

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 5 B. 25 D. 3
2	If $x-2$ and $x-1$ both are factors of $x^3-3x^2+2x-4p$ , then P must equal to	A. 1 B. 2 C. 0 D. -2
3	Arithmetic mean between $x - 3$ and $x + 5$ is	A. $x + 1$ B. $x + 2$ C. $x + 3$ D. $x + 4$
4	$\cos (180^\circ - \theta) =$	A. $\sin \theta$ B. $-\cos \theta$ C. $-\sin \theta$ D. None of above
5	$f(x) = ax + b$ will be an identity function if	A. $a = 1, b = 1$ B. $a = 1, b = 0$
6	The law of cosines reduces to $a^2 + c^2 = b^2$ for	A. $\alpha = 90^\circ$ B. $\beta = 90^\circ$ C. $\gamma = 90^\circ$ D. $\alpha + \beta + \gamma = 180^\circ$
7	The angle between the vectors $\underline{u} = [-3, 5]$ and $\underline{v} = [6, -2]$ is:	A. $\pi/2$ B. $-3\pi/2$ C. $\pi$ D. None of these
8	The transport of a square matrix is a	A. Row matrix B. Column matrix C. Square matrix D. Null matrix
9	Question Image	
10	$\sqrt{2} + \sqrt{3} + \sqrt{5} = (\sqrt{2} + \sqrt{3} + \sqrt{5})$ : this property is called	A. associative property w.r.t addition B. commutative property C. Closure property w.r.t addition D. Additive identity
11	Question Image	
12	If $3x^4 + 4x^3 + x^5$ is divided by $x+1$ , which of the following is the remainder	A. 7 B. -2 C. 6 D. 1
13	If 2 and 2 are x and y components of vector then its angle with x-axis is	A. $30^\circ$ B. $45^\circ$ C. $60^\circ$ D. $90^\circ$
14	If p, q, r and in A.P., a is G.M. between p and q and b is G.M. between q and r, then $a^2, q^2, b^2$ are in	A. A.P. B. G.P. C. H.P. D. None of these
15	If $a = 2i + 2j, b = 3i - j$ and $c = 4i + 5j$ , the $3b - a - 2c =$	A. $-i - 15j$ B. $i - 15j$ C. $i - 3i$

		D. None of these
16	To each element of a group there corresponds _____ inverse element	A. Two B. One C. No D. Three
17	$x = r \cos\theta, y = r \sin\theta$ are the parametric equations of	A. Circle B. Ellipse C. Parabola D. Hyperbola
18	Multiplicative inverse of 0 is	A. 0 B. 1 C. -1 D. Does not exist
19	a chord passing through the focus of a parabola is called a:	A. Focal chord B. Latus rectum C. Tangent D. Directrix
20	Question Image <input type="text"/>	A. 1/2 B. 2 C. 1/4 D. 4