7. The slope of the line which is perpendicular to a line joining the points (0,0) and (−8,8) is

(1) −1 (2) 1 (3) $\frac{1}{3}$ (4) −8

8. If slope of the line PQ is $\frac{1}{\sqrt{3}}$ then slope of the perpendicular bisector of PQ is

(1) $\sqrt{3}$ (2) $-\sqrt{3}$ (3) $\frac{1}{\sqrt{3}}$ (4) 0

9. If A is a point on the Y axis whose ordinate is 8 and B is a point on the X axis whose abscissae is 5 then the equation of the line AB is

(1) $8x+5y=40$ (2) $8x-5y=40$ (3) $x=8$ (4) $y=5$

10. The equation of a line passing through the origin and perpendicular to the line $7x-3y+4=0$ is

(1) $7x-3y+4=0$ (2) $3x-7y+4=0$ (3) $3x+7y=0$ (4) $7x-3y=0$

11. Consider four straight lines

(i) $l_1 : 3y=4x+5$ (ii) $l_2 : 4y=3x-1$ (iii) $l_3 : 4y+3x=7$ (iv) $l_4 : 4x+3y=2$

Which of the following statement is true ?

(1) l_1 and l_2 are perpendicular (2) l_1 and l_4 are parallel

(3) l_2 and l_4 are perpendicular (4) l_2 and l_3 are parallel

12. A straight line has equation $8y=4x+21$. Which of the following is true

(1) The slope is 0.5 and the y intercept is 2.6

(2) The slope is 5 and the y intercept is 1.6

(3) The slope is 0.5 and the y intercept is 1.6

(4) The slope is 5 and the y intercept is 2.6

13. When proving that a quadrilateral is a trapezium, it is necessary to show

(1) Two sides are parallel.

(2) Two parallel and two non-parallel sides.

(3) Opposite sides are parallel.

(4) All sides are of equal length.

14. When proving that a quadrilateral is a parallelogram by using slopes you must find

(1) The slopes of two sides

(2) The slopes of two pair of opposite sides

(3) The lengths of all sides

(4) Both the lengths and slopes of two sides

15. (2, 1) is the point of intersection of two lines.

(1) $x-y-3=0;\ 3x-y-7=0$ (2) $x+y=3;\ 3x+y=7$

(3) $3x+y=3;\ x+y=7$ (4) $x+3y-3=0;\ x-y-7=0$