# SCHOOL-BASED ASSESSMENT (SBA) - 2025

# END-OF-YEAR ASSESSMENT

## SUBJECT: MATHEMATICS

## GRADE-8

**FINAL TERM**

**[Paper A: 48 Marks, Paper B: 52 Marks, Total: 100 Marks], Time = 3 hours**

**School Name:** _____

**Student Name :** _____ **Roll Number :** _____ **Section :** _____

## OBJECTIVE PART(MCQs)

**Question No.1 : The number $\sqrt{3}$ is:**

(a) Rational Number (b) Irrational Number (c) Natural Number (d) Integer

**Question No.2 : Terminating decimal fraction is:**

(a) $\frac{3}{8}$ (b) $\frac{4}{11}$ (c) $\frac{24}{51}$ (d) $\frac{43}{99}$

**Question No.3 : By rounding 50.51765 upto three decimal places, we get:**

(a) 50.517 (b) 50.518 (c) 50.527 (d) 50.516

**Question No.4 : The square root of 20.25 is:**

(a) 4.5 (b) 5.4 (c) 4.05 (d) 5.04

**Question No.5 : The square of 35 is:**

(a) 1005 (b) 1205 (c) 1250 (d) 1225

**Question No.6 : If the length of side of a square shaped garden is 30 m, then its area will be:**

(a) $30m^2$ (b) $90m^2$ (c) $900m^2$ (d) $9000m^2$

**Question No.7 : If $A = \{1, 3, 5, 7\}$ and $B = \{3, 7, 8, 9\}$, then $B - A$ will be:**

(a) $\{8, 9\}$ (b) $\{3, 7\}$ (c) $\{1, 5\}$ (d) $\{7, 9\}$

**Question No.8 : The set of first four prime numbers is:**

(a) {0,1,2,3} (b) {2,3,5,7} (c) {1,3,5,7} (d) {3,5,7,9}

**Question No.9 : The number of subsets of set $A = \{1, 2\}$ is:**

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

**Question No.10 : The value of x in the proportion $3 : x :: x : 12$ is:**

(a) 4 (b) 6 (c) 12 (d) 36

**Question No.11 : Mohsin bought a motorcycle for Rs 80000 and sold it for Rs 88000. His profit percentage is:**

(a) $10\%$ (b) $20\%$ (c) $81\%$ (d) $90\%$

**Question No.12 : Rs 4914 into US Dollars are: (1$ = Rs 273)**

(a) $197\ \$$ (b) $180\ \$$ (c) $18\ \$$ (d) $19\ \$$

**Question No.13 : If $a_n = 2n - 1$, then value of $a_5$ will be:**

(a) 7 (b) 9 (c) 11 (d) 13

**Question No.14 : The next term of arithmetic sequence $4, 9, 14, 19, \ldots$ will be:**

(a) 24 (b) 23 (c) 22 (d) 21

**Question No.15 : The open sentence is:**

(a) $3 \times 4 = 12$ (b) $2 + 4 = 6$ (c) $3a^0 = 3$ (d) $4x + 1 = 4$

**Question No.16 : Factorization of $4x^2+13xy + 9y^2$ is:**

(a) $(x + y)(4x + 9y)$ (b) $(x - y)(4x - 9y)$
(c) $(4x + y)(x + 9y)$ (d) $(4x - y)(x - 9y)$

**Question No.17 : In scientific notation 0.000065 is written as:**

(a) $0.65 \times 10^{-6}$ (b) $6.5 \times 10^{-5}$ (c) $6.5 \times 10^{-4}$ (d) $6.5 \times 10^{-3}$

**Question No.18 : The solution of $2x - 3 > 5$ is:**

(a) $x > 1$ (b) $x > 2$ (c) $x > 4$ (d) $x > -8$

**Question No.19 : If $5x + 3y = 11$ and $x = 1$, then the value of $y$ will be:**

(a) 2 (b) 4 (c) 10 (d) 13

**Question No.20 : The equation for the statement " The price of 9 books and 7 pencils is Rs 1050" is:**

(a) $9x - 7y = 1050$ (b) $9 + 7y = 1050$
(c) $9x + 7y = 1050$ (d) $9x + 7 = 1050$

**Question No.21 : The slope of the line $3y = 15x + 9$ is:**

(a) 3 (b) 9 (c) 5 (d) 15

**Question No.22 : If the radius of a hemisphere is 7 cm, then its surface area will be:**

(a) 462cm$^2$ (b) 362cm$^2$
(c) 262cm$^2$ (d) 162cm$^2$

**Question No.23 : If 5 cm and 12 cm are lengths of base and perpendicular of a right angled triangle, then the length of hyptenous will be:**

(a) 11 cm (b) 12 cm (c) 13 cm (d) 14 cm

**Question No.24 : A straight line that touches the circle at a single point externally is called:**

(a) Chord (b) Secant (c) Tangent (d) Diameter

**Question No.25 : The angle bisector of a triangle divides the angle into equal parts:**

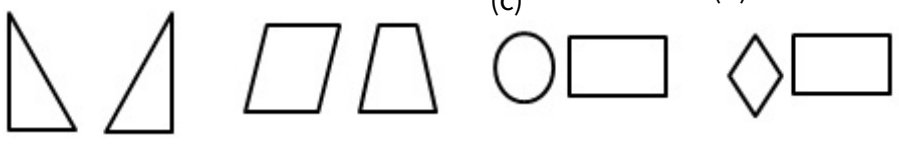
(a) 2 (b) 3 (c) 4 (d) 5

**Question No.26 : If the measurment of angles of a triangle are $\mathrm{m}\angle\mathrm{A} = 49^\circ$ and $\mathrm{m}\angle\mathrm{C} = 102^\circ$, then $m\angle\mathrm{B}$ will be:**

(a) $29^o$ (b) $30^o$ (c) $31^o$ (d) $32^o$

**Question No.27 : Identify the congruent figures:**

(a) (b) (c) (d)



**Question No.28 : If the distance of object and image from centre of enlargement is 3 and 9 units respectively, then the scale factor will be:**

(a) 3 (b) 2 (c) $\frac{1}{3}$ (d) $\frac{1}{2}$

**Question No.29 : The weight of 3 students (in kg) is 52,54,62. The mean of the data is:**

(a) 53 (b) 55 (c) 56 (d) 65

**Question No.30 : The example of continuous data is:**

(a) 6 flowers (b) 20 girls (c) 15 balls (d) 3.5 kg

**Question No.31 : If A and B are two independent events, then P(AUB) will be:**

(a) P(A) (b) P(B) (c) P(A)+ P(B) (d) P(A) - P(B)

**Question No.32 : If a coin is tossed twice, then the probability of getting two tails is:**

(a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{8}$ (d) $\frac{3}{4}$

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# SUBJECTIVE PART(CRQs)

**Question No: 33**

**a ) How many pieces of $\frac{3}{4}$ meter of wire can be cut from a wire which is $23\frac{1}{4}$ meters long? (5 marks)**

**b ) Find square root of 65025 by division method. (5 marks)**

**Question No: 34**

**a ) Verify the commutative law of intersection If A = $\{1, 2, 3, \ldots, 15\}$ and B = $\{6, 8, 10, 12, \ldots, 20\}$ (5 marks)**

**b ) Akram purchased a car for Rs 900000 and sold it for Rs 720000. Find his loss percentage. (5 Marks)**

**Question No: 35**

**a ) Find the general term of arithmetic sequence 3,7,11,15,19,..... 5 marks )**

**b ) Find the value of $x^2 + \frac{1}{x^2}$ when $x - \frac{1}{x} = 5$. (5 marks)**

**Question No: 36**

**a ) Find the solution of the equations $2x + 3y = 12$ and $x - y = 1$ with the help of substitution method. (5 marks)**

**b ) Find the volume of a sphere whose radius is 42 cm. (5 marks)**

**Question No: 37**

**a ) Construct a rectangle ABCD, when $m\overline{AB} = 5cm$ and $m\overline{BC} = 7cm$. (7 marks)**