

Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|----|---|---|
| 1 | Question Image | |
| 2 | $\tan(2\pi+\theta) = \underline{\hspace{2cm}}$; | A. $\tan\theta$ B. $-\tan\theta$ C. $\cot\theta$ D. $-\cot\theta$ |
| 3 | The arbitrary constants involving in the solution can be determined by the given conditions. Such conditions are called | A. Boundaries B. Variable separable C. Initial values D. None |
| 4 | Question Image | A. 0 B. 1 C. -A D. -1 |
| 5 | If $x - 1$ is a factor of $x^4 - 5x^2 + 4$ then other factor is | A. $(x + 2)^2(x - 1)$ B. $(x + 2)(x - 1)^2$ C. $(x+2)(x^2 - x - 2)$ D. $(x + 2)^2(x - 1)^2$ |
| 6 | When we expand $(a + 2b)^5$ then | A. $a^5 + 10a^4b + 40a^3b^2 + 80a^2b^3 + 80ab^4 + 32b^5$ B. $a^5 + a^4b + a^3b^2 + ab^4 + b^5$ C. $5a^5 + 4a^4b + 3a^3b^2 + 2a^2b^3 + 1ab^4 + b^5$ D. None |
| 7 | Latus rectum = 4 x _____ | A. focal distance of the vertex B. Chord C. Focus D. 1/2 |
| 8 | 202.04 is an example of | A. Recurring decimals B. Non-recurring decimals C. Terminating decimals D. None of above |
| 9 | Question Image | |
| 10 | If $f(x) = x^2$ then $f(-2)$ is | A. -2 B. 2 C. 4 D. -4 |
| 11 | Question Image | |
| 12 | Question Image | |
| 13 | The first three terms in the expansion of $(1 + x)^{-1}$ are | A. $1 + x + x^2$ B. $1 - x - x^2$ C. $-1 - x + x^2$ D. $1 - x + x^2$ |
| 14 | If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$ then which expression defines the product of z_1 and z_2 | A. $36 + (-32)i$ B. $-36 + 32i$ C. $6 + (-11)i$ D. $0, +(-12)i$ |
| 15 | For an A.P common difference d | A. Can be zero B. May or may not zero C. Cannot be zero D. None of these |

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| 16 |  | |
| 17 | $4^{1+x} + 4^{1-x} = 10$ is called | A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these |
| 18 | If $3x^4 + 4x^3 + x - 5$ is divided by $x + 1$, then the remainder is | A. 0 B. 7 C. -7 D. 5 |
| 19 |  | A. A parabola B. An ellipse C. A hyperbola D. A circle |
| 20 | The graph of a linear function is | A. a circle B. triangle C. a straight line D. none of these |