Apeejay MANK WALIA 8^3 A

SS

Summative Assessment-I 2014-2015

Mathematics

Class-VIII

Time : 2 hrs. 45 minutes **Maximum Marks : 80**

General Instructions :

Section A consists of 10 questions of 2 marks each.

Section B consists of 10 questions of 3 marks each.

Section C consists of 6 questions of 5 marks each.

Section-A (2 marks each)

1. A man sold an article for ₹ 805 and gained 15% on it. Find the C.P. of the article.
2. Find four rational numbers between – 2/5 and 1/2.
3. Write the Pythagorean triplet whose smallest member is 8.
4. Find the cube root of 8000.
5. Can you construct the quadrilateral PLAN if PL = 6 cm, LA = 9.5 cm ∠P 75, ∠L 150° and ∠A 140° ? Justify your answer.
6. Area of a square plot is 2304 m^2. Find the side of the square.
7. The opposite angles of a parallelogram are $(150 - 3x)°$ and $(2x - 50)°$. Find the measure of all angles.
8. A man got a 10% increase in his salary. If his new salary is ₹ 1,54,000, find his original salary.
9. Find the square root of 121 by repeated subtraction.
10. Find the number of sides of a regular polygon if each interior angle measures 170°.

Section-B (3 marks each)

11. Find the amount and the compound interest on ₹ 4000 at 10% p.a. for $2\frac{1}{2}$ years.
12. The population of a town increases at the rate of 7% every year. If the present population is 90000, what will it be after 2 years?
13. Construct a square in which each side measures 4.5 cm.

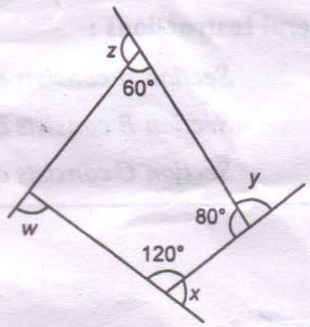
14. Construct a parallelogram $ABCD$ in which $AB = 4$ cm. $BC = 6$ cm and $\angle ABC = 60$.

15. The sum of three consecutive multiple of 8 is 888. Find the multiples.

16. Solve and check : $\frac{x-5}{3} = \frac{x-3}{5}$

17. Fifteen years from now Ravi's age will be four times his present age. What is Ravi's present age?

18. Find $x + y + z + w$. (See figure)



19. I purchased a hair-dryer for ₹ 5,400 including 8% VAT. Find the price before VAT was added.

20. Represent the following rational numbers on the number line (a) – 1/4 (b) 11/5

Section-C

(5 marks)

21. A number consists of two digits whose sum is 9. If 9 is subtracted from the number, the digits interchange their places. Find the number.

22. Find the greatest number of 4 digits which is a perfect square.

23. Is 5488 a perfect cube? If not, find the smallest natural number by which 5488 must be multiplied so that the product is a perfect cube.

24. A VCR and TV were bought for ₹ 8000 each. The shopkeeper made a loss of 4% on the VCR and a profit of 8% on the TV. Find the gain or loss percent on the whole transaction.

25. (a) $\frac{3}{7} + \left(-\frac{6}{11}\right) + \left(\frac{-8}{21}\right) + \left(\frac{5}{22}\right)$.

(b) Write the additive inverse and multiplicative inverse of – 2/3.

26. In the given figure both RISK and CLUE are parallelograms. Find the value of x.