Class: VII

Subject: Maths (unsolved sample paper)

Summative Assessment –I

Time: 2½ hours **MM:60**

Name: _____ class & section: _____ Roll.no._____

Invigilator's Name & Signature _____

General instructions

i) The question paper contains 4 sections.
ii) Section -A 1 -8 ½ mark each.
iii) Section -B 9 -14 1 mark each.
iv) Section –C 15 -24 2 marks each.
v) Section –D 25 -34 3 marks each.

SECTION-A

(8 x ½ = 4 marks)

Choose the correct option for the following.

Q1. Which is additive inverse of 5?

(a) -5
(b) 5
(c) 0
(d) 1

Q2. Which is reciprocal of $2\frac{1}{3}$?

(a) $\frac{7}{3}$

(b) $\frac{-7}{3}$

(c) $\frac{3}{7}$

(d) $\frac{-3}{7}$

Q3. What is the product of 0.017 x 100

(a) 1.7
(b) 17
(c) 0.0017
(d) 0.17

Q4. This is the degree of the polynomial:

$x^2 + y^2 - 3y^2\ 9x^3 - 12x + 17x^2y - y^4 + 14$

(a) 4
(b) 3
(c) 2
(d) 5

Q5. This is the simplest form of the ratio 1 hour: 30 min

(a) 1:30
(b) 2:1
(c) 1:2
(d) 6:3

Q6. What is the percentage of $\left(\frac{3}{20}\right)$.

(a) 15%
(b) 45%
(c) 20%
(d) 300%

Q7. This is the complementary angle of 60^0.

(a) 60^0
(b) 30^0
(c) 90^0
(d) 180^0

Q8. This is mode for the data:

1, 1, 2, 4, 3, 2, 1, 2, 2, 4

(a) 2
(b) 1
(c) 4
(d) 3

SECTION - B

Q9. Evaluate: - 23 x (-8)

Q10.Evalute: $\frac{7}{12} \div \frac{2}{3}$

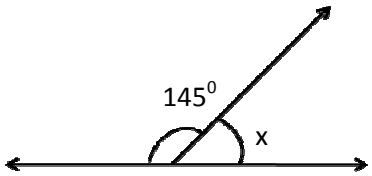
Q11. Convert 2.3 kg into grams.

Q12. Classify into monomials, binomials and trinomials

(i) $4y - 3y$ (ii) $8xy$ (iii) $x^2 + y^2 - 3y^2$ (iv) $3a - 5b$

Q13. Write two equivalent ratios for 3:4.

Q14. Find the measurement of the unknown angle in given figure.



SECTION – C

Q15. A mixture of iron, sand and glass contains the three ingredients in the ratio 4:7:9 respectively, how much sand is in 500g of the mixture?

Q16. By selling a fan for ₹ 720 a trader incurs a loss of 20% find the loss amount.

Q17. Take two pairs of integers and verify the commutative property for multiplication.

Q18. Evaluate:- $2\frac{3}{5} - 1\frac{4}{5} + 3\frac{2}{5}$

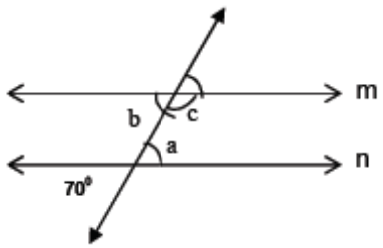
Q19. Evaluate: - 42.21 ÷ 2.1

Q20. Add: - 3x+8 and x-4y+10

Or

Find the value of $3x^2 - 5b + 8$ for for a=1 and b = -1.

Q21. From the adjoining figure find the value of the unknown angles a, b, c and d. if m || n.



Q22. Divide 714 marbles between Alok and Kabeer in the ratio 3:4

Or

If P = 3Q = 7R find P: Q: R

Q23. Draw the line of symmetry for the following figure.

Q24. Find the median of the data.
17, 16, 12, 14, 14, 16, 17, 22, 15, 17, 16, 18

Section – D

Q25. The table below gives the marks of four students in the annual examination in English. Represent the data in a bar graph.

Students	Megha	Manav	Kirti	John
Marks	80	90	75	65

Q26. Complete the following table:

Shape	Order of rotation	Angle of rotation
Rectangle		
Equilateral triangle		
Circle		

Q27. Take a set of three integers and verify the associative property for multiplication.

OR

Evaluate the following using properties for multiplication to simplify the multiplication. 45 x (-7) + (-45) x 3

Q28. The area of rectangle is 9278square meters. If its length is 3210m, find the breadth.

Q29. The product of two numbers is 3.84. If one of the numbers is 0.3 find the other number.

OR

Karan runs at the speed of 7.5km/h. If he runs for 1.4 hours, how much distance Will he cover?

Q30. Subtract $2x^2 + 3x - a\ 3a^2 - 5a + 6b - 8$ from $2a^2 + 4a - 7ab + 1$

OR

Find the value of a if the value of $2x^2 + 3x - a$ is equal to 6 when x = -2

Q31. A cake recipe uses 150g.sugar in 400g of flour. Find the ratio of:

i) Sugar to flour ii) Flour to sugar

iii) Sugar to the amount of sugar and flour.

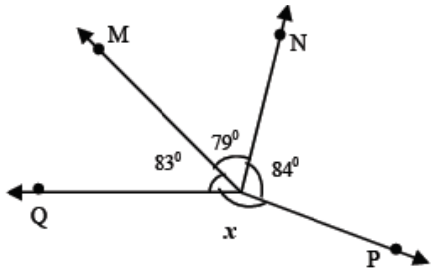
Q32. Ratan bought ₹ 10 dozen oranges at ₹ 40 a dozen. He sold half of them at ₹ 5 per

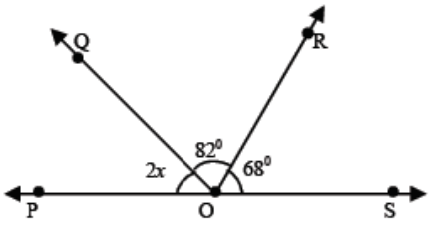
orange. By now ₹ 6 oranges had rotted. Ratan sells the remaining oranges at ₹3 each. Find loss or gain percentage.

OR

In an election there are two candidates A and B. The total numbers of voters is 60,000 and 80% of the total votes were polled. If 60% of the polled votes were cast in favour of A. How many votes were polled in favour of B?

Q33. Find the value of the unknown angle in each of the following.





Q34. Following are the number of members in 20 families in a village.

6, 8, 6, 3, 2, 5, 7, 8, 6, 5, 5, 7, 7, 8, 6, 6, 7, 7, 6, 5

i) What is the smallest family size?

ii) How many families are of the smallest size?

iii) What is the mode of given data?