

**RAJIV VIDYA MISSION (SSA), A.P., HYDERABAD
SUMMATIVE TEST - MATHEMATICS**

Subject: Mathematics

class: 8

Time : $2\frac{1}{2}$ hrs.

Name of the student:.....

R. No.

Acad. Std.	Problem Solving					Reasoning & Proof					Communication					Connections					Reprentation					Overall grade
	1	2	6	7	22	3	5	8	9	17	10	11	18	19	20	12	13	16	20	23	4	14	15	21	25	
Qn. Nos.																										
Q. wise Grade																										
Acad. Std. wise grades																										

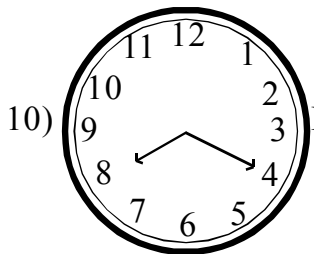
I Solve the following.

- 1) A field is rectangular in shape and its length is $1\frac{1}{2}$ times of breadth. If its area is 2.4576 hectares, what is its perimetre?
- 2) Gopayya bought a house for Rs. 70,000 and a site for Rs. 16,500. He sold the house at a gain of 12%, and the site at a loss of 20%. Find his gain or loss percent on the whole?
- 3) In how many years certain sum amounts to double to the principle at the rate of $16\frac{2}{3}\%$?
- 4) A square tank whose side is 28 m. is in a grass field. A bull is tied with a rope of length 35 m. in a corner of the tank. What is the area of a grass field that the bull can graze?
- 5) I walk from my house to my office at a speed of 3 km/ hr and arrive at the office 20 min. late, but when I walked at 4 km/hr. I reach the office 15 min. before. Find the distance between house and office.

II Answer the following Questions.

- 6) If $\sqrt{3} = 1.732$, find the value of $\sqrt{75}$.
- 7) The radius of circular field is 77 m. A path of width 7m. is laid in side it. Find its area.

- 8) The compound ratio of $8:5\frac{1}{3}$ and the inverse of $3\frac{1}{5} : 1\frac{1}{3}$ is $50 : x$. Find x .
- 9) Annual income of the families of Sita and Latha are in the ratio 4:3 and their annual expenditures are in the ratio 3:2. What is their annual income if they save Rs. 3000/- in a year?



- 10) Find the angle between the two hands.

- 11) $\mu = \{1, 2, 3, \dots, 10\}$
 $B = \{x/x \text{ is a prime number}\}$
 Write B in Roaster form

- 12) Simplify $(x^{x+1})^{x-n} \times (x^{n+6})^{n-p} \times (x^{p+n})^{p-n}$, $m, n, p, x \in R$

13) Simplify $\left[\frac{x^{3x+1} - x^{3n-1}}{x^{2n+1}} \right]^2$ ($x \neq 0$)

- 14) Write $0.\overline{125}$ in the form of rational number.

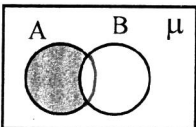
- 15) $A = \{1, 3, 4, 5, 6\}$, $B = \{1, 5, 9, 10\}$
 draw a venndiagram and show the elements of each set.

III Choose the correct answers.

- 16) If $\sqrt{9604} = 98$, then $\sqrt{0.9604} =$ _____ []
 a) 9.8 b) 0.98 c) 0.098 d) 0.0098

- 17) If profit is 20%, cost price is multiplied with _____ gives selling price []
 a) $\frac{5}{6}$ b) $\frac{4}{5}$ c) $\frac{6}{5}$ d) $\frac{5}{4}$

- 18) 8 does not belong to the set of prime numbers P. symbolic form of this is []
 a) $8 \notin p$ b) $8 \in p$ c) $8 \subset p$ d) $8 \not\subset p$

- 19) The shaded part in the diagram  represents []

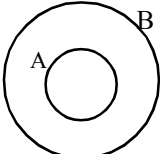
- a) $A \cup B$ b) $A \cap B$ c) $B - A$ d) $A - B$

20) If $(a+b, a-b) = (5, 1)$ then $a \times b =$ _____ []
a) 3 b) 2 c) 6 d) 5

IV Match the following

21) $\left\{1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}\right\}$ [] a) 2

22) G.C.D. of 30, 45 [] b) $B \subset A$

23)  The relation [] c) μ
between A and B

24) Universal set is denoted by [] d) O

25) The digit in units place in [] f) $\left\{x/x = \frac{1}{y}, y \in N, y \leq 5\right\}$
the product of
 $5 \times 3 \times 7 \times 672 \times 857$