10th Class 2018

Math (Science)	Group-II	PAPER-II
Time: 20 Minutes	(Objective Type)	Max. 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- If $u \propto v^2$, then:

(a) $u = v^2$ (b) $u = k v^2$ √

(c) $u v^2 = k$ (d) $u v^2 = 1$

2- A set with no element is called:

(a) Subset (b) Empty set √

(c) Singleton set (d) Super set

3- The number of terms in a standard quadratic equation $ax^2 + bx + c = 0$ is:

(a) 1 (b) 2

(c) 3 √ (d) 4

4- A frequency polygon is a many sided _____ .

(a) Closed figure √ (b) Rectangle

(c) Circle (d) Triangle

5- $\sec\theta \cot\theta$ = _____ .

(a) $\sin\theta$ (b) $\frac{1}{\cos\theta}$

(c) $\frac{1}{\sin\theta}$ √ (d) $\frac{\sin\theta}{\cos\theta}$

6- The arcs opposite to incongruent central angles of circle are always _____ .

(a) Parallel (b) Perpendicular

(c) Congruent (d) Incongruent √

7- The symbol for a triangle is denoted by:

(a) $\angle$ (b) Δ √

(c) $\perp$ (d) $\odot$

8- **The length of the diameter of a circle is how many times the radius of the circle?**

(a) 4 times (b) 3 times

(c) 2 times √ (d) 1 time

9- **If $\frac{a}{b} = \frac{c}{d}$, then componendo property is:**

(a) $\frac{a}{a+b} = \frac{c}{c+d}$ √ (b) $\frac{a}{a-b} = \frac{c}{c-d}$

(c) $\frac{ad}{bc}$ (d) $\frac{a-b}{b} = \frac{c-d}{d}$

10- **A circle has only one ____ .**

(a) Secant (b) Chord

(c) Diameter (d) Centre √

11- **How many common tangents can be drawn for two touching circles?**

(a) 1 (b) 2

(c) 3 √ (d) 4

12- **If $A \subseteq B$, then $A \cap B$ is equal to:**

(a) A √ (b) B

(c) ϕ (d) $A \cup B$

13- **The discriminant of $ax^2 + bx + c = 0$ is:**

(a) $b^2 - 4ac$ √ (b) $b^2 + 4ac$

(c) $-b^2 + 4ac$ (d) $-b^2 - 4ac$

14- **A fraction in which the degree of numerator is less than the degree of the denominator is called:**

(a) An equation (b) An improper fraction

(c) An identity (d) A proper fraction √

15- **Product of cube roots of unity is:**

(a) 0 (b) 1 √

(c) –1 (d) 3