

Mathematics (Science Group)	Ninth Gujranwala Board 2019	Paper -
Time: 20 Min.	Objective	Marks : 15

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1.1 Order of transpose of  $\begin{bmatrix} 2 & 1 \\ 0 & 1 \\ 3 & 2 \end{bmatrix}$  is

- (A) 3-by-2 (B) 2-by-3  
(C) 1-by-3 (D) 3-by-1

2  $\left(\frac{25}{16}\right)^{-\frac{1}{2}} = \text{-----}$

- (A)  $\frac{5}{4}$  (B)  $\frac{4}{5}$   
(C)  $-\frac{5}{4}$  (D)  $-\frac{4}{5}$

3  $\log e \text{ ----- where } (e \approx 2.718)$

- (A) 0 (B)  $\infty$   
(C) 1 (D) 0.4343

4  $\frac{a^2 - b^2}{a + b}$  is equal to

- (A)  $(a - b)^2$  (B)  $a^2 - b^2$   
(C)  $a - b$  (D)  $a + b$

5 Factors of  $5x^2 - 17xy - 12y^2$  are -----

- (A)  $(x + 4y), (5x + 3y)$  (B)  $(x - 4y), (5x + 3y)$   
(C)  $(x - 4y), (5x - 3y)$  (D)  $(5x - 4y), (x + 3y)$

6 What should be added to complete the square of  $x^2 + 64$ ?

- (A)  $8x^2$  (B)  $-8x^2$   
(C)  $16x^2$  (D)  $4x^2$

7 The capacity 'c' of an elevator is at most 1600 pounds, then

- (A)  $c < 1600$  (B)  $c \leq 1600$   
(C)  $c > 1600$  (D)  $c \geq 1600$

8 Which ordered pair satisfies the equation  $y = 2x$ ?

- (A) (1, 2) (B) (2, 1)  
(C) (2, 2) (D) (0, 1)

9 Mid-point of the points (2, 2) and (0, 0) is -----

- (A) (1, 1) (B) (1, 0)  
(C) (0, 1) (D) (-1, -1)

10 In two triangles for (1--1) correspondence symbol used is -----

- (A) = (B)  $\sim$   
(C)  $\rightarrow$  (D)  $\sim$

11 In a parallelogram opposite angles are -----

- (A) congruent (B) parallel  
(C) concurrent (D) non-congruent

12 Bisection means to divide into ----- equal parts.

- (A) 2 (B) 3  
(C) 4 (D) 5

13 The sign of ratio is -----

- (A) = (B) :  
(C) :: (D) ||

14 The region enclosed by the bounding lines of a closed figure is called -----

- (A) volume (B) area  
(C) length (D) width

15 The medians of a triangle cut each other in the ratio -----

- (A) 4 : 1 (B) 3 : 1  
(C) 2 : 1 (D) 1 : 1