

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	5 unbiased coins are tossed simultaneously. The probability of getting at least one head is	A. $1/32$ B. $31/32$ C. $1/16$ D. None of these
2	The number of significant numbers which can be formed by using any number of the digits 0, 1, 2, 3, 4 but using each not more than once in each number is	A. 260 B. 356 C. 410 D. 96
3	The positive value of k for which the equation $x^2 + kx + 64 = 0$ has one of the roots 0	A. 4 B. 64 C. 8 D. All values of k
4	The difference of two consecutive terms of an A.P. is called _____	A. General term B. Common ratio C. Common difference D. None of these
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
6	The number of permutation that can be formed from the letters of the word OBJECT is	A. 700 B. 600 C. 720 D. 620
7	The directrix of $y^2 = -4ax$ is	A. $y = -a$ B. $y = a$ C. $x = a$ D. $x = -a$
8	The surface generated by lines, consists of two parts, called:	A. vertex B. apex C. nappes D. axis
9	The centre of the conic $x^2 + 16x + 4y^2 - 16y + 76 = 0$ is	A. (0,10) B. (-8,4) C. (-8,-2) D. (1,1)
10	Cycle tyres are supplied in lots of 10 and there is a chance if 1 in 500 tyres to be defective. Using Poisson distribution, the approximate number of lots containing no defective tyre in a consignment of 10, 0000 lots is	A. 9028 B. 9208 C. 9802 D. 9820
11	The multiplicative inverse of 1 is	A. 1 B. -1 C. 0 D. Does not exist
12	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. $0, +(-12)i$
13	The minimum value of the quadratic function $f(x) = 5x^2 - 11x$ , is	A. -11 B. 6 C. -7 D. 7
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
16	The set of complex numbers forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Subtraction
17	$\cos 315^\circ =$ _____	

18	The set of rational number is represented by	<p>A. <math>\mathbb{N}</math>          B. <math>\mathbb{R}</math>          C. <math>\mathbb{Q}</math>          D. <math>\mathbb{Q}</math></p>
19	If A is a set then any subset R of $A \times A$ is called	<p>A. relation on A          B. relation on B          C. relation from A to B          D. relation from B to A</p>
20	$\sin(a-90^\circ) = \underline{\hspace{2cm}}$ ;	<p>A. <math>\sin a</math>          B. <math>\cos a</math>          C. <math>-\sin \theta</math>          D. <math>-\cos a</math></p>