

BRIHANMUMBAI MAHANAGARPALIKA (EDUCATION DEPT.)

SUMMATIVE EVALUATION - I 2018-19

STD - VIII SUB:- MATHS (WRITTEN)

NAME OF STUDENT :- _____ Roll No _____

NAME OF SCHOOL :- _____ DIV _____

DT:- | / 2018

QUES. No.	1	2	3	4	5	ORAL	PRAC	TOTAL	SIGN
MARKS OBTAINED	10	10	10	10	10	5	5	60	

ORAL ANSWERS TO BE WRITTEN (EACH QUES. CARRIES ONE MARK)

M1

M2

M3

M4

M5

Q.2 - 10 - 100
100 - 100 = 0

WRITTEN EXAM

Ques 1 and 2 each sub-question 1 mark

Q1 A) Identify the Natural number from the following.

- 1) $2\frac{1}{3}$ 2) -7 3) $-2\frac{1}{3}$ 4) 7

B) Identify the Rational Number from the following.

- 1) $\sqrt{2}$ 2) 0.3 3) $\sqrt{3}$ 4) $\sqrt{7}$

C) If $4x = 64$ then which number will be in the place of x

- 1) 6 2) 3 3) 2 4) 1

D) $(-1)^3 \times (-1)^6$ in easier form -

- 1) 0 2) -1 3) 1 4) $(-1)^8$

E) The medians of a triangle are concurrent. Their point of concurrence is called the _____

- 1) Orthocentre 2) Centroid 3) Circumcentre 4) Incentre.

F) $(x+2y)^2 = x^2 + \square + 4y^2$

- 1) $2xy$ 2) $4xy$ 3) xy 4) x^2y^2

G) $4 + (-6) = \square$

- 1) 10 2) 2 3) -2 4) -10

H) $(-3) - (-5) = \square$

- 1) 8 2) -8 3) 2 4) -2

J) $\sqrt{625} = \square$

- 1) 5 2) 25 3) 125 4) -52

L) Find the cube root: $\sqrt[3]{216} = \square$

- 1) 16 2) 6 3) 36 4) 61

Q2) Solve :-

A Multiply :-

$$8512$$

$$\times 32$$

- 1) 272384 (2) 85122 (3) 3227502 (4) 4010172

B) DIVIDE :- $2097 \div 15$

- 1) 142 (2) 435 (3) 139.8 (4) 141.3

C) If 234 students participated in a Tree plantation programme. Each student planted 15 saplings then how many saplings were planted by them.

- 1) 3510 (2) 430 (3) 3215 (4) 4105

D) Write the Prime number of 36.

- 1) 6×6 (2) 9×4 (3) $2 \times 2 \times 3 \times 3$ (4) 4×9

E) If a given angle is 36° that what is the measure of its complementary angles

- 1) 54° (2) 60° (3) 45° (4) 66°

F) Identify the Prime number from the following.

- 1) 4 (2) 12 (3) 3 (4) 8

G) Multiply :- $-8 \times 4 = \square$

- 1) 32 (2) 8 (3) -32 (4) 40

H

H) Write the correct Number

$$(-5)^2 = \square$$

- 1) 5 (2) 10 (3) -25 (4) 25

I) Find the value of

$$\sqrt{169} = \square$$

- 1) 16 (2) 13 (3) 12 (4) 1

J) Circle the Irrational number.

- 1) $1.\bar{23}$ (2) $\sqrt{25}$ (3) $\sqrt{07}$ (4) $\frac{3}{8}$

Q3) Question 3 to 5 each question carries (2) marks.

Write the following numbers in the form of rational indices

A (i) Cube root of 7th power of 64

- 1) 64^7 (2) $64^{\frac{7}{3}}$ (3) $64^{\frac{3}{7}}$ (4) 64^3

ii) Cube of 4th root of 57

- 1) 57^3 (2) 57^4 (3) $57^{\frac{3}{4}}$ (4) $57^{\frac{4}{3}}$

B) Write the following number in decimal form

- (i) $\frac{7}{4} =$ (1) 1.75 (2) 1.57 (3) 2.3 (4) 1.76

- ii) $\frac{-29}{5} =$ (1) 5.8 (2) -5.8 (3) 2.9 (4) -4.3

(c) Expand :-

(i) $(p+5)(p-3)$

- 1) $p^2 - 2p + 5$ (2) $p^2 + 2p - 15$ (3) $p^2 + 15$ (4) $p^2 - 15$

(ii) $(x-2)(x+4)$

- 1) $x^2 + 2x - 8$ (2) $x^2 - 2x - 8$ (3) $x^2 - 2x + 8$ (4) $x^2 + 2x + 8$

D) Factorise :- (i) $x^2 + 25x + 144$

1) $(x+25)(x+22)$ (2) $(x+16)(x+9)$

3) $(x+144)(x+9)$ (4) $(x+16)(x-9)$

ii) $p^2 - 2p - 120$

1) $p - 2p$ (2) $(p+12)(p-12)$ (3) $(p+2)(p-120)$

4) $(p-12)(p+10)$

E) Write the Divisor of 8000.

- 1) 204 (2) 600 (3) 800 (4) 184

Q4] Expand:

A $(3x+4y)(3x+5y)$

1) $9x^2+27xy+20y^2$ (2) $3x+12y+5y$ (3) $9x+20y$

4) $9x+12xy$

(B) $(101)^3$

1) 1030300 (2) 1030301 (3) 1010101 (4) 101330

C) $(m+2n+3p)^2$

1) $m^2+4n^2+9p^2+4mn+12np+6mp$

2) $m+2n+3p$ (3) $2+m+2n+3p$ (4) $m^2+2n+3p$

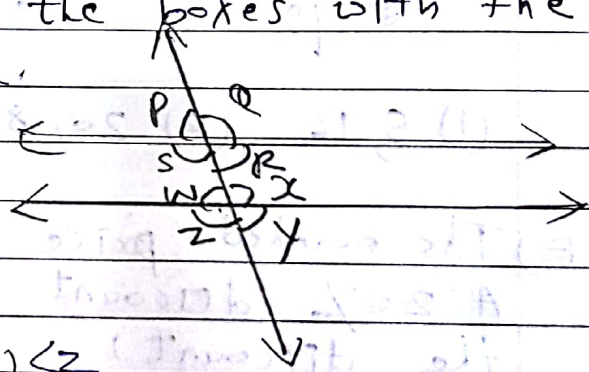
D) If diagonal of a rectangle is 26 cm and one side is 24 cm, find the other side.

1) 8 cm (2) 10 cm (3) 24 cm (4) 26 cm.

E) In the following figure, each angle is shown by a letter. Fill in the boxes with the help of the figure.

Corresponding angles

1) $\angle P$ and \square



1) $\angle R$ (2) $\angle W$ (3) $\angle Q$ (4) $\angle Z$

Q5(A) Complete the following table considering the Number of things and the cost of the things.

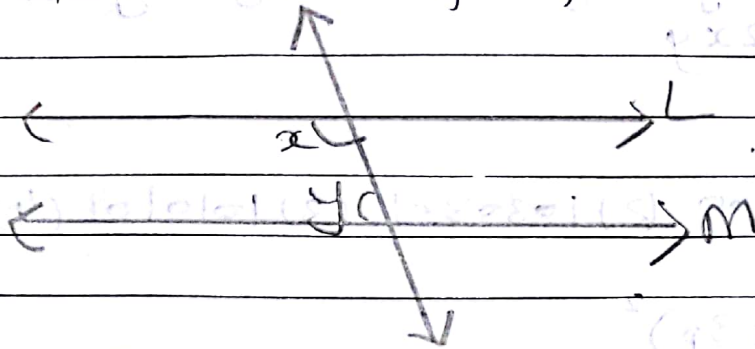
Number of things	3	6	—	10
Cost of things	12	24	28	—

(1) 6, 8 (2) 7, 40 (3) 7, 100 (4) 3, 4

(B) y varies $\propto x$ if $y=10$ then $x=6$. Find the constant variation

1) 60 (2) 10 (3) 6 (4) 16

c) In the given figure $\angle x = 70^\circ$, then, to show line L parallel to line M , what should be the measure of $\angle y$.



- 1) 110° 2) 70° 3) 180° 4) 90°

d) The information about numbers of workers and number of days to complete a work is given in the following table. Complete the table.

Number of workers	30	—	15	5
Days	6	9	—	36

- (1) 5, 16 (2) 20, 8 (3) 3, 12 (4) 5, 6

e) The marked price of a table is Rs 5500. A 20% discount is given on it. Calculate the discount.

- 1) 5520 (2) 5500 (3) 1100 (4) 100

Oral:

- M1) The cube of positive number is _____
- M2) The cube root of 125 is _____
- M3) The perpendicular segment drawn from a vertex of a triangle on the opposite side to it is called an _____ of the triangle
- M4) x & y is written in the form of equation as _____
- M5) Which property is the wrong one from the following?
- (i) The diagonals of parallelogram bisect each other.
 - (ii) Opposite angles of parallelogram are congruent
 - (iii) All sides of parallelogram are equal.

Practical: Each one mark.

(Form groups of students and give one activity to each group)

P(i) Show the following rational numbers on the number line.

$$0, -5, \frac{3}{2}, \frac{5}{2}, -\frac{3}{2}$$

P(ii) Draw the following \angle s.

- a) Alternate angle
- b) Corresponding angle
- c) Interior angle

P(iii) Write the following numbers in the index form.

- (a) 7th root of 7
- (b) Cube of cube root of 4
- (c) 6th root of 11

P(iv) In Acute angled triangle ABC, Consider AB as a base. Draw segment $CN \perp$ to seg AB.

Form 3 groups and tell them to draw

Seg $AM \perp$ Seg BC

Seg $BP \perp$ seg AC

Draw the diagram and show the above Altitudes

P. (v) Construct Triangles

(i) In ΔABC $l(AB) = 5\text{cm}$, $l(BC) = 5\text{cm}$, $l(AC) = 6\text{cm}$

(ii) In ΔPQR $l(PQ) = 6\text{cm}$, $l(QR) = 6.4\text{cm}$, $l(PR) = 5.2\text{cm}$

(iii) ΔMNP $l(MN) = 4.2\text{cm}$, $l(NP) = 4$, $l(MP) = 5.1\text{cm}$