

Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|----|--|---|
| 1 | Question Image | A. $a^{1/2} + a^{2/2}$ B. $a^{2/2} \times a^{1/2} + a^{2/2} \times a^{2/2}$ |
| 2 | The solution set of the equation $4 \cos^2 x - 3 = 0$ is | D. none of these |
| 3 | Question Image | A. [0, 0, 0] B. [1, 0, 0] C. [0, 1, 0] D. [0, 0, 1] |
| 4 | Question Image | A. 2C B. $C^{3/3}$ C. 1 D. 0 |
| 5 | A cone is generated by all lines through a fixed point and the circumference of | A. a Circle B. an ellipse C. a Hyperbola D. None of these |
| 6 | Arithmetic mean between $x - 3$ and $x + 5$ is | A. $x + 1$ B. $x + 2$ C. $x + 3$ D. $x + 4$ |
| 7 | Question Image | A. 120 B. 5 C. 4 D. 6 |
| 8 | If a, b, c are in A.P., a, b, c are in G.P. then A, m^2b, c are in | A. A.P. B. G.P. C. H.P. D. None of these |
| 9 | The point of concurrency of the medians of the $\triangle ABC$ is called its | A. Orthocenter B. Centroid C. Circumcentre D. Incentre |
| 10 | Period of $\tan 4x$ is _____ | |
| 11 | $s > t$ then | A. $(s - t)^2 > (t - s)^2$ B. $(s - t)^2 < (t - s)^2$ C. $(s - t)^2 = (t - s)^2$ D. None |
| 12 | Question Image | |
| 13 | The minimum value of the quadratic function $f(x) = 5x^2 - 11$ is | A. -11 B. 6 C. -7 D. 7 |
| 14 | There are 16 points in a plane, in which 6 are collinear. How many lines can be drawn by joining these points? | A. 10 B. 66 C. 71 D. 106 |
| 15 | The number of tangents to the circle $x^2 + y^2 - 8x - 6y + 9 = 0$ which pass through the point (3, -2) is | A. 2 B. 1 C. 0 D. None of these |
| 16 | Question Image | D. none of these |
| 17 | The square matrix A is skew Hermitian when $(A)^t =$ | A. A B. A' C. $-A$ D. A |

18 Question Image

19 Question Image

- A. 0
- B. -1
- C. 1
- D. 2

20 $\sin[\cot^{-1}\{\cos(\tan^{-1}x)\}]=$