BLUE PRINT OF MATHEMATICS

WEEKLYTEST

CLASS-VII

S.NO.	TYPE OF QUESTIONS	NO. OF QUESTIONS	MARKS	TOTAL
1.	FILL IN THE BLANKS	10	1/2MARK	5
2.	MCQ	5	1MARK	5
3.	VSAQ	4	1MARK	4
4.	SAQ	4	2MARKS	8
5.	LAQ	4	3MARKS	12
6.	VLAQ	4	4MARKS	16

VLAQ consists of a value based question

Delhi Public School , Bahadurgarh
Summative Assessment-1 sample paper

Class – VII Subject-Mathematics
Max Time : 3 hrs. Marks: 90

General Instructions:-
1) All questions are compulsory
2) Q 5 to Q 11 carry 2 marks each
3) Q 12 to Q 17 carry 3 marks each
4) Q 18 to Q 24 carry 4 marks each

Q 1. Fill in the blanks 5 X 1 = 5

i) (3) + (-4) = (4) + _____
ii) -7 x -3 x (1) = _____
iii) A _____ of a fraction is obtained by inverting it upside down.
iv) 7 x 0.01 = _____
v) _____ help to compare two collections of data at a glance.

Q 2. Use the sign of " >, <, = " 5 X 1 = 5

i) (-8) + (-4) _____ (-8) –(-4)
ii) (-3) + 7- 19 _____ 15-8 +(-9)
iii) 23-41+11 _____ 23-41-11
iv) 39+(-24)-(-15) _____ 36+(-52) –(-36)
v) -231+79+51 _____ -399+159+81

Q.3. Match the following: 5 X 1 = 5

a) Angle sum property	linear pair
b) Pythagoras property	angle-side-angle
c) Equilateral triangle	$H^2 = P^2 + B^2$
d) Straight angle	sum of all angles is 180^0
e) ASA congruence criteria	all sides are equal

Q.4 Multiple Choice Questions: 15 x 1 = 15

(i) Which of the following is a solution of the equation 3x + 5 = 14?
(a) 0 (b)1 (c) -2 (d) 3

(ii) Which of the following is a variable
(a) 25 (b) 1008 (c) 7x + 9 (d) 298

(iii) Two triangles can never become congruent by using this criteria-
(a) ASA (b) AAS (c) SAS (d) SSA

(iv) An _____ is perpendicular from the vertex of a triangle to the opposite side.
(a) hypotenuse (b) median (c) altitude (d) none

(v) It is not a natural number is
(a) 3 (b) 0 (c) 1 (d) none

(vi) 10 + (2 + 99) = (10 + 2) + 99 is an example of which property
(a) closure (b) commutative (c) associative (d) none

(vii) The additive inverse for multiplication is
(a) 1 (b) 0 (c) both a and b (d) none

(viii) The next number in the pattern -1, 2, 5, 8 ……is
(a) 9 (b) 10 (c) 12 (d) 11

(ix) 0 / a = ??
(a) 1 (b) 0 (c) a (d) not defined

(x) what should be added to2.654 to get 10
(a) 12.654 (b) 7.346 (c) 6.14 (d) 3.142

(xi) The average value of a given data is known to be its
(a) mode (b) median (c) mean (d) none

(xii) The difference between highest value and lowest value is called
(a) mode (b) median (c) mean (d) range

(xiii) Alternate angles are always
(a) equal (b) 180^0 (c) both a and b (d) none

(xiv) 0 is a
(a) whole number (b) natural number (c) both a and b (d) none of these

(xv) The supplementary angle of any acute angle will always be a
(a)Acute angle (b) right angle (c) obtuse angle (d) none of these

Q.5 Verify -30 X [13 + (- 3)] = (-30 X 13) + (-30 X (-3)) (2marks)

Q.6 Evaluate : (a) - 234 / 3 (b) 0 / 99 (1+1=2)

Q.7 Solve : (a) 8 / 5 + 4 / 8 (b) 6⅓ - 1 (1+1=2)

Q.8 How much less is 28km than 42.6km? (2)

Q.9 Find the complement and supplement of 78^0 (1+1=2)

Q.10 There is a dice. (1+1=2)

(a) What is the probability of getting a number less than 4?

(b) What is the probability of getting a number more than 5?

Q.11 Find the mode and median of the data: 35,32,35,42,38,34,32,32 (1+1=2)

Q.12 Determine the integer whose product with 1 is

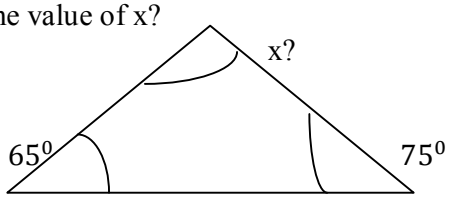
(a) -7 (b) 34 (c) -1 (1+1+1=3)

Q.13 A car covers a distance of 89.1km in 2.2 hours. What is the average distance travelled by it In 1 hour? (3)

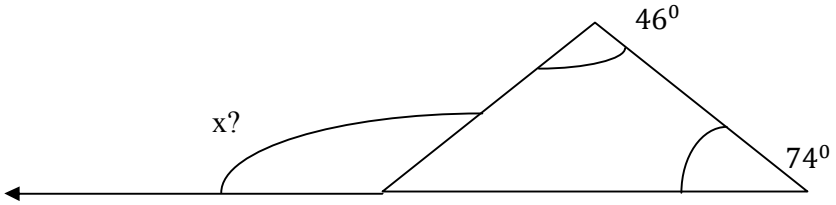
Q.14 Find the angle which is equal to its complement. (3)

Q.15 Find the value of x? (1.5 x 2= 3)

a)



b)

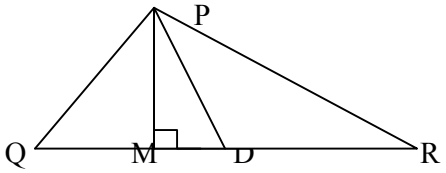


Q.16 In a triangle PQR, D is the mid-point of QR. (1x 3= 3)

a) PM is an _____.

b) PD is a _____.

c) Is QM = MR? or Is QD= DR?



Q.17 Find the value of the angle which is equal to its complement. (3)

Q.18 Following data gives total marks (out of 800) obtained by six students of a class.

Students	Ajay	Rahul	Mayank	Suresh	Hari	Raj
Marks obtained	650	500	400	600	700	750

Represent this data by a bargraph (4)

Q.19 Write equations for the following statements: (4x1=4)

(a)Ten times Y is 80 (b)three-fourth of T is 25 (c)7 subtracted from B is 11(d)sum of P and Q

Q.20 Solve the following : (2x2=4)

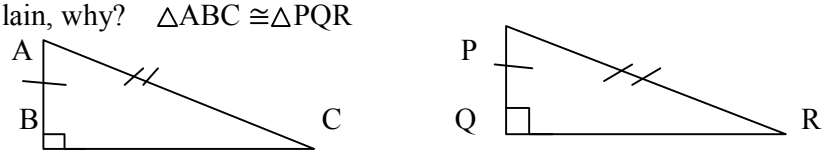
(a) When I subtracted 11 from twice a number, the result was 15. Find the number?

(b) If I take three-fourths of a number and add 3 to it, I get 21. Find the number?

Q.21 PQR is a triangle, right-angled at P. if PQ=10cm and PR=24cm, find QR. (3+1=4)

Q.22 The diagonals of a rhombus measures 24 cm and 10 cm. Find its perimeter. (3+1=4)

Q.23 Explain, why? $\triangle ABC \cong \triangle PQR$ (3+1=4)



Q24. Lipika reads a book for 5/4 hours everyday. She reads the entire book in 6 days. How many hours in all were required by her to read the book? (4)

DELHI PUBLIC SCHOOL BAHADURGARH

SA 2 sample paper
Class – VII

Date: **Subject – Mathematics** **Total pages: 05**

Time: 3 hours SET-1 Maximum marks: 90

General Instructions:

1. *All questions are **compulsory.***
2. *The question paper is divided into 2 sections A, B. **Section-A** is of 30marks . **Section-B** is of 60marks.*
3. *There is no overall choice.*
4. *The marks are allotted in front of each question.*
5. *Use of calculators is not permitted.*

SECTION-A (30MARKS)

I. MULTIPLE CHOICE QUESTIONS (1MARK EACH)

Q1. 10% of 365 days is
a) 3.65 days b) 365 days c) 36.5 days d) none of these

Q2. The rational number equivalent to 3/5 is
a) 5/3 b) 9/10 c) 9/15 d) none of these

Q3. 6/8 as rate percent is
(a) 7.5% (b) 75% (c) 0.75% (d) none of these

Q4. Profit or loss percent is always calculated on

(a)C.P. (b)S.P (c)Both (d) None of these

Q5. A side of a parallelogram is 80 m and the length of the corresponding altitude is 26m. Its area is

a) 1280sq. m b) 2080sq. m c) 2180sq. m d) 2010sq. m

Q6. The diameter of the wheel of a car is 70 cm. How much distance will it cover in 100 revolutions?

a) 220cm b) 2200cm c) 22m d) 220m

Q7. The constant term in the expression $4x^2y - 9x^3y - 3$ is

a) 3 b) -3 c) 4 d) -9

Q8. The sum of 3ab, -2ab, 8ab is

a) 9a2b b) 9ab c) -9ab d)13ab

Q9. The value of $(40^0 + 60^0) \times 70^0$ is:

a) 2 b) 1 c) 10 d) 70

Q10. $(-3/4)^3$ equals

a) 9/16 b) -9/16 c) 27/64 d) -27/64

II. FILL IN THE BLANKS (1MARK EACH)

Q1. A birthday cap is an example of _____ .

Q2. 1 m^2 = _____ cm^2

Q3. The order of rotational symmetry of a square is _____.

Q4. Number of edges in a cylinder is _____.

Q5. The degree of the trinomial $2x^5 - 3x^4 + 1$ is _____.

Q6. A radius of a circle is 28 cm. Its circumference is _____.

Q7. Number of faces in a cube is _____.

Q8. An isosceles triangle has_____ lines of symmetry.

Q9. The coefficient of x in 5x-3y is _____.

Q10. An Almirah is an example of _____.

III. VERY SHORT ANSWER QUESTION (1 MARK EACH)

Q1. If Mohit pays an interest of Rs 750 for two years on a sum of Rs 4500, find the rate of interest.

Q2. Give two equivalent rational numbers of -2/5

Q3. What is the circumference of a circle of diameter 10cm?

Q4. If p = -2, find the value of 4p + 7.

Q5. If a = 0, b = -1, find the value of a + ab + 2.

Q6. Find the number from the following expanded form: $9 \times 10^5 + 2 \times 10^2 + 3 \times 10$.

Q7. Express the number using exponential notation 216.

Q8. Show the terms and factors by tree diagrams: $-ab + 2b^2 - 3a^2$.

Q9. List 2 rational numbers between -3 and -4.

Q10. Find the product of: (3/7) x (-2/5).

SECTION- B (60MARKS)

I. SHORT ANSWER QUESTIONS (18MARKS)

Q1. Divide : $7\frac{1}{2}\ by\ 4\frac{2}{7}$. (2)

Q2. Represent 5/4 & 2/5 on the same number line. (2)

Q3. Find the reciprocal of $\frac{3}{2} \times \frac{2}{7}$. (2)

Q4. Simplify: $(6^0+5^0) \times (11^0+2^0) \times 2^3$. (2)

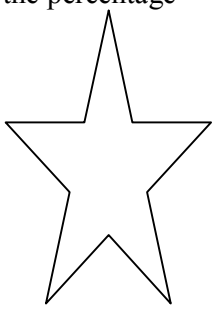
Q5. Write the following in the standard form: 954068900. (2)

Q6. Subtract : (7a+2b-6ab+4ab-3b) from (-6a+2b+2ab) (2)

Q7. The population of a city decreased from 25000 to 24000. Find the percentage decrease. (2)

Q8. The circumference of a circle is 616m. Find the radius &area. (2)

Q9. How many lines of symmetry does the figure have? (2)



II. LONG ANSWER QUESTIONS (18MARKS)

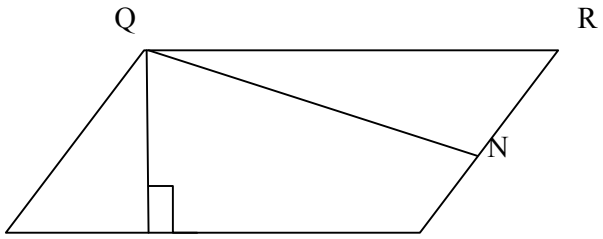
Q1. Three cubes each are joined to each other in a row. What shape on joining will you get? Draw a rough sketch of the figure obtained. (1.5+1.5)

Q2. Nalin purchased an old ceiling fan for Rs.1450 & spent Rs. 250 on its repairs. He sold it at a profit of 10%. Find the selling price of the fan. (3)

Q3.Find the length of a side of a square whose perimeter is equal to the circumference of a circle of diameter is 140cm. (3)

Q4. Construct a triangle ABC, in which AB = 6cm, <A=45 & <C=75. Write the steps of constructions. (2+1)

Q5. In parallelogram PQRS,if QN=9cm, SR =16cm, PS=24cm, find the length of QM. (3)



Q6. If P= $3x^2+7x+8$, Q= $2x^2+x-9$ and R= $-5x^2-8x+1$. Show that P+Q+R=0. (3)

III. VERY LONG ANSWER QUESTIONS (24 MARKS)

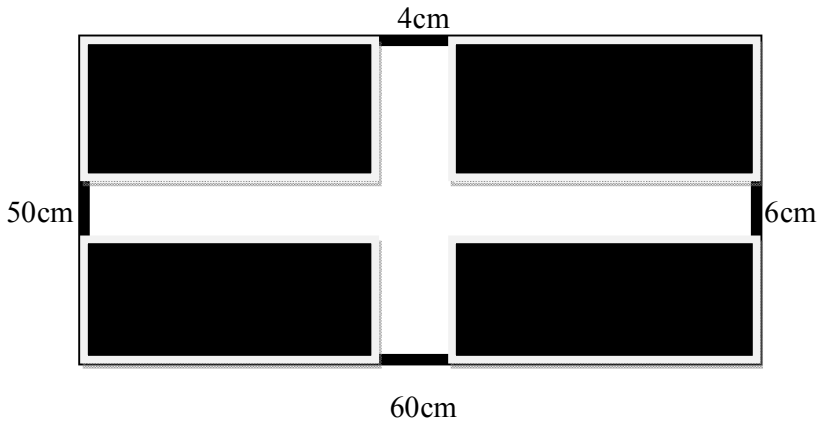
Q1. Find the value of P.

a) $27 \times 3^{p+1} = 729$. b) $(\frac{1}{5})^{p+1} X \frac{1}{5} = (\frac{1}{5})^9$ (2+2)

Q2. a) The product of two rational numbers is 8. If one of the numbers is (-16/5) ,find the other

b) By what number (-8/13) should be divided to get 16/3? (2+2)

Q3. Calculate the area of the shaded region from the adjoining figure: (4)



Q4. Construct a right triangle whose hypotenuse is 13cm & one side measures 5cm. Write the steps of construction. What is the length of the third side? (2+1+1)

Q5. VALUE BASED QUESTION- Ramesh's child was admitted in the hospital. He needed money, but no one helped. A bank lent Rs.28000 to Ramesh. They charged 12% per annum on Rs.

20,000 & 15% on the rest Rs. 8,000.How much interest does the bank earn in three years. What value is depicted in the act? (3+1)

Q6. From the sum of $(a^3b+6a^2b-7ab+4)$ and $(-7a^2b+5a^3b-1)$, subtract $(-5a^3b+8ab+5)$ (4)
