Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 12 B. 13 C. 14 D. 15
2	Question Image	
3	Question Image	A. π/2 B. π/3 C. π/4 D. π
4	Question Image	A. a = a B. a < a C. a > a D. a²= a
5	The set {-1,1} is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
6	A statement which is either true or false is called	A. Induction B. Deduction C. Propositicon D. Logic
7	cos 3a =_____;	A. 3sin a - 4sin3 a B. 4sin a - 3sin3 a C. 3cos3 a - 4cos a D. 4cos3a - 3cos a
8	Circle $x^2 + y^2 - 2y - y = 0$ and $x^2 + y^2 - 8y - 4 = 0$:	A. Interesect B. touch externally C. touch internally D. do not touch
9	The equation of the chord of the circle $x^2 + y^2 - 4x = 0$ whose mid-point is (1, 0) is	A. y = 2 B. y = 1 C. x = 2 D. x = 1
10	The distance of the point (1.1) from the origin is	A. 0 B. 2
11	The product of complex numbers (a,b) and (c,d) is	A. (ac, bd) B. (ac-bd, ad+bc) C. (ab,cd) D. (ac+bd,ad-bc)
12	Question Image	
		A. 2 sin<span style="font-family: "Times New Roman"; font-size: 24px; color: rgb(34, 34, 34); text-

13	sin (α+β) + sin (α-β)	align: center; background-color: rgb(255, 255, 224);">α cosβ B. sin (2α β) C. sinαcosα D. None of these
14	The inclination of a line parallel to x-axis is	
15	A tower subtends an angleαat a point on the same level as the root of the tower and at a second point, b meters above the first, the angle of depression of the foot of the tower isβ. The height of the tower is	A. b cotαtanβ B. b tanαtanβ C. b tanαcotβ D. None of these
16	If the equation x2+2x-3=0 and x2+3x-k=0 have a common root then the non - zero value of k is	A. 1 B. 3 C. 2 D. 4
17	If #n = $(n-5)^2$+ 5, then find #3 x #4.	A. 54 B. 12 C. 4 D. 9
18	Equation of the chord of contact to the tangents drawn from (-3,4) to the circle x2 + y2 = 21	A. -3x + 4y =21 B. 4x - 3x = 0 C. -3x + 4y = 25 D. None of these
19	When we expand $(a + 2b)^5$then	A. a⁵+ 10a⁴b + 40a³b²+ 80a²b³+ 80ab⁴+ 32b⁵ B. a⁵+ a⁴b + a³b²+ a²b³+ ab⁴+ b⁵ C. 5a⁵+ 4a⁴b + 3a³b²+ 2a²b³+ 1 ab⁴+ b⁵ D. None
20	If f(x) = $(-x)^2$then f(-2) is	A. 0 B. 2 C. -4 D. 4