this period?
16. What are different technological developments that took place in this period?
17. What gives us information about the different aspects of society and culture?

### Assertion and Reason-

**Direction-** In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Mark the correct choice as:

- A. Both Assertion (A) and Reason (R) are true and the reason is the correct explanation of Assertion.
- B. Both Assertion (A) and Reason (R) are true but reason is not the correct explanation of Assertion.
- C. Assertion (A) is true but Reason (R) is false.
- D. Assertion (A) is false but Reason (R) is true.
  - a. **Assertion-** The Biological environment includes all living and non-living things.  
**Reason-** Man is the most important component of biological environment.
  - b. **Assertion-** Atmosphere is the most dynamic sphere in nature.  
**Reason-** There can be sudden change in atmosphere within a short period of time.
  - c. **Assertion-** Weathering refers to the process that breaks rock into smaller particles.  
**Reason-** Erosion refers to gradual wearing and carrying away of those loose particles which lie exposed on the earth's surface by the weathering agents of gradation.
  - d. **Assertion-** Human beings need to take care of all the resources for maintaining ecological balance.  
**Reason-** This can be achieved by sustainable development.

**Read the given extract and answer the following questions:**

The main sources of information of the medieval period are literature and archaeological findings. The literature of this period consists of religious works and commentaries (based on Puranas, Smrities, etc.). We get a lot of information about the social, economic, political and military conditions of that period from non-religious works on medicine, astronomy, dramas, stories and other literature. The autobiographies, orders of the rulers and letters written during that period also help us to understand the life of the people during the medieval period. For example, Prithviraj Raso written by Chand Bardai throws light on the administration and the life of the people in north India during the reign of Prithviraj Chauhan.

Muslim rulers encouraged the writing of historical accounts. The well-known works of history of this period are Tahqiq-i-Hind (Al-Biruni), Ain-i-Akbari (Abul Fazl), etc., which were written mainly in Persian. The travel accounts of foreign visitors, like Ibn Battutah, Marco Polo and Bernier, are also important sources of information about that time.

- a. In India, what marks the beginning of the medieval period?
- b. What is an autobiography?
- c. Name any two foreign visitors came to India during medieval period.

**Read the given extract and answer the following questions:**

Removal of the top layer of soil is called soil erosion. We must understand that soil erosion is a serious problem affecting land all over the world. In certain areas, the soil erosion has become menace which causes decline in the crop yield. This is happening due to wrong human practices cutting of trees, overgrazing by animals, besides many other reasons. Soil erosion needs to be checked through appropriate measures of soil conservation, such as plantation of trees, selective agricultural practices like crop rotation and multiple cropping method, development and management pasture land. We need mass awareness and adoption of these practices at local level.

- a. Define soil erosion.
- b. What are the various reasons for soil erosion in India?
- c. What are the various methods of soil conservation?

## Project Work

1. Make a working model of Meanders (River System) (Roll No:- 1-20)
2. In a Glass jar make different Layers of Soil. (Roll No:- 21-40)

### संस्कृतम्

प्रश्न :1 मञ्जूषायाः सहायतया रिक्तस्थानानि पूरयित्वा अनुच्छेदपूर्ति कुरुत।

वृक्षस्य-आत्मकथा

अहं वृक्षः अस्मि। अहं परोपकाराय फलामि। अहं पूर्वं .....आसम्। अधुना अहं ..... सघनः वक्षः अस्मि।  
अहं शीतला ..... छायां यच्छामि। खगाः आगच्छति। ते मम ..... उपविशन्ति। ते स्वशावकेभ्यः .....  
रचयन्ति। यदा ते कूजन्ति अहं .....। भवामि। अहं सर्वेभ्यः शुद्धं ..... च यच्छामि।

मञ्जूषा - फलानि, शाखासु, वायुम्, प्रसन्नः पथिकेभ्यः, विशालः, बीजरूपेण, नीडम्

प्रश्न :2 प्रथमद्वितीयस्य पाठस्य पूर्णवाक्येन प्रश्नोत्तराणि अभ्यासपुस्तिकायां लिखन्तु।

प्रश्न :3 प्रथमद्वितीयस्य पाठस्य शब्दार्थान् लिखन्तु स्मरणं च कुर्वन्तु।

प्रश्न :4 द्वितीय पाठस्य प्रश्नोत्तराणि अभ्यासपुस्तिकायां लिखन्तु।

प्रश्न :5 "ईश्वर! तव महिमानं वन्दे" इति प्रार्थनां A4 size पत्रे लिखन्तु स्मरणं च कुर्वन्तु।

प्रश्न :6 अस्मद्, युस्मद् सर्वनामशब्दयोः विभक्त्यः सह लिखित्वा चार्टनिर्माणं कुर्वन्तु। (रोल नंबर 1-13)

प्रश्न :7 व्याकरणभागात् अव्ययपदानां चित्वा अर्थसहितं चार्टनिर्माणं कुर्वन्तु। (रोल नंबर 14-26)

प्रश्न :8 उपसर्गान् पठित्वा चार्टनिर्माणं कुर्वन्तु। (रोल नंबर 27-40)