Math (Science)	Lahore Board Ninth, 2021	Paper – I
Time: 20 Min.	Objective Type	Marks : 15

(Group-II)

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 Adj of $\begin{bmatrix} 1 & 2 \\ 0 & -1 \end{bmatrix}$ is:

A $\begin{bmatrix} 1 & -2 \\ 0 & -1 \end{bmatrix}$ B $\begin{bmatrix} -1 & 2 \\ 0 & -1 \end{bmatrix}$

C $\begin{bmatrix} -1 & 0 \\ 2 & 1 \end{bmatrix}$ D $\begin{bmatrix} -1 & -2 \\ 0 & 1 \end{bmatrix}$

2 The product of $[x \quad y]\begin{bmatrix} 2 \\ -1 \end{bmatrix}$ is:

A $[2x + y]$ B $[x - 2y]$

C $[2x - y]$ D $[x + 2y]$

3 Write $4^{\frac{2}{3}}$ with radical sign:

A $\sqrt[3]{4^2}$ B $\sqrt{4^3}$

C $\sqrt[2]{4^3}$ D $\sqrt{4^6}$

4 In $\sqrt[3]{35}$ the radicand is:

A 3 B $\frac{1}{3}$

C 35 D None of these

5 Log e = ..., where $(e \approx 2.718)$:

A 0 B 0.4343

C ∞ D 1

6 The value of $\log\left(\frac{p}{q}\right)$ is:

A $\log p - \log q$ B $\frac{\log p}{\log q}$

C $\log p + \log$ D $\log q - \log p$

7 $a^3 + b^3$ = ...:

A $(a-b)(a^2+ab+b^2)$ B $(a+b)(a^2-ab+b^2)$

C $(a-b)(a^2-ab+b^2)$ D $(a-b)(a^2+ab-b^2)$

8 Factors of $a^4 - 4b^4$ are.....:

A $(a-b)(a+b)(a^2+4b^2)$ B $(a^2+2b^2)(a^2+2b^2)$

C $(a-b)(a+b)(a^2-4b^2)$ D $(a-26)(a^2+2b^2)$

9 H.C.F of $x^2 - 5x + 6$ and $x^2 - x - 6$ is:

A $x-3$ B $x+2$

C x^2-4 D $x-2$

10 H.C.F of $a^2 - b^2$ and $a^3 - b^3$ is.....:

A $a - b$ B $a + b$

C a^2+ab+b^2 D a^2-ab+b^2

11 If x is no larger than 10, then .....:

A $x \geq 8$ B $x \leq 10$

C $x < 10$ D $x > 10$

12 Point (2, -3) lies in quadrant:

A I B II

C III D IV

13 Mid point of the points (2, 2) and (0, 0) is:

A (1, 1) B (1, 0)

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

14 The right bisectors of the three sides of a triangle are.....:

A Congruent B Collinear

C Concurrent D Parallel

15 A point equidistant from the end points of a line segment is on its.....:

A Bisector B Right bisector

C Perpendicular D Median