1) Assertion: An equation of the form ax + by + c = 0, where a, b and c are real numbers, such that a and b are not both zero, is called a linear equation in two variables.

Reason: A linear equation in two variables has infinitely many solutions.

a) Both Assertion and Reason are correct and Reason is the correct explanation for Assertion

b.) Both Assertion and Reason are correct and Reason is not the correct explanation for Assertion.

c.) assertion is true but the reason is false.

d.) both assertion and reason are false

2) Assertion: The graph of every linear equation in two variables is a straight line.

Reason: x = 0 is the equation of the y-axis and y = 0 is the equation of the x-axis.

3) Assertion: the graph of y = a is a straight line parallel to the y-axis.

Reason:The graph of x= a is a straight line parallel to the x-axis.

4) Assertion: . An equation of the type y = mx represents a line passing through the origin.

Reason: Every point on the graph of a linear equation in two variables is a solution of the quadratic equation.

5) Assertion: There are infinite number of lines which passes through (3, 2).

Reason: A linear equation in two variables has infinitely many solutions.

6) Assertion: If x = 2, y = 1 is a solution of the equation 2x + 3y = k, then the value of k is 7.

Reason: The solution of the line will satisfy the equation of the line.

7) Assertion: If $x = 2k - 1$ and $y = k$ is a solution of the equation $3x - 5y - 7 = 0$, then the value of k is 10.

Reason: A linear equation in two variables has infinitely many solutions

8) Assertion: Assertion: x + y = 3 is not the equation of a line passing through the origin.

Reason: y = 2x is the equation of a line passing through the origin.

9) Assertion: Assertion: X = 3 and y = 2 is a solution of the linear equation 2x + 3y = 12.

Reason: X = 4 and y = 2 is a solution of the linear equation x + 3y = 10.

10) The point (3, 0) lies on the graph of the linear equation 4x + 3y = 12.

Reason: (3, 0) satisfies the equation 4x + 3y = 12.

11) Assertion: A linear equation in two variables has infinitely many solutions.

Reason: A linear equation $3x + 5y = 2$ has a unique solution.

12) Assertion : The graph of the linear equation $2x - y = 1$ passes through the point (2, 3).

Reason: Every point lying on graph is not a solution of $2x - y = 1$.

13) Assertion: Assertion: y = 3x represents a line passing through the origin.

Reason: Any line parallel to the x-axis is y = a.

14) Assertion: The point (2, 2) is the solution of x + y = 4.

Reason: Every point which satisfy the linear equation is a solution of the equation

15) Assertion: The graph of the linear equations $3x+2y=12$ and $5x-2y=4$ gives a pair of intersecting lines.

Reason: The graph of linear equations $a_1x+b_1y+c_1=0$ and $a_2x+b_2y+c_2=0$ gives a pair of intersecting lines if $a_1/a_2 \neq b_1/b_2$

16) Assertion: If the pair of lines are coincident, then we say that pair of lines is consistent and it has a unique solution.

Reason: If the pair of lines are parallel, then the pairs has solution and is called inconsistent pair of equations.

17) Assertion: The linear equations x-2y-3=0 and 3x+4y-20=0 have exactly one solution

Reason: The linear equation 2x+3y-9=0 and 4x+6y-18=0 have a unique solution.

18) Assertion: The graph of linear equations $a_1x+b_1y+c_1=0$ and $a_2x+b_2y+c_2=0$ gives a pair of intersecting lines if $a_1/a_2 \neq b_1/b_2$

Reason: the graphical representation of the equations $x+2y=3$ and $2x+4y+7=0$ gives a pair of coincident lines.

19) Assertion: The value of k for which the system of equations $3x+ky=0$ and $2x-y=0$ has a unique solution is $k \neq -3/2$

Reason: The graph of linear equations $a1x+b1y+c1=0$ and $a2x+b2y+c2=0$ gives a pair of intersecting lines if $a1/a2 \neq b1/b2$

20) Assertion: The number of common solutions for the system of linear equations $5x+4y+6=0$ and $10x+8y=12$ is zero.

Reason: The graph of linear equations $a1x+b1y+c1=0$ and $a2x+b2y+c2=0$ gives a pair of intersecting lines if $a1/a2 \neq b1/b2$

21) . Assertion: The value of k for which the system of linear equations 3x-4y=7 and 6x-8y=k have infinite number of solution is 14.

Reason: The graph of linear equations a1x+b1y+c1=0 and a2x+b2y+c2=0 gives a pair of intersecting lines if a1/a2 ≠ b1/b