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 : Non terminating decimal fraction is:

(a) $\frac{3}{8}$ (b) $\frac{1}{4}$ (c) $\frac{4}{5}$ (d) $\frac{1}{3}$

Question No.3 : By rounding 87.5476 upto three decimal places, we get:

(a) 87.546 (b) 87.547 (c) 87.548 (d) 87.549

Question No.4 : The square root of 12.25 is:

(a) 3.5 (b) 5.3 (c) 35 (d) 53

Question No.5 : The square of 15 is:

(a) 325 (b) 225 (c) 125 (d) 115

Question No.6 : If the length of side of a square shaped ground is 27 m, then its area will be:

(a) $529m^2$ (b) $592m^2$ (c) $729m^2$ (d) $829m^2$

Question No.7 : If $A = \{1, 2, 3, 5\}$ and $B = \{1, 3, 4, 5\}$, then $B - A$ will be:

(a) $\{2\}$ (b) $\{4\}$ (c) $\{2, 4\}$ (d) $\{1, 3, 5\}$

Question No.8 : The set of first five natural numbers is:

(a) {0,1,2,3,4} (b) {1,2,3,4,5} (c) {1,3,5,7,9} (d) {2,4,6,8,10}

Question No.9 : The number of the subsets of set $A = \{a, b, c\}$ is:

(a) 2 (b) 3 (c) 6 (d) 8

Question No.10 : The value x of in the proportion $2 : 3 :: 4 : x$ is:

(a) 4 (b) 6 (c) 8 (d) 16

Question No.11 : Hassan bought a chair for Rs 8400 and sold it for Rs 8946. His profit percentage is:

(a) 6.05% (b) 6.25% (c) 6.50% (d) 6.75%

Question No.12 : Rs 49000 into US Dollars are: (1$= Rs. 250):

(a) 190 $ (b) 192 $ (c) 194 $ (d) 196 $

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 $5, 9, 13, 17, \ldots$. will be:

(a) 21 (b) 25 (c) 27 (d) 30

Question No.15 : The open sentence is:

(a) $1 \times 2 = 2$ (b) $4 + \nabla = 1$ (c) $6 \div 6 = 1$ (d) $13 - 4 = 9$

Question No.16 : Factorization of $x^2 - 14x + 49$ is:

(a) $(x - 7)^2$ (b) $(x + 7)^2$
(c) $(x + 7)(x - 7)$ (d) $(x + 7)(x - 2)$

Question No.17 : In scientific notation 275600000 is written as:

(a) 2.756×10^8 (b) 27.56×10^8 (c) 275.6×10^8 (d) 0.2756×10^8

Question No.18 : The solution of $4x - 3 > 5$ is:

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

Question No.19 : If $3y - x = 4$ and $x = 5$, then the value of y will be:

(a) 3 (b) 5 (c) 7 (d) 9

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 $x + 2y = 1$ is:

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

Question No.22 : If the radius of a hemisphere is 3 cm, then its surface area will be:

(a) 5.46cm² (b) 6.45cm²
(c) 56.5cm² (d) 84.85cm²

Question No.23 : If 6 cm and 8 cm are lengths of base and perpendicular of a right angled triangle, then the length of hyptenous will be:

(a) 10 cm (b) 18 cm (c) 32 cm (d) 50 cm

Question No.24 : A continuous part of the boundary of a circle is:

(a) Tangent (b) Radius (c) Arc (d) Chord

Question No.25 : The perpendicular bisector of side of a triangle divides the side into equal parts:

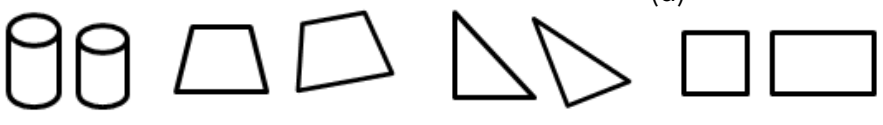
(a) 2 (b) 3 (c) 4 (d) 5

Question No.26 : If the measurment of angles of a triangle are $m\angle A = 50^\circ$ and $m\angle C = 55^\circ$, then $m\angle B$ will be:

(a) 60° (b) 65° (c) 70° (d) 75°

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 age of 3 students (in years) of a class are $12, 14, 16$. The mean of the data is :

(a) 10 (b) 12 (c) 14 (d) 16

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

(a) 12 candies (b) 20 students (c) 5 books (d) 7.5 m

Question No.31 : If A is an event, then $P(A)$ will be:

(a) $\frac{n(A)}{n(S)}$ (b) $\frac{n(S)}{n(A)}$ (c) $P(A) + P(B)$ (d) $P(A) \cup P(B)$

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) $\frac{3}{4}$

SUBJECTIVE PART(CRQs)

Question No: 33

a) If one packet contains $3\frac{1}{4}$ liters of oil, then find the quantity of oil in 7 such packets. (5 marks)

b) Find the square root of 1024 by prime factorization. (5 marks)

Question No: 34

a) Verify associative law of intersection if $A = \{1, 2, 4, 6, 9\},\ B = \{2, 4, 9, 10\},\ C = \{1, 2, 3, 5, 9, 10\}$. (5 marks)

b) Cost price of car is Rs 480000 and sale price is Rs 320000. Find loss percentage. (5 marks)

Question No: 35

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

b) Evaluate $(48)^2$ by using formula. (5 marks)

Question No: 36

a) Find the solution set of 9x+8y=1 and 5x- y= 6 by using the method of elimination. (5 marks)

b) Find the surface area of a sphere whose radius is 5.8 cm. (5 Marks)

Question No: 37

a) Construct a triangle ABC in which $m\overline{BC} = 6cm$, $m\angle B = 30^\circ$ and $m\angle C = 45^\circ$ (7 Marks)

b) Amina rolled a dice .What will be the probability of getting 3 dots? Also find the probability of not getting 3 dots. (5 marks)