# Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | The distance s of a particle in time t is given by $s = t^3 - 6t^2 - 4t - 8$. Its acceleration vanishes at t = | A. 1<br>B. 2<br>C. 3<br>D. 4 |
| 2 | Question Image | A. Imaginary<br>B. Rational<br>C. Irrational<br>D. Real numbers |
| 3 | If n is a negative integer n! is | A. 1<br>B. 0<br>C. Unique<br>D. Not defined |
| 4 | Question Image | |
| 5 | The proposition S(n) is true $\forall n \in N$,S(k+1) true when _____is true | A. S(1)<br>B. Both a & c<br>C. S(k)<br>D. None |
| 6 | A fraction in which the degree of the numerator is greater than or equal to the degree of the denominator is called | A. A proper fraction<br>B. An improper fraction<br>C. An equation<br>D. An identity |
| 7 | Question Image | A. square root function<br>B. identity function<br>C. linear function<br>D. quadratic function |
| 8 | The points (5, 2, 4)(6, -1, 2) and (8, -7, k) are collinear if k is equal to | A. -2<br>B. 2<br>C. 3<br>D. -1 |
| 9 | Equation of the chord of contact to the tangents drawn from (-3,4) to the circle x2 + y2 = 21 | A. -3x + 4y =21<br>B. 4x - 3x = 0<br>C. -3x + 4y = 25<br>D. None of these |
| 10 | Question Image | |
| 11 | The general equation of circle $x^3 + y^3 + 2gx + 2fy + c = 0$ , contains: | A. Three independent variables<br>B. Two independent conntants<br>C. Three indepentent parameters<br>D. Three independent constants |
| 12 | Question Image | D. none of these |
| 13 | x = _____ is in the solution of 2x - 5 > 0 | A. 0<br>B. 2<br>C. -2<br>D. 3 |
| 14 | The number of the diagonals of a 6 sided figure is | A. 15<br>B. 21<br>C. 9<br>D. 6 |
| 15 | Period of sin x is | |
| 16 | 1.4142135... is _____ | A. A natural number<br>B. A rational number<br>C. A prime number<br>D. An irrational number |
| 17 | The sample space for tossing a coin twice is | A. {H, T}<br>B. {HH, HT, TH, TT}<br>C. {H, T, HH}<br>D. {HH, HT, TT} |
| 18 | Question Image | |

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|---|---|---|
| 19 | If $n \in Z+$ then$(a+x)n$ is a/an | A. Finite series<br>B. Convergent series<br>C. Infinite series<br>D. Divergent series |
| 20 | The line $y = 4x + c$ touches the hyperbola $x^2 - y^2 = 1$ if | |