

Summative Assessment-1(2013-14)

Class- VIII (Mathematics)

Time -2hrs 30 min.

F.M-60

General Instructions-

1. All questions are compulsory
2. The question paper consists of 26 questions divided into 4 groups-A,B,C and D . Group A contains 8 questions of 1 mark each which are multiple choice .you have to select one correct answer out of four choices given .Group B contains 6 questions of 2 marks each .Group C contains 8 questions of 3 marks each .Group D contains 4 questions of 4 marks each .
3. There is no overall choice but internal choice has been provided in 1 question of 2 marks, 2 questions of 3 marks and 1 question of 4 marks.

GROUP –A

1. The reciprocal of -5 is
(a)5 (b)1/5 (c)-1/5 (d)none of these
2. Which of the following is not a linear equation?
(a) $2x+5=16$ (b) $3x=5$ (c) $2-y=0$ (d) $3x^2 =16$
- 3.Sum of all interior angles of a quadrilateral is
(a) 180^0 (b) 270^0 (c) 90^0 (d) 360^0
4. How many measurements are necessary to construct a quadrilateral?
(a)4 (b)3 (c)2 (d)5
5. The square of 1.1 is
(a) 12.1 (b)1.21 (c)0.121 (d) 121

6. The square root of $256/16$ is

(a) 1 (b) 6 (c) 4 (d) 16

7. The value of $(0.2)^3$ is

(a) 0.8 (b) 0.08 (c) 0.008 (d) 0.800

8. The value of cube root of $125/343$ is

(a) $5/7$ (b) $7/5$ (c) $-5/7$ (d) $5/3$

Group B

9. Represent $-5/6$ and $5/6$ on the number line.

10. Solve $3/7+x=17/7$.

11. Explain how a square is a rhombus.

Or

Name the quadrilaterals whose diagonals bisect each other.

12. What will be the unit digit of the squares of

(a) 81 (b) 1234

13. Find the square root of 7744 by prime factorisation method.

14. Find cube root of 27000.

GROUP-C

15. Find six rational numbers between $1/4$ and $1/2$.

16. Three consecutive integers add up to 51. What are the integers?

17. Solve

$$m - \frac{(m-1)}{2} = 1 - \frac{(m-2)}{3}$$

Or

$$\frac{(3t-2)}{4} - \frac{(2t+3)}{3} = \frac{(2/3)}{t}$$

18. How many sides does regular polygon have if the measure of an exterior angle is 24° ?

19. Construct a rhombus BEST where $BE=4.5\text{cm}$ and $ET=6\text{cm}$.

20. Find square root of 51.84.

21. Find smallest number by which 243 must be multiplied to obtain a perfect cube.

22. Find square root of 36 by repeated subtraction method.

or

Find the smallest whole number by which 396 should be divided so as to get a perfect square.

GROUP-D

23. Write a Pythagorean triplet whose one member is 6.

24. Construct a quadrilateral TRUE as given that $TR=3.5\text{cm}$, $RU=3\text{cm}$, $UE=4\text{cm}$, $\angle R=75^{\circ}$, $\angle U=120^{\circ}$.

25. Two adjacent angles of a parallelogram have equal measures. Find the measure of the angles of parallelogram.

26. The ages of Hari and Harry are in the ratio 5:7. Four years from now the ratio of their ages will be 3:4. Find their present ages.

or

The denominator of a rational number is greater than its numerator by 8. If the numerator is increased by 17 and the denominator is decreased by 1, the number obtained is $\frac{3}{2}$. Find the rational number.