

Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|----|--|---|
| 1 | Question Image | B. 1 D. -1 |
| 2 | The largest possible domain of the function: $y = \sqrt{x}$ is: | A. $(0, \infty)$ B. 12 C. $(3, 12)$ D. $(3, \infty)$ |
| 3 | Question Image | A. $3/8$ B. $7/8$ C. $1/8$ D. None |
| 4 | Question Image | A. z is purely imaginary B. a is any complex number C. z is real D. None of these |
| 5 | Which of the following is a vector. | A. energy B. force C. work D. power |
| 6 | The value of the expression $3 \cos \theta + 4 \sin \theta$ lie between | A. -7 and 7 B. -25 and 25 C. -1 and 1 D. -5 and 5 |
| 7 | Roots of the equation $x^2 - 7x + 10 = 0$ are | A. {2, 5} B. {-2, 5} C. {2, 5} D. {-2, -5} |
| 8 | Which of the following is a quadrantal angle | A. 30° B. 45° C. 60° D. 90° |
| 9 | The unit vector along z-axis is | D. none of these |
| 10 | The number z so that the triangle with vertices A(1,-1,0), B(-2,2,1) and C(0,2,z) is a right triangle with right angle at vertex C | A. 1,2 B. -1,-2 C. 2,-1 D. -2,1 |
| 11 | Question Image | |
| 12 | The behavior of trigonometric function is called | A. Continuity B. Discontinuity C. Periodicity D. Smoothness |
| 13 | $f(x) = 1$ is | A. identity function B. constant function C. linear function D. quadratic function |
| 14 | Question Image | |
| 15 | Decimal part of irrational number is | A. Terminating B. Repeating only C. Neither repeating nor terminating D. Repeating and terminating |
| 16 | The value of i^{4n+1} | A. 1 B. -1 C. i D. i^{2+2} |
| 17 | The area of the rhombus whose vertices are A(0,0), B(2,1), C(3,3), D(1,2) is | A. 36 square units B. 3 square units C. 6 square units D. 18 square units |

18 Question Image

19 Question Image

20 The roots of $(b-c)x^2 + (c-a)x + a-b = 0$ are equal if

- A. $2b = a+c$
- B. $2a = b+c$
- C. $2c = a+b$
- D. $a + b + c = 0$