

RAJIV VIDYA MISSION (S.S.A) ANDHRA PRADESH
SUMMATIVE ASSESSMENT -2 (MODEL PAPER) – JAN – 2013

MATHEMATICS
(ENGLISH MADIUM)

VIII CLASS

TIME 2 ½ hrs

NAME OF THE STUDENT _____

ROLL NO _____

Education Standard	Problem Solving					Reasoning And Proof					Communication			Connections				Representation	Total Subject Grade
	1	5	6	7	17	2	8	9	10	18	11	12	13	4	14	15	16		
Question Number																		3	
Question Wise Grade																			
Education Standard Grade																			

I Solve the following

1) Find the solution sets of the following systems of equations

$$5x + 3y = 11;$$

$$3x + 5y = 13$$

2) A trader sells two cycles at Rs 1188 each and gains 10% on the first and loses 10% on the second. Find his profit or loss percent on the whole?

3) Shade the region on a graph paper which represents the solution set of the following inequation

$$x > 0; y > 0; 2x + 3y = 6$$

4) The area of a circular grass field is 2464 sq.m. Find the cost for leveling the circular path width 1m. laid outside it at a cost of Rs. 1.85 per sq. m.

II Solve the following

5) The area of a square is 4 hectares. Find the length of its side?

6) If $a : b = \frac{3}{5} : \frac{5}{7}$ and $b : c = \frac{3}{4} : \frac{2}{5}$ find $a : b : c$?

7) $x^2 - 8x + 15$ Resolve into factors

8) $\sqrt{3}$ is an irrational number and $\sqrt{27}$ is an irrational number. So $\sqrt{3} \times \sqrt{27}$ is an irrational number.

Is this true? Why?

9) In a class of 26 students 8 members take tea, but not coffee. And 16 members take tea, find the

Numbers of students take coffee only?

10) $\{1, 2, 3, \dots, 10\} \neq \{x \in \mathbb{N} \text{ and } 1 < x < 10\}$, state the reason?

11) Name the property indicated by the following example

a) $\frac{8}{5} \times \left(\frac{2}{3} + \frac{3}{5}\right) = \left(\frac{8}{5} \times \frac{2}{3}\right) + \left(\frac{8}{5} \times \frac{3}{5}\right)$

b) $528 + 372 = 372 + 528$

12) Area of trapezium = $\frac{1}{2}(a + b)h$. In this formulae what denotes a, b and h ?

13) Express the following in the exponential notation

a) 1296

14) If 'A' is the set of prime numbers less than 20 and 'B' is the set of whole numbers less than 10,

Then find $A \cap B$?

15) If $2^n = 64$, find the values of 2^{n+2} , 2^{n-3}

16) If $x + y = 7$, $xy = 12$ find the value of $x^2 + y^2$

OBJECTIVE TYPE QUESTIONS

17) Fill in the blanks

- 1) The amount in 2 years of premium Rs. 800 at the rate of 5% is _____
- 2) If the side of a square is 10 cm. then the perimeter is _____
- 3) Express 24 as the product of prime factors _____
- 4) G.C.D of 30 and 45 is _____

18) Choose the correct answer from the given multiple choices

- 1) If $4:9 = x:63$ then $x =$ ()
a) 36 b) 72 c) 28 d) 35
- 2) In a $\triangle ABC$, If $AB \perp AC$ then hypotenuse is ()
a) AB b) BA c) AC d) None of these
- 3) If $(-1)^n = y$, n is an even number then $y =$ _____ ()
a) 1 b) -1 c) 0 d) 2
- 4) $(a + b)^2 - (a - b)^2 =$ _____ ()
a) $4ab$ b) $-4ab$ c) $a^2 + b^2$ d) 0

19) Match the following

- 1) A straight line divides the () a. 1
Plane into ___ number of set of points
- 2) Number of factors of $x^4 + 3x^2 + 2x + 1$ () b. 2
- 3) If $2x + 3 = 13$ then $x =$ () c. 3
- 4) G.C.D of co prime numbers is () d. 4
() e. 5