Paper 2017 Supp MCQs

1. Product of $[\,x \quad y\,]\begin{bmatrix}2\\-1\end{bmatrix}$ is :

   A. $[2x+y]$ B. $[x-2y]$ C. $[2x-y]$ D. $[x+2y]$

2. Every real number is:

   A. A positive number B. A negative number
   C. A complex number D. A rational number

3. Find x if $\log_{64}x = \frac{-2}{3}$

   A. 32 B. $\frac{1}{16}$ C. $\frac{1}{8}$ D. $\frac{1}{4}$

4. The relation $y = \log_z x$ implies:

   A. $x^y = z$ B. $z^y = x$ C. $x^z = y$ D. $y^z = x$

5. $\frac{a^2-b^2}{a+b}$ is equal to:

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

6. What will be added to complete the square of $9a^2 - 12ab$?

   A. $-16b^2$ B. $16b^2$ C. $4b^2$ D. $-4b^2$

7. Factors of $3x^2 - x - 2$:

   A. $(x+1)(3x-2)$ B. $(x+1)(3x+2)$
   C. $(x-1)(3x-2)$ D. $(x-1)(3x+2)$

8. The square root of $a^2 - 2a + 1$ is:

   A. $\pm(a+1)$ B. $\pm(a-1)$ C. $a-1$ D. $a+1$

9. LCM of a^2+b^2 and a^4-b^4 is:

   A. a^2+b^2 B. a^2-b^2 C. a^4-b^4 D. $a-b$

10. $P(2,-3)$ lies in quadrant:

    A. I B. II C. III D. IV

11. Distance between the points $(1,0)$ and $(0,1)$:

    A. 0 B. 1 C. $\sqrt{2}$ D. 2

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

    A. Congruent B. Collinear C. Concurrent D. Parallel

13. The diagonals of a parallelogram _____ each other.

    A. Bisect B. Trisect
    C. Bisect and right angle D. Quadrisect

14. $x = 0$ is a solution of the inequality:

    A. $x > 0$ B. $3x + 5 < 0$ C. $x + 2 < 0$ D. $x - 2 < 0$

15. If $y = 2x + 1$, and $x = 2$ then y is equal to:

    A. 2 B. 3 C. 4 D. 5