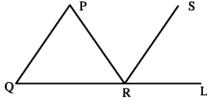
Class: Seven **Subject: Mathematics** 

## **Group-A**

Rea	d the following stems and answer <u>any three</u> of to 23805 and 651201 are two numbers:	he following questions:	10×3=30		
	<ul><li>a) Give reason whether the number 21952 be a period by What is the least number which is to be divided perfect square number?</li><li>c) What is the least number which is to be subtracted.</li></ul>	by the first number so that the	4		
	is a perfect square number.		4		
2.	The ratio of weight of milk and water in first mixture is 6:7. The ratio of weight of water and sugar in second mixture is 8:5 and the weight of the second mixture is 650 gm.				
	a) Find the successive ratio of milk, water and sug		2		
	<ul><li>b) what will be the ratio of milk, water and sugar if</li><li>c) How much sugar is to be added in the second r</li></ul>		1. 4		
3.	$A = x^2 - xy + y^2$ , $B = x + y$ and $C = x^6 - x^6$	- y <sup>6</sup>			
	a) Multiply B by $(x - y)$ . b) Prove that, $AB = x^3 + y^3$ .		2 4		
	c) Find the value of $C \div AB$ .		4		
4.		/E			
	/ <sub>P</sub>				
	Α	В			
	$c \frac{Q}{F}$	R D			
	a) Find the pairs of alternate angles and write down two properties of alternate angles.				
	b) Prove that ∠BPQ = ∠PQC.				
	c) If $\angle APE = 120^{\circ}$ and PQ = PR, then prove that	ΔPQR is an equilateral trian	gle. 4		
<b>0</b> 1	Group		4 00 00		
	ose the correct answer and write in answer scri	•	1×20=20		
1)	If 97969 trees are arranged in square form, what v				
٥١	a) 303 b) 313 Which one is an irrational number?	c) 323	d) 333		
2)		、13	1) 0 04004		
	a) 234 b) 3.45	c) $\frac{13}{7}$	d) 6.24381		
3)	What is the least number which is to be added wit				
4\	a) 4 b) 8	c) 16	d) 36		
4)	What will be the digits in unit place in the square r				
5١	a) 7, 7 b) 7, 3	c) 3, 7	d) 3, 3		
5)	<ul><li>i. 256 is a perfect square number.</li><li>ii. 1057 is not a perfect square number.</li></ul>				
	iii. the square root of 841 is 29.				
	Which one of the following is correct?				
	a) i b) i and ii	c) ii and iii	d) i, ii and iii		
6)	How many digits are there in the square root of 32	28853329?			

	a) 9	b) 5	c) 6	d) 4	
7)	Determine the fourth pro	•	,	,	
,	a) 35	b) 33	c) 55	d) 66	
8)		•	24, what is the second value	,	
•	a) 12	b) 18	c) 22	d) 16	
9)	If the ratio of water and the mix ratio?	milk in the first mixture is	6:5 and in the second mixtu	re is 5:6, then what is	
			c) 6:10:6	d) 1:1	
10)	will get the boy 9?		7 and 9 years according to	their age. How much	
	a) 1500	b) 2100	c)1800	d) 2700	
11)	If $\frac{1}{3}$ : $\frac{1}{5}$ :: x: $\frac{3}{10}$ then what is	s the value of x?	1	4	
	a) ½	b) $\frac{2}{5}$	c) $\frac{1}{2}$	d) $\frac{4}{10}$	
12)	In the proportion-	v	_	10	
	i. there are four quantity				
	ii. each quantity is called				
	iii. the ratio of 1st and 2nd quantity and the ratio of 3rd and 4th quantity are equal to each other.				
	Which one of the followi	•	\		
40\	•	b) i and iii	•	d) i, ii and iii	
13)		ng is the product of $-3a^2b$ and	$-4ab^2$ ?	d\ 10 313	
4.4\	a) $-12a^3b^3$	•	•	d) $12a^3b^3$	
14)	vvnen 289 $\ x^3y\ ^2$ is divid	led by $1/x \mathbb{Z}_y$ then which	one of the following is the q	uotient?	
4 = \			c) $171x^6y^3$	d) $17 \mathbb{I} x^6 y \mathbb{I}^4$	
15)	What is the product of (4				
	a) $16x^{2} + 169$	b) $16 x^2 + 52x + 169$	c) $16x^2 - 52x^2 - 9$	d) $16x^{2} - 169$	
16)	$x^8 \div x^{-3}$				
	a) $x^{11}$	b) $x^5$	c) $x^{-11}$	d) $x^{-5}$	
17)	$\frac{-25x^3y}{5xy^3} = ?$				
	a) $-5x^2y^2$	b) $5x^2y^2$	c) $\frac{5x^2}{v^2}$	d) $-\frac{5x^2}{y^2}$	
Answer to the questions no. 18, 19 and 20.					
		$\bigwedge^{P}$	/ s		



In the figure, if PQ II SR, PQ = PR and  $\angle SRL \square = 70^0$ 

18) What is the value of <code>PRQ?</code>

c) 80<sup>0</sup>

d) 50<sup>0</sup>

a)  $60^{\circ}$  b)  $70^{0}$  19) What is the value of  $\mathbb{Q}$ PR?

a)  $40^0$ 

b) 50<sup>0</sup>

c)  $60^{0}$ 

 $d)70^{0}$ 

20) If PQ II SR, PQ = PR and  $\square = 55^0$ ,  $\square$  what is the value of  $\angle \square PRS$ ?

a) 55<sup>0</sup>

b)  $60^0$ 

c)  $65^0$ 

d)  $70^{0}$