# Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | If n∈Z+ then(a+x)n is a/an | A. Finite series<br>B. Convergent series<br>C. Infinite series<br>D. Divergent series |
| 2 | If (2, 3) and (2, 5) are end points of a diameter of a circle, then the centre of the circle is | A. (2, 4)<br>B. (4, 8)<br>C. (0, 2)<br>D. (0, -2) |
| 3 | The number of subsets of a set having three elements is | A. 4<br>B. 6<br>C. 8<br>D. none of these |
| 4 | Question Image | B. 6x + 2 + c<br>C. 6x + x<sup>2</sup>+ c<br>D. 6x<sup>3</sup>+ x<sup>2</sup>+ x |
| 5 | If c = 2i+j+k and d= -1 + 4j +2k, then [c-d]= | A. √7<br>B. √41<br>C. √19<br>D. √(2&7) |
| 6 | Question Image | |
| 7 | csc(-π/2) = _____; | A. 0<br>B. 1<br>C. -1<br>D. Undefined |
| 8 | Question Image | A. Associative law of addition<br>B. Commutative law of addition<br>C. Additive identity<br>D. Closure law of addition |
| 9 | Three right angles is the angle of measure | A. 270°<br>B. 180°<br>C. 90°<br>D. 270' |
| 10 | The function ø(x) is ananti derivativeof function f (x),x∈Df if | A. ø′(x) =∫f(x)dx<br>B. ø(x) =∫f(x)dx<br>C. ø′(x) =f(x)<br>D. ø(x) =∫′(x)dx |
| 11 | The set of complex numbers forms a group under the binary operation of | A. Addition<br>B. none of these<br>C. Division<br>D. Subtraction |
| 12 | If the angle between two vectors u and v is 0 orπ, then the vectors u and v are: | A. Orthogonal<br>B. Collinear<br>C. Perpendicular<br>D. None of these |
| 13 | The three noncollinear points through which a circle passe are known, then we can find the: | A. Variables x and y<br>B. Value of x and c<br>C. three constants f,g and c<br>D. inverse of the circle |
| 14 | If a particle moves according to the law s = $t^3$- $t^2$, then its velocity at time t = 1.5 is | A. 9/2<br>B. 15/4<br>C. 5<br>D. None |
| 15 | Question Image | A. 1 / 2<br>B. 1 / 3<br>C. 1 / 4<br>D. None of these |
| 16 | If #n = $(n-5)^2$+ 5, then find #3 x #4. | A. 54<br>B. 12<br>C. 4 |

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|---|---|---|
| | | D. 9 |
| 17 | Question Image | A. cos x<br>B. - sin x<br>C. - cos x<br>D. tan x |
| 18 | Question Image | |
| 19 | Range of y = sec x is | A. -1≤ y≤ 1<br>B. y≥ 1 or y≤ -1<br>C. y≤ 1or y≥ -1<br>D. -∞ < y < +∞ |
| 20 | The fixed point from which all the points of a circle are equidistant is called the | A. chord of the circle<br>B. centre of the circle<br>C. diameter of the circle<br>D. radius of the circle |