

### Kailash Vidya Vihar: Nimbahera

(ISO 9001 : 2015)

### **Summer Vacation Assignments: 2019-20**

**Class VIII** 

**Subject: Mathematics** 

# CTION \_A /FIXED RESPONSE TYPE)

		SECTION -A (FIXE	D RESPONSE THE	4
		OBJECTIVE	QUESTIONS	
1.	Which of the follo	owing is prime (B) 241	(C) 341	(D) 441
2.	Which of the follo	owing natural numbers is (B) 1	neither prime nor com (C) 2	posite. (D) None
3.	<ul><li>(A) is a positive in (B) is a negative</li></ul>	rational number a positive or a negative		
4.	Lowest form of $\frac{-}{3}$	219 365		
	(A) $-\frac{73}{125}$	(B) $-\frac{3}{5}$	(C) $\frac{3}{5}$	(D) None of these
5.	-138 - -243  =	?		
	(A) 105	(B) 381	(C) -381	(D) - 105
6.	Which of the follow	wing is (are) greater thar	1 x when x = $\frac{9}{11}$ ?	
	(i) $\frac{1}{x}$	(ii) $\frac{x+1}{x}$	(iii) $\frac{x+1}{x-1}$	
,	(A) (i) only	(B) (i) and (ii) only	(C) (i) and (iii) only	(D) (ii) and (iii) only
7.	Arrange the follow	ing fractions in ascendin	g order $\frac{3}{7}, \frac{4}{5}, \frac{7}{9}, \frac{1}{2}$	
9	(A) $\frac{4}{5}$ , $\frac{7}{9}$ , $\frac{3}{7}$ , $\frac{1}{2}$	(B) $\frac{3}{7}, \frac{1}{2}, \frac{7}{9}, \frac{4}{5}$	(C) $\frac{4}{5}$ , $\frac{7}{9}$ , $\frac{1}{2}$ , $\frac{3}{7}$	(D) $\frac{1}{2}$ , $\frac{3}{7}$ , $\frac{7}{9}$ , $\frac{4}{5}$
8.	Multiplicative inver	se of $\frac{3}{5}$ is :		* *
	(A) 1	(B) 0	(C) $\frac{-3}{5}$	(D) $\frac{5}{3}$
9.	What number shou	ld be subtracted from –	5 to get $\frac{8}{9}$ .	
	(A) <u>-53</u>	(B) 37	9	- <b>a</b>

10.	lf
(")	•

x/y = 6/5 then  $\frac{x^2 + y^2}{x^2 - y^2}$  is:

(A) 
$$\frac{36}{25}$$

(B) 
$$\frac{25}{36}$$

(B) 
$$\frac{25}{36}$$
 (C)  $\frac{11}{61}$ 

$$_{1}$$
 (D)  $\frac{61}{11}$ 

- The product of a non zero rational number with an irrational number is : 11.
  - (A) Irrational number (B) Rational number (C) Whole number
- (D) Natural number
- If  $\frac{3}{11}$  of a number is 22, what is  $\frac{6}{11}$  of that number? 12.
  - (A) 6
- (B) 11
- (C) 12
- (D) 44
- How many rational numbers exist between any two distinct rational numbers ? (A) 2
- (B)3
- (C) 11
- (D) Infinite

- Rational number between 1 and 2
  - (A)  $\frac{5}{6}$
- (B)  $\frac{6}{5}$
- (C)  $\frac{3}{7}$

### **FILL IN THE BLANKS**

All natural numbers that have one and itself as their only 2 distinct factors are  $\frac{1}{11}$  is  $\frac{$ 1.

Lowest form of 8/12 is  $\frac{2}{3}$ .

4. 
$$\frac{3}{7} \times \frac{5}{8} = \frac{3}{7} \times \frac{5}{7}$$

5. 
$$\frac{3}{7} \times \left(\frac{5}{8} + \frac{4}{7}\right) = \frac{3}{7} \times \frac{5}{8} + \frac{3}{7} \times \frac{1}{2}$$

6. 
$$\frac{37}{58} \times \frac{58}{37} = 1$$
.

7. 
$$\frac{4}{9} \times 1 = \frac{4}{9}$$
.

8. 
$$\frac{-5}{9} + \frac{5}{9} = 0.$$

- Additive inverse of 5 is \_\_\_\_\_.
- 10. Product of 2/3 and -3/2 is - \ .

RAT	MOL	IAL	NI	IMP	FRS

- Which rational number is its own additive inverse? (i)
  - (ii) Is the difference of two rational numbers a rational number?
  - Is addition commutative on rational numbers? (iii)
  - Is addition associative on rational numbers? (iv)
  - Is subtraction commutative on rational numbers? (v)
  - Is subtraction associative on rational numbers? (vi)
  - What is the negative of negative rational number? (vii)
- The cost of  $3\frac{7}{9}$  m cloth is Rs  $212\frac{4}{5}$ .. Find the cost of  $7\frac{2}{3}$  m cloth. 18.
- 19. Simplify:
  - $2\frac{3}{4} \times 1\frac{2}{3} + 9\frac{11}{12} 1\frac{5}{6}$ .
- (ii)  $5 \left[ \frac{3}{4} + \left\{ 2\frac{1}{2} \left( 0.5 + \overline{\frac{1}{6} \frac{1}{7}} \right) \right\} \right]$

### SECTION -A (COMPETITIVE EXAMINATION QUESTION)

#### **OBJECTIVE QUESTIONS**



There are four prime numbers written in ascending order. The product of the first three is 385 and that of the last three is 1001. The last number is :

- (A) 11
- (B) 13
- (D) 19



Let x, y and z be distinct integers where x and y are odd and positive, and z is even and positive. Which one of the following statements cannot be true?  $(A) (x-z)^2 y$  is even  $(B) (x-z) y^2$  is odd

- (C) (x z)y is odd
- (D)  $(x y)^2z$  is even

Choose the rational number which does not lie between rational numbers 3/5 and 2/3 3.

- (A) 46/75
- (B) 47/75
- (C) 49/75
- (D) 50/75

4.

Evaluate:  $\frac{8 - [5 - (-3 + 2)] \div 2}{|5 - 3| - |5 - 8| \div 3}$ .

(A)2

(C)4

(D) 5

A student was asked to multiply a number by  $\frac{3}{2}$ . Instead he divided the number by  $\frac{3}{2}$  and

obtained a number smaller by  $\frac{2}{3}$ , the number is :

- (A)  $\frac{4}{5}$
- (B)  $\frac{3}{5}$
- (C)  $\frac{2}{3}$
- (D)  $\frac{1}{2}$

6. Which one of the following is Rational number in simplest form?

- (A)  $\frac{-8}{28}$
- (B)  $\frac{-13}{38}$
- (C)  $\frac{14}{40}$

7. If a and b are positive integers, then which of the following is correct?  (A) a + b is rational  (B) a - b is a positive integer							
	(C) $\frac{a}{b}$ is irrational	al	(D) None of the	ese			
8.		$\div \frac{5}{4} + \frac{3}{5}$ is equal (					
	(A) $1\frac{69}{80}$	(B) $1\frac{41}{80}$	(C) $2\frac{2}{9}$	(D) $20\frac{7}{9}$			
9.	The product (2 -	$-\frac{1}{3}\bigg)\bigg(2-\frac{3}{5}\bigg)\bigg(2-\frac{5}{5}\bigg)$	$\left(2-\frac{97}{99}\right)$ is equ	ual to :			
	(A) $\frac{5}{99}$	(B) $\frac{101}{99}$	(C) $\frac{101}{3}$	(D) <del>97</del>			
10.)	The product of the	e following fractions	3				
	$\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$	1_1	1 1				
W.	The product of the $\frac{1}{2} - \frac{1}{3} \times \frac{1}{4} - \frac{1}{5} = \frac{1}{3} - \frac{1}{4} \times \frac{1}{5} = \frac{1}{6}$	$\times \frac{6}{1} - \frac{7}{1} \times \dots \times \frac{6}{1} \times \frac{7}{1} $	99 99 1 1 : is :				
	3 4 5 6 (A) 2	7 8 9 (B) 50	9 100	15)			
	( ) _		(C) 100	(D) <b>Q</b>			
		SECTION -	B (TECHIE STUFF)	*			
11.	0.018 can be exp	pressed in the ration	nal form as :				
	(A) $\frac{18}{1000}$	(B) $\frac{18}{990}$	(C) $\frac{18}{9900}$	(D) $\frac{18}{999}$			
12.	On dividing a num	ber by 999, the quo	otient is 366 and the ren	nainder is 103. The number is:			
	(A) 364724	(B) 365387	(C) 365737	(D) 366757			
13)	The number 2.525 the sum of the num			en reduced to the lowest term,			
	(A) 7	(B) 29	(C) 141	(D) 340			

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### **SECTION -A (PREVIOUS YEAR EXAMINATION QUESTIONS)**

1.	0.2 + 0.3 + 0.	4+0.5 is equiralent to		[Aryabhatta 2005]
	(A) $\frac{14}{9}$	(B) $\frac{15}{9}$	(C) $\frac{1}{3}$	(D) 1

2. If a number is divided by 45, then the remainder is 32. if the same number is divided by 15, then the remainder is

(A) 2

(B) 3

(C) 16

(D) 4

4. The product of $x^2y$ and $\left(\frac{x}{y}\right)$ is equal to the quotient obtained when $x^2$ is divided by  [NSTSE 2010]  (A) 0 (B) 1 (C) X (D) $\frac{1}{x}$ 5. If $1+\frac{1}{x}=\frac{x+1}{x}$ , which does 'x' equal to?  (A) 1 or 2 only (D) any number except '0'  (A) 1 or 2 only (D) any number except '0'  (A) $\frac{1}{4}$ (B) $\frac{9}{10}$ (C) $\frac{17}{30}$ (D) 1  7. Which of the statements is true about consecutive natural numbers?  (A) There are $2n + 1$ numbers between squares of consecutive numbers.  (B) There are $2n + 1$ numbers between squares of consecutive numbers.  (C) The sum of the squares of two consecutive numbers is not a perfect square (D) $n^2 - 1$ is the standard form of the difference between two consecutive numbers.  8. Identify the ones that is/are greater than 'm' if $m = \frac{9}{11}$ [NSTSE 2014]  (i) $\frac{1}{m}$ (ii) $\frac{m+1}{m}$ (iii) $\frac{m+1}{m-1}$ (A) (i) only (B) (ii) and (iii) only (C) (i) and (iii) only (D) (i) and (ii) only 9. Which number is in the middle if $\frac{-1}{6}$ , $\frac{4}{9}$ , $\frac{6}{-7}$ , $\frac{2}{5}$ and $\frac{-3}{4}$ are arranged in descend order (NSTSE 2014).  If the division N + 5 leaves a remainder of 3, what might be the ones digit of N?	3.	A rational numb	per can be expressed as	a terminating dec	[NSTSE 2010]
[NSTSE 2010]  (A) 0 (B) 1 (C) X (D) $\frac{1}{x}$ 5. If $1+\frac{1}{x}=\frac{x+1}{x}$ , which does 'x' equal to?  (A) 1 or 2 only (B) 1 and 0 only (C) +1 or -2 only (D) any number except '0'  6. Identify a rational number between $\frac{1}{3}$ and $\frac{4}{5}$ [NSTSE 2012]  (A) $\frac{1}{4}$ (B) $\frac{9}{10}$ (C) $\frac{17}{30}$ (D) 1  7. Which of the statements is true about consecutive natural numbers?  (A) There are $2n + 1$ numbers between squares of consecutive numbers.  (B) There are $2n + 1$ numbers between squares of consecutive numbers.  (C) The sum of the squares of two consecutive numbers is not a perfect square (D) $n^2 - 1$ is the standard form of the difference between two consecutive numbers.  8. Identify the ones that is/are greater than 'm' if $m = \frac{9}{11}$ [NSTSE 2014]  (i) $\frac{1}{m}$ (ii) $\frac{m+1}{m}$ (iii) $\frac{m+1}{m-1}$ (NA) (i) only (B) (ii) and (iii) only (C) (i) and (iii) only (D) (i) and (ii) only  9. Which number is in the middle if $\frac{-1}{6}$ , $\frac{4}{9}$ , $\frac{6}{-7}$ , $\frac{2}{5}$ and $\frac{-3}{4}$ are arranged in descend order (NSTSE 2014)  (A) $\frac{2}{5}$ (B) $\frac{4}{9}$ (C) $\frac{-1}{6}$ (D) $\frac{-6}{7}$ 10. If the division N + 5 leaves a remainder of 3, what might be the ones digit of N? (NSTSE 2014)  (A) 2 (B) 3 (C) 4 (D) 6		(A) 2 or 5	(B) 3 or 5	(C) 2, 3 or 5	(D) None of these
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order  (A) $\frac{2}{5}$ (B) $\frac{4}{9}$ (C) $\frac{-1}{6}$ (D) $\frac{-6}{7}$ 10. If the division N ÷ 5 leaves a remainder of 3, what might be the ones digit of N?  [NSTSE 2014]  (A) 2  (B) 3  (C) 4  (D) 6	8.	numbers. (C) The sum of (D) n² – 1 is the	the squares of two consects standard form of the differes that is/are greater than 'r	eutive numbers is not rence between two or m' if m = $\frac{9}{11}$	ot a perfect square consecutive numbers
(A) $\frac{2}{5}$ (B) $\frac{4}{9}$ (C) $\frac{-1}{6}$ (D) $\frac{-6}{7}$ 10. If the division N ÷ 5 leaves a remainder of 3, what might be the ones digit of N?  [NSTSE 2014]  (A) 2 (B) 3 (C) 4 (D) 6  11. Which of the following numbers does NOT have a multiplicative inverse? [NSTSE 2014]	8.	numbers. (C) The sum of (D) $n^2 - 1$ is the Identify the one (i) $\frac{1}{m}$	the squares of two consects standard form of the differences that is/are greater than 'r' (ii) $\frac{m+1}{m}$	eutive numbers is not rence between two m' if m = $\frac{9}{11}$ (iii) $\frac{m+1}{m-1}$	ot a perfect square consecutive numbers [NSTSE 2014]
<ul> <li>10. If the division N ÷ 5 leaves a remainder of 3, what might be the ones digit of N?  [NSTSE 201]  (A) 2 (B) 3 (C) 4 (D) 6</li> <li>11. Which of the following numbers does NOT have a multiplicative inverse? [NSTSE 2014]</li> </ul>		numbers. (C) The sum of (D) $n^2 - 1$ is the Identify the one (i) $\frac{1}{m}$ (A) (i) only	the squares of two consects standard form of the differences that is/are greater than 'r'  (ii) $\frac{m+1}{m}$ (B) (ii) and (iii) only	eutive numbers is not rence between two m' if m = $\frac{9}{11}$ (iii) $\frac{m+1}{m-1}$ (C) (i) and (iii) or	ot a perfect square consecutive numbers  [NSTSE 2014]  only (D) (i) and (ii) only
(A) 2 (B) 3 (C) 4 (D) 6  11. Which of the following numbers does NOT have a multiplicative inverse? [NSTSE 2014]		numbers. (C) The sum of (D) $n^2 - 1$ is the Identify the one (i) $\frac{1}{m}$ (A) (i) only Which number	the squares of two consects standard form of the differences that is/are greater than 'r'  (ii) $\frac{m+1}{m}$ (B) (ii) and (iii) only is in the middle if $\frac{-1}{6}$ , $\frac{4}{9}$	eutive numbers is not rence between two m' if m = $\frac{9}{11}$ (iii) $\frac{m+1}{m-1}$ (C) (i) and (iii) or	ot a perfect square consecutive numbers  [NSTSE 2014]  only (D) (i) and (ii) only
(A) 2 (B) 3 (C) 4 (D) 6  11. Which of the following numbers does NOT have a multiplicative inverse? [NSTSE 2014]		numbers.  (C) The sum of (D) $n^2 - 1$ is the Identify the one  (i) $\frac{1}{m}$ (A) (i) only  Which number order	the squares of two consects standard form of the differences that is/are greater than 'r'  (ii) $\frac{m+1}{m}$ (B) (ii) and (iii) only is in the middle if $\frac{-1}{6}$ , $\frac{4}{9}$	eutive numbers is not rence between two m' if m = $\frac{9}{11}$ (iii) $\frac{m+1}{m-1}$ (C) (i) and (iii) or $\frac{6}{-7}$ , $\frac{2}{5}$ and $\frac{-2}{4}$	it a perfect square consecutive numbers  [NSTSE 2014]  Inly (D) (i) and (ii) only  are arranged in descending [NSTSE 2014]
	9.	numbers. (C) The sum of (D) $n^2 - 1$ is the Identify the one (i) $\frac{1}{m}$ (A) (i) only  Which number order (A) $\frac{2}{5}$	the squares of two consects standard form of the differences that is/are greater than 'rest than 'rest that is/are greater than 'rest that is/are greater	eutive numbers is not rence between two m' if m = $\frac{9}{11}$ (iii) $\frac{m+1}{m-1}$ (C) (i) and (iii) or $\frac{6}{-7}$ , $\frac{2}{5}$ and $\frac{-2}{2}$ (C) $\frac{-1}{6}$	of a perfect square consecutive numbers  [NSTSE 2014]  Inly (D) (i) and (ii) only  are arranged in descending  [NSTSE 2014]  (D) $\frac{-6}{7}$ the ones digit of N?
	9.	numbers. (C) The sum of (D) $n^2 - 1$ is the Identify the one (i) $\frac{1}{m}$ (A) (i) only  Which number order (A) $\frac{2}{5}$ If the division N	the squares of two consects standard form of the differences that is/are greater than 'rest than 'rest that is/are greater than 'rest that is/are greater	eutive numbers is not rence between two form if $m = \frac{9}{11}$ (iii) $\frac{m+1}{m-1}$ (C) (i) and (iii) or $\frac{6}{7}$ , $\frac{2}{5}$ and $\frac{2}{4}$ (C) $\frac{-1}{6}$	of a perfect square consecutive numbers  [NSTSE 2014]  Inly (D) (i) and (ii) only  3 are arranged in descending  [NSTSE 2014]  (D) $\frac{-6}{7}$ the ones digit of N?  [NSTSE 2014]
3 (2)0	9.	numbers. (C) The sum of (D) $n^2 - 1$ is the Identify the one (i) $\frac{1}{m}$ (A) (i) only  Which number order (A) $\frac{2}{5}$ If the division N (A) 2	the squares of two consects standard form of the differences that is/are greater than 'rest than 'rest that is/are greater than 'rest that is/are greater	eutive numbers is not rence between two form if $m = \frac{9}{11}$ (iii) $\frac{m+1}{m-1}$ (C) (i) and (iii) or $\frac{6}{7}$ , $\frac{2}{5}$ and $\frac{2}{4}$ (C) $\frac{-1}{6}$ f 3, what might be the first of the first	of a perfect square consecutive numbers  [NSTSE 2014]  Inly (D) (i) and (ii) only  3 are arranged in descending  [NSTSE 2014]  (D) $\frac{-6}{7}$ the ones digit of N?  [NSTSE 2014]  (D) 6
	9.	numbers.  (C) The sum of (D) $n^2 - 1$ is the Identify the one  (i) $\frac{1}{m}$ (A) (i) only  Which number order  (A) $\frac{2}{5}$ If the division N  (A) 2  Which of the fo	the squares of two consects standard form of the differences that is/are greater than 'rest	eutive numbers is not rence between two form if $m = \frac{9}{11}$ (iii) $\frac{m+1}{m-1}$ (C) (i) and (iii) or $\frac{6}{7}$ , $\frac{2}{5}$ and $\frac{-2}{2}$ (C) $\frac{-1}{6}$ If 3, what might be the control of the co	of a perfect square consecutive numbers  [NSTSE 2014]  (D) (i) and (ii) only  are arranged in descending  [NSTSE 2014]  (D) $\frac{-6}{7}$ the ones digit of N?  [NSTSE 2014]  (D) 6  tive inverse? [NSTSE 2014]

Nalini and three of her friends worked together to make a quilt. The given table lists the 12. fractional part of the quilt that each of the girls made. Which list shows the girls in order from the one who sewed the most to the one who sewed the least? **INSTSE 2014** 

Girl	Parts Sewn
Nalini	<u>3</u> 8
Kamini	1 5
Shalini	<u>2</u> 5
Reena	1 40

- (A) Reena, Nalini, Shalini, Kamini
- (B) Shalini, Nalini, Kamini, Reena
- (C) Reena, Karnini, Nalini, Shalini
- (D) Kamini, Shalini, Nalini, Reena

13.	The difference	between the place	value and the face	value of 6 in the	e numeral 856973
	IS				[NSTSE 2014]
	(A) 973	(B) 6973	(C) 5994	(D) No	one of these

Which of the following expressions is true? 14.

[NSTSE 2014]

(A) 
$$0.09 > \frac{7}{8}$$
 (B)  $6\% < 0.09$ 

(C)  $\frac{7}{8} < 8.0 \times 10^{-3}$  (D)  $8.0 \times 10^{-3} > 6\%$ 

15. If x:y = 5:2, then 
$$(8x + 9y)$$
:  $(8x + 2y)$  is

[NSTSE 2014]

- (A) 22:29
- (B) 26:61

(B) 6% < 0.09

- (C) 29:22
- (D) 61: 26
- Closure property for rational numbers is satisfied in case of 16. [NSTSE 2014] (A) Addition (B) Subtraction (C) Multiplication (D) All of these

- 17. Which of the following statements is INCORRECT for rational numbers? [NSTSE 2014]
  - (A) The rational number O is the additive identity for rational numbers.
  - (B) The rational number 1 is the multiplicative identity for rational numbers
  - (C) Subtraction is associative for rational numbers.
  - (D) There are infinite rational numbers between any two given rational numbers.

# SECTION -A (FIXED RESPONSE TYPE)

## **OBJECTIVE QUESTIONS**

1. If 
$$4x + \frac{3}{5} = 5$$
, then  $x =$ 

- (A)  $\frac{11}{10}$  (B)  $\frac{13}{14}$
- (C)  $\frac{16}{17}$
- (D)  $\frac{12}{11}$

2. If 
$$\frac{x}{3} - \frac{5}{2} = 6$$
, then x = ?

- (A)  $\frac{51}{2}$  (B)  $\frac{52}{3}$
- (C)  $\frac{53}{4}$
- (D)  $\frac{54}{5}$

3. If 
$$0.6x + 0.8 = 0.28x + 1.16$$
, then  $x = ?$ 

- (A)  $\frac{6}{7}$
- (B)  $\frac{3}{9}$
- (C)  $\frac{11}{2}$
- (D)  $\frac{13}{5}$

4. If 
$$\frac{\frac{2}{3}x+1}{x+\frac{1}{4}} = \frac{5}{3}$$
, then x = ?

- (A)  $\frac{7}{12}$
- (B)  $\frac{5}{13}$
- (C)  $\frac{6}{13}$
- (D)  $\frac{7}{14}$

5. A positive value of x which satisfies the equation 
$$\frac{x^2+1}{x^2-1} = \frac{5}{4}$$
 is:

- (A) 4
- (B)9
- (C) 5
- (D) 3

6. If 
$$\frac{2x+7}{5x+8} = \frac{2x+6}{5x+4}$$
, then x = ?

- (A)  $-6\frac{2}{3}$  (B)  $-3\frac{1}{2}$
- (C)  $-2\frac{1}{2}$
- (D)  $-3\frac{6}{7}$

7. If 
$$\frac{5x}{4} + \frac{6-x}{8} = \frac{6(x+3)}{3} - \frac{1}{6}$$
, then x = ?

- (A)  $-\frac{121}{22}$  (B)  $\frac{121}{12}$  (C)  $\frac{212}{21}$

- (D)  $-\frac{122}{24}$

- (A) Length = 16 m and breadth = 12 m
- (B) Length = 13 m, breadth = 15 m
- (C) Length = 14 m, breadth = 17 m
- (D) Length = 18 m, breadth = 21 m

- (A) Father = 36, Son = 12
- (C) Father = 39, Son = 13

- (B) Father = 45, Son = 15
- (D) Father = 42. Son = 14

LINE	EAR.	_					
10.	(A) 15, 45	(B) 12, 36	(C) 13, 39	(D) 14, 42			
11.	Sum of the digit obtained by inter(A) 81	s of a two digit nu changing the digits t (B) 82	mber is 12. The given num (C) 83	en number exceeds to ber is : (D) 84	he number		
12.	The denominator	of a rational numb	er is 4 more than the	e numerator. If 2 is ac	ided to the		
	numerator and 3	is added to denor	ninator then the new	number becomes $\frac{3}{4}$	. Find the		
	original number.			4			
	(A) $\frac{13}{17}$	(B) $\frac{12}{16}$	(C) $\frac{11}{15}$	(D) $\frac{10}{14}$			
FILL	IN THE BLANKS	}		· /			
1.	The solution of th	e equation 3x – 4 =	1 – 2x is				
2.		e question 2y – 5y =					
3.	$\frac{x}{5} + 30 = 18 \text{ has}$	the solution is					
4.	If two-third of a is	number is equal to	o one-fifth of the sa	me number , then th	ne number		
5.	If twice of a numb	er is 5 less than thri	ce of that number , th	en the number is	·		
6.	If one-third of a number when added to one-half of the same number results in 5, then the number is						
<b>7</b> .	If x% of a number	is equal to 6% of or	ne-third of that number	er, then the value of x	is		
8.	A two-digit number place digit is 5, the	er is equal to the nu en unit's place digit	mber obtained by intis	erchanging the digits.	If the ten's		
TRUE	E/FALSE						
1.	An equation, in wh	ich the maximum d	egree of a term is on	e, is called a linear eq	uation.		
2.	We cannot subtract	of the same number	on both sides of the	equation			

We can multiply both sides of the equation by same non zero number.

If we transpose any term of the equation from one side to other with its sign gets changed.

We can divide both sides of the equation by same number.

8x - 3 = 25 + 174 then x is a rational number.

3.

4.

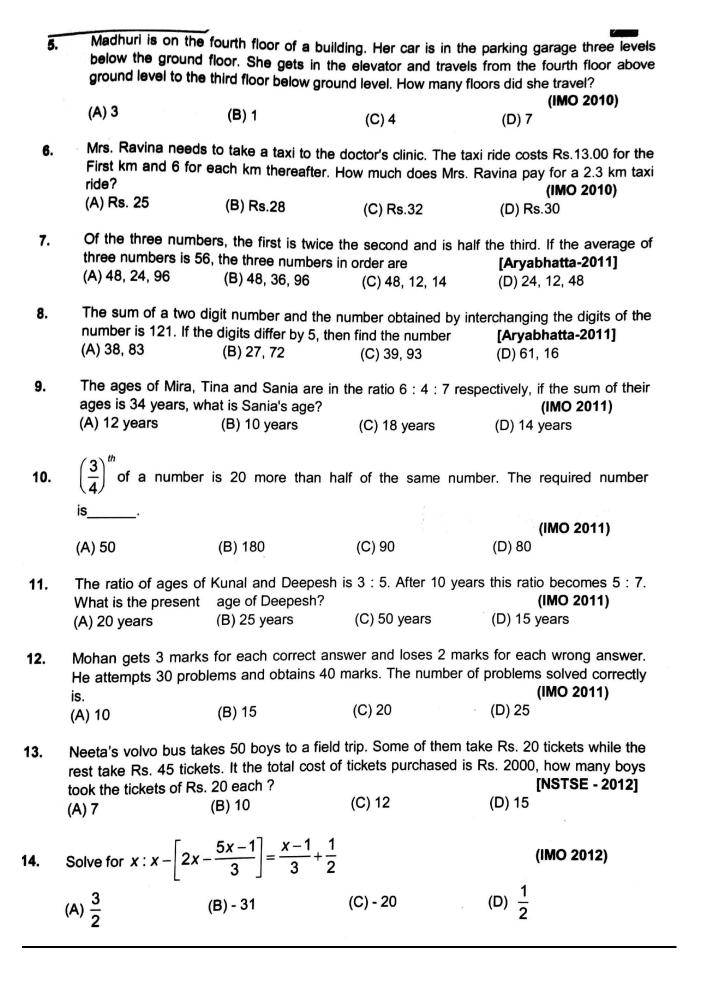
5,

6.

- **9.** One fourth of a number exceeds one fifth of its succeeding number by 3. Find the number.
- 10. The numerator of a rational number is less than its denominator by 3. If the numerator becomes three times and the denominator is increased by 20, the new number becomes  $\frac{1}{8}$ . Find the original number.

11.	The cost price of a desk and a chair is Rs. 371. If the desk costs 12 % more than the chair. Find the cost price of each.						
-	and the	02 —					
	SECTION	-A (COMPETITIVE	EXAMINATION QU	ESTION)			
		OBJECTIVE	QUESTIONS				
1.	One fifth of a number (A) 12	er diminishes one fourt (B) 9	th of its successor by o (C) 15	ne. The number is (D) 20			
2.	If we represent the f	raction $\frac{5}{26}$ by $\frac{3x-1}{2x+5}$	then x =				
	(A) $\frac{3}{4}$	(B) $\frac{4}{3}$	(C) $\frac{3}{7}$	(D) $\frac{7}{3}$			
3.	If half of the one thire (A) 18	d of a number is 15 les (B) 17	ss then the number, the (C) 16	en number is (D) 15			
4.	Solve for x : $\frac{2x-a}{x-b}$	= 1					
	(A) a – b	(B) b – a	(C) a + b	(D) –a – b			
5.	between the number	digits. The unit digit obtained by reversing	is four times than ten the digits and the orig	ns digits. If the difference ginal number is 54, find the			
	original number. (A) 28	(B) 82	(C) 14	(D) 41			
6.	reach 4 minutes too s (A) 18 km	soon. Find the distanc (B) 30 km	(C) 15 km	nd if I drive at a 30 kmph, I y residence (in kilometer). (D) 36 km			
<b>7.</b>	The sum of two numb (A) 30, 40	pers, which are in the (B) 50, 70	ratio 5 : 7, is 120. Find (C) 70, 90	the numbers. (D) 150, 170			

	8.	When 4 is subtracted from three times a number and the result is divided by 3 more than					
		the number, we get $\frac{2}{5}$	. Find the number.				
		(A) 2	(B) 3	(C) 5	(D) 4		
	9.	A streamer goes down stream from one port to another in 5 hours while it covers the same distance upstream in 6 hours. If the speed of the stream is 3 kmph, find the speed of the steamer in still water.					
		(A) 18 km/hr	(B) 30 km/hr	(C) 20 km/hr	(D) 33 km/hr		
	10.	The denominator of	umerator is doubled and the				
		denominator is incre	eased by 14, then fra	action becomes $\frac{2}{3}$ rd	of the original fraction. Find		
		the fraction. (A) 4/7	(B) 5/7	(C) 6/7	(D) 3/7		
	Ξ		SECTION -B (	TECHIE STUFF)			
	11.	If 29x + 37y = 103, (A) x = 1, y = 2	37x + 29y = 95, then (B) x = 2, y = 1	: (C) x = 2, y = 3	(D) x = 3, y = 2		
	12.	If Rs. 50 is distributed among 150 children giving 50 p to each boy and 25 p to each girl.  Then the number of boys is:					
		(A) 25	(B) 40	(C) 36	(D) 50		
	-		03-				
	PREVIOUS YEAR EXAMINATION QUESTIONS						
	1.	The sum of three	numbers is 98. The i	ratio of the first to the	e second is $\frac{2}{3}$ and the ratio of		
		the second to the	third is $\frac{5}{8}$ . The second	nd number is	[NSTSE - 2010]		
		(A) 15	(B) 20	(C) 30	(D) 32		
	2.	What is the value $\frac{(3x+1)}{16} + \frac{(2x-3)}{7}$	of x in the given equal $\frac{3}{8} = \frac{(x+3)}{8} + \frac{(3x-1)}{14}$	ation? )	(IMO 2010)		
		(A) 2	(B) 4	(C) 3	(D) 5		
	3.	(A) 15x - 10	n is equivalent 5[4 + 3 (B) 15x - 70	(C) 15x - 14	(IMO 2010) (D) 15x - 110		
	4.	she will earn 5 p did Jasmine win'	ch better tennis player ins a game, she will o points. If they play 48 ?	r than Reshma. They earn 3 points and ev games and the final	decide to have a contest. Every ery time Reshma wins a game, score is tiled, how many games		
	-	(A) 50	(B) 40	(C) 30	(I <b>MO 2010)</b> (D) 18		



15. For a journey the cost of a child ticket is 1/3" of the cost of an adult ticket. If the cost of the tickets for 4 adults and 5 children is Rs. 85, the cost of a child ticket is (IMO 2012)

(A) Rs.5

(B) Rs.6

(C) Rs.10

(D) Rs.15

The ratio of present ages of Rahul and Deepesh is 3 : 5. 10 years later this ratio becomes 5:7. What is the present age of Deepesh? (IMO 2012)

(A) 20 years

- (B) 50 years
- (C) 25 years
- (D) 40 years

17. Solve for  $x: \frac{3x+4}{6x+7} = \frac{x+1}{2x+3}$ 

(IMO 2012)

- (A)  $\frac{1}{2}$
- (B)  $-\frac{5}{4}$
- (C) 1
- (D) 3

 $18. \qquad \frac{x}{x-a} + \frac{x}{x-b} = 2 \text{ find } x$ 

[NSTSE - 2013]

- (A)  $\frac{a}{b}$
- (B) ab
- (C)  $\frac{2ab}{a+b}$
- (D) 2ab
- **19.** If x + y = 6 and 3x y = 4, find the value of x y.

(A) - 1

(B) 0

(C) 2

[NSTSE - 2014] (D) 4

**Class VIII** 

**Subject: Science** 

### **PHYSICS**

ACTIVITY1. Explain with the help of an activity that pressure exerted by liquid depends on height of liquid column.

ACTIVITY 2. To show that liquid exerts equal pressure at the same depth.

ACTIVITY 3 Explain with help of an activity that pressure on the wall of container remain same by the liquids.

- Q 4. What do you understand by force? Describe the different application of force on an object.
- Q5. Describe the different type of forces in the category of contact and non- contact force

#### **CHEMISTRY**

- Q.1 Make a list of some common articles made from natural and artificial fibers.
- Q.2 Find out synthetic fiber like nylon is stronger than other fibers (with the help of an activity).
- Q.3 Do synthetic fabrics absorb more or less water than the natural fabric? Explain it with the help of an activity.
- Q.4 Make a table of biodegradable and Non-biodegradable waste, also write down approximately time taken to degenerate.

Class VIII Subject: Hindi

### कक्षा - VIII (A,B,C)

- 💠 पत्र :
  - 1. अपने क्षेत्र की अपर्याप्त जल आपूर्ति के संबंध में जल बोर्ड के सचिव को पत्र लिखिए।
  - 2. परीक्षा में कुछ विषयों में कम अंक आने पर दु:ख बताते हुए भविष्य में अच्छे अंक लाने का वादा करते हुए माताजी को पत्र लिखिए।
- 💠 निबंध :
  - 1. मोबाइल फोन : सुविधा या असुविधा
  - 2. यदि मैं प्रधानमंत्री होता
- भारत की खोज :

भारत की खोज पुस्तक के पाठ पढेंगे।

वसन्त भाग 3 :

पाठ 1, 2, 3 व 4 का दोहरान करेंगे।

Class VIII Subject: Computer

: Create chart on Variouse Input, output, processing and memory system devices. Chapter First.

Class VIII Subject: English

- a) Utilise your leisure time in reading English newspaper.
- b) Read chapter 1,2,3 and 4 of supplementary reader.
- c) Write down their summary and find out the question and answers and hard words.
- d) Do one page of writing daily so that you can improve your handwriting.
- e) Enjoy and celebrate each moment of summer vacation with your parents, friends and relatives and when you return back share your experience with your teacher.
- f) Revise April syllabus.

Class VIII Subject: Social Science

(1)Project work on life history of any one governor general

(2) History ch-2, Civics, Geog Chapter-1 – Frame at least 20 internal questions with answers

Class VIII Subject: Drawing

5 paintings of their own choice 5 sketches of their own choice