

# DAV VEDANTA INTERNATIONAL SCHOOL, LANJIGARH

## HOLIDAY HOME WORK CLASS-VII

### ENGLISH

1. Enlist all the types of **sentences** with **5** examples of each.
2. Write **20 affirmative sentences** and transform them into **interrogative**.
3. Learn all the question answers of the lessons (Literature) –

### **‘Monkey Trouble’ & ‘Birdie, will You Pet?’**

4. Read the following lessons of lessons Unit-I “**People at Work**” of “**My English Reader**” and prepare the vocabulary works-

**(a) The New Assistant (b) Teachers’ prayer (c) The Vendor of Sweets (d) Caution- Men at Work**

### ACTIVITY:

Collect the pictures of some people involved in particular occupations. **(At least 5)** Write about them about their importance in our society. **(Use Chart Paper - 2 pages)**

### SCIENCE

1. What is symbiotic relationship? Explain with example.
2. Explain the process of photo synthesis. Write its equation. Also write the raw materials and products.
3. Write the procedure followed for writing the chemical formula of a substance. With examples in each step discuss the same.
4. Differentiate between pure substance and mixture with examples.
5. Draw the flow-chart to show the modes of nutrition in plants.

### **ACTIVITY**

1. Make a chart for different cations and anions.
2. Prepare CARTOON ARTS for the interaction of different parts of a plant.

## **SOCIAL SCIENCE**

1. Differentiate between the physical and the biological environment. (Geo)
2. On an outline map of India. Locate and label the areas of major soil types. (Page no.-11) (Geo)
3. Prepare a comparative table as per the following format about the Rashtrakutas, the Palas and the Pratiharas from different sources.

Dynasty	Names of the Kings	The Period	Religion	Literary Achievements	Art and Architecture
Rashtrakutas					
Palas					
Pariharas					

4. Collect the pictures of miniature painting and mural painting and differentiate between them.
5. Collect the information about Shankaracharya.
6. Recite the preamble.

## **HINDI**

- प्रश्न. 1 ऋतुओं के बारे में बताते हुए एक स्व-रचित कविता लिखिए।
- प्रश्न. 2 दस मुहावरे अर्थ सहित सारणी के माध्यम से प्रदर्शित कीजिए।
- प्रश्न. 3 आपका नाम काव्या कुमारी / दिनेश कुमार है आप अपने विद्यालय में फीस कम (शुल्क मुक्ति) करने के लिए अपने प्रधानाचार्य को एक प्रार्थना पत्र लिखिए।
- प्रश्न. 4 पाठ में आए संज्ञा शब्दों का एक ट्री चार्ट या वृक्ष प्लान बनाइए।
- प्रश्न. 5 हिंदी मास के अनुसार आने वाले महीने व त्योहार के नाम लिखिए।

## SANSKRIT

- 1) सर्वनाम शब्दानां ( तत्, एतत्, किं ) रूपं त्रिषु लिङ्गेषु स्मरन्तु लिखन्तु च।
- 2) अकारान्त पुलिङ्ग शब्दानां रूपं ( बालक, पर्वत ,राम ) स्मरन्तु लिखन्तु च ।
- 3) आकारान्त स्त्री लिङ्ग शब्दानां रूपं ( लता, सीता ,कविता ) स्मरन्तु लिखन्तु च।
- 4) इकारान्त पुल्लिङ्ग शब्दानाम् रूपं ( मुनि , अग्नि, हरि ) स्मरन्तु लिखन्तु च ।
- 5) पञ्चधातूनां(खाद् .हस् ,लिख् ,पा, दृश्) लट् लकार लङ्ग लकार च रूपं लिखत ।
- 6) दश अव्ययपदानां नामानि लिखत ।
- 7) प्रथमतःपञ्चमपर्यन्तं विषयाणां no.6 प्रश्नानाम् उत्तरं लिखत ।

### ସଂସ୍କୃତ ଶ୍ରେଣୀ (ଓଡ଼ିଆ)

୧- ରାମାୟଣର ଯେ କୌଣସି ତିନୋଟି ଆଦର୍ଶ ଚରିତ୍ର ବିଷୟରେ ଲେଖି ଫଟୋ ଚିତ୍ର ସଂଗ୍ରହ କର ।

୨- ଅଂଶୁଭାଗରୁ ନିଜକୁ କିପରି ରକ୍ଷା କରିବ , ସେ ସମ୍ପର୍କରେ ଉପଦେଶ ଦେଇ ସାନ ଭାଇ ପାଖକୁ ପତ୍ର ଲେଖ ।

୩- ଓଡ଼ିଶାର ଯେ କୌଣସି ଦୁଇଟି ଦର୍ଶନୀୟ ସ୍ଥାନ ସଂପର୍କରେ ଲେଖ ( ଫଟୋଚିତ୍ର ସହ) ।

# MATHEMATICS

## WORKSHEET-1

1. Verify whether the following pair of rational numbers are equivalent or not.

(i)  $\frac{-7}{3}$  and  $\frac{28}{-12}$

(ii)  $\frac{17}{7}$  and  $\frac{49}{11}$

2. Express  $\frac{5}{8}$  as a rational number with

(i) Numerator -75

(ii) Denominator 64

3. Simplify the following.

(i)  $(-105) \times 3 + 285 - 147$

(ii)  $[225 \div (-15)] \times [(-121) \div 11]$

4. Write the rational numbers in  $\frac{p}{q}$  form if,

(i) Numerator =  $5 \times (-3)$  and denominator =  $(-11) + 7$

(ii) Numerator =  $75 \div (-5)$  and denominator =  $13 - (-12)$

5. Find the value of x and y in each of the followings.

(i)  $\frac{5}{8} = \frac{65}{x} = \frac{y}{-512}$

(ii)  $\frac{9}{x} = \frac{-27}{y} = \frac{1}{-3}$

6. Write the following rational numbers in standard form,

(i)  $\frac{84}{-124}$  (ii)  $\frac{-125}{210}$

7. Write the absolute values of the following rational numbers

(i)  $\frac{-7}{3}$  (ii)  $\frac{1}{-3}$  (iii)  $\frac{-9}{-12}$  (iv)  $\frac{28}{-12}$

8. Represent the following rational numbers on the number line.

(i)  $\frac{-17}{3}$  (ii)  $\frac{11}{-3}$  (iii)  $\frac{19}{5}$  (iv)  $5\frac{3}{7}$

9. Arrange in ascending order.

$$\frac{-5}{6}, \frac{11}{-12}, \frac{-8}{9}, \frac{7}{-8}.$$

10. Arrange in descending order.

$$\frac{13}{8}, \frac{15}{12}, \frac{-18}{16}, \frac{7}{-8}.$$

11. Write a short biography on any one Indian mathematician and his/her contribution to mathematics.

12. Add: (i)  $\frac{9}{11}$  and  $\frac{17}{11}$  (ii)  $\frac{7}{-18}$  and  $\frac{-19}{18}$  (iii)  $\frac{-13}{15}$  and  $\frac{17}{30}$   
 (iv)  $\frac{23}{25}$  and  $\frac{11}{15}$
13. Subtract: (i)  $\frac{8}{15}$  from  $\frac{23}{15}$  (ii)  $\frac{-17}{-18}$  from  $\frac{-9}{18}$  (iii)  $\frac{-11}{12}$  from  $\frac{17}{-16}$  (iv)  $3\frac{3}{5}$  from  $\frac{11}{15}$
14. Name the following properties. ( where x, y and z are rational numbers )  
 (i)  $x + y = y + x$  . (ii)  $x \times y = y \times x$  .  
 (iii)  $x + (y + z) = (x + y) + z$  . (iv)  $x \times (y \times z) = (x \times y) \times z$  .  
 (v)  $x \times (y + z) = (x \times y) + (x \times z)$  .
15. Simplify:  
 (i)  $\frac{4}{5} + \frac{7}{4} + \frac{11}{15} + \frac{9}{8}$  .  
 (ii)  $\frac{-5}{12} + \frac{8}{-6} + \frac{15}{18} + \frac{-17}{36}$  .  
 (iii)  $3\frac{1}{4} - 2\frac{5}{8} + 1\frac{2}{5} - \frac{-7}{2}$  .
16. (i) If  $x = \frac{-5}{8}$  ,  $y = \frac{9}{4}$  , verify that  $x + y = y + x$  .  
 (ii) If  $p = \frac{-5}{7}$  ,  $q = \frac{5}{4}$  , verify that  $p - q \neq q - p$  .  
 (iii) If  $a = \frac{-15}{8}$  ,  $b = \frac{-9}{12}$  , verify that  $a \times b = b \times a$  .  
 (iv) If  $x = \frac{-15}{18}$  ,  $y = \frac{9}{6}$  and  $z = \frac{-11}{12}$  , verify that  $x + (y + z) = (x + y) + z$  .  
 (v) If  $x = \frac{-15}{18}$  ,  $y = \frac{9}{25}$  and  $z = \frac{-11}{12}$  , verify that  $x \times (y \times z) = (x \times y) \times z$  .

### WORKSHEET-2

- Represent  $\frac{1}{5}$  ;  $\frac{-3}{5}$  ;  $\frac{7}{5}$  on the same number line.
- Find 'x' if  $\frac{2}{7} = \frac{4}{x}$  .
- On a number line what is the length between  $\frac{-1}{5}$  and  $-2\frac{1}{5}$  .
- Compare the pair of rational numbers  $|\frac{-8}{7}|$  and  $|\frac{8}{5}|$  .
- Which one is greatest out of  $\frac{2}{5}$  ;  $\frac{-5}{5}$  ;  $\frac{7}{5}$  .
- Arrange the following in ascending order:

$$\frac{4}{7}, \quad \frac{5}{9}, \quad \frac{2}{5}, \quad \frac{1}{3}$$

7. Arrange the following rational number in descending order.

(i)  $-3/10, -7/5, 9/-15, 18/30$

(ii)  $-3/4, -5/-12, -7/16, 3/2$

8. (a) Find the missing number:-  $\frac{105}{\text{---}} = \frac{\text{---}}{-99} = \frac{-5}{-11}$

(b) Compare  $:- \frac{-5}{7}$  and  $\frac{9}{-13}$

9. Find any three rational numbers between  $\frac{-2}{3}$  and  $\frac{1}{2}$ .

10. Represent the following on the number line.

a)  $\frac{2}{3}$

b)  $-\frac{25}{6}$

11. Express :  $\frac{-4}{7}$  as a rational number with ; (i) numerators 12 (ii) denominator 42

12. Find the reciprocal of  $\frac{-2}{3} \times \frac{5}{7} + \frac{2}{9} \div \frac{1}{3} \times \frac{6}{7}$

13. Arrange the rational numbers in descending order  $\frac{-6}{5}; \frac{2}{-3}; \frac{7}{10}; \frac{8}{15}$

14. Arrange the rational numbers in ascending order  $\frac{-16}{15}; \frac{-12}{-30}; \frac{7}{10}; \frac{6}{15}$ .

### WORKSHEET-3

1. Find the product of  $-5/7$  and its reciprocal.

2. Verify  $(X+Y)+Z=X+(Y+Z)$  for  $X=2/5, Y=3/4$  and  $Z=1/4$ .

3. Verify  $(X-Y)-Z \neq X-(Y-Z)$  for  $X=1/5, Y=-3/5$  and  $Z=2/5$ .

4. Verify  $(X+Y) \div Z = X \div Y + X \div Z$  for  $X=1/3, Y=-3/4$  and  $Z=2/5$ .

5. A tin holds  $16\frac{1}{2}$  litres of oil. How many such tins will be required to hold  $313\frac{1}{2}$  litres of oil?

6. Show that  $\frac{3}{5} \left( -\frac{1}{7} - \frac{5}{14} \right) = \frac{3}{5} \times \frac{-1}{7} - \frac{3}{5} \times \frac{5}{14}$

7. Divide the difference of  $\frac{12}{5}$  and  $\frac{-16}{20}$  by their product.

8. Verify  $x + y = y + x$  by taking  $x = \frac{5}{7}$  and  $y = \frac{-3}{2}$

9. For  $x = \frac{-5}{11}$  &  $y = \frac{7}{3}$ , Verify that  $(x \div y)^{-1} = x^{-1} \div y^{-1}$

10. Simplify and express the result as a rational number in its lowest term.

$$\frac{2}{5} - \frac{1}{4} + (8.1 \times 2.7) \div 0.09$$

11. Simplify:  $\frac{-4}{8} + \frac{7}{13} + 9$

12. Verify:  $\frac{3}{5} \times (\frac{-1}{7} - \frac{5}{14}) = (\frac{3}{5} \times \frac{-1}{7}) - (\frac{3}{5} \times \frac{5}{14})$

13. Divide the sum of  $\frac{5}{21}$  and  $\frac{4}{7}$  by their difference.

14. For  $x = \frac{3}{4}$  and  $y = \frac{-9}{8}$ , insert a rational number between  $(x - y)^{-1}$  and  $x^{-1} - y^{-1}$ .

15. Find the value of  $x - y$  and  $y - x$  for  $x = \frac{2}{3}$  and  $y = \frac{5}{9}$ . Are they same?

16. Simplify and express the result in standard form.  $-4 \times (\frac{7}{3} - \frac{5}{6})$

17. The cost of  $2\frac{1}{2}$  m of cloth is Rs  $78\frac{3}{4}$ . Find the cost of cloth per metre.

18. How many pieces each of length  $3\frac{3}{4}$  m, can be cut from a rope of length 30 metres?

19. By what rational number should  $\frac{-8}{39}$  be multiplied to obtain  $\frac{5}{26}$ ?

20. Show that  $\frac{3}{5} \times (\frac{-1}{7} - \frac{5}{14}) = (\frac{3}{5} \times \frac{-1}{7}) - (\frac{3}{5} \times \frac{5}{14})$

21. Verify that  $(x - y)^{-1} \neq x^{-1} - y^{-1}$  by taking  $x = \frac{-2}{7}$ ,  $y = \frac{4}{7}$

#### WORKSHEET-4

1. Raju earns Rs16000 per month. He spends  $\frac{1}{4}$  of his income on food;  $\frac{3}{10}$  of the remainder on house rent and  $\frac{5}{21}$  of the remainder on education of children. How much money is still left with him?

2. Simplify:  $(-\frac{3}{7}) \times \frac{6}{5} + (\frac{1}{10}) \times \frac{3}{2} - (\frac{6}{5}) \times (\frac{1}{14})$

3. If  $\frac{6}{7} \times (-\frac{3}{13}) + (\frac{3}{26}) - (\frac{3}{13}) \times (\frac{8}{7}) = (\frac{3}{26}) - (m) \times 2$ , then what is the value of m?

4. If  $x = \frac{2}{3}$ ,  $y = \frac{4}{5}$ ,  $z = \frac{3}{4}$  show that  $x \div (y + z) \neq (x \div y) + (x \div z)$ .

5. Simplify and Express the result in a lowest form.

$$\frac{2}{5} \times \frac{3}{4} + \frac{1}{25} \times \frac{1}{2} - \frac{2}{10} \times \frac{1}{5}$$

6. (a) The product of two numbers is  $-\frac{25}{16}$ , One number is  $-\frac{5}{4}$ , Find the other number.

(b) Find reciprocal of  $\frac{2}{5} \times \frac{5}{7}$

7. By taking  $x = \frac{-2}{3}$ ,  $y = \frac{5}{9}$ ,  $z = \frac{-1}{6}$ , verify that  $(x + y) \div z = (x \div z) + (y \div z)$

8. By taking  $X = \frac{-3}{5}$ ,  $Y = \frac{7}{10}$ ,  $Z = \frac{-7}{4}$

Prove that  $X \times (Y + Z) = X \times Y + X \times Z$

9. If 24 pairs of trousers of equal size can be prepared with 54 m of cloth, what length of cloth is required for each pair of trousers?

10. A car is moving at average speed of  $36\frac{4}{5}$  Km per hour. What distance will it cover in  $7\frac{1}{2}$  hour?

11. The product of two rational numbers is -9, If one of the number is -12. Find the other.

12. By taking  $x = -\frac{5}{8}$ ,  $y = \frac{2}{7}$ ,  $z = -\frac{1}{4}$ , verify that  $x \div (Y - Z) \neq (X \div Y) - (X \div Z)$