Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The st. lines whose direction cosines satisfy al + bm + cn = 0, fmn + gnl + hlm=0 are perpendicular if	
2	cos 3a =_____;	A. 3sin a - 4sin3 a B. 4sin a - 3sin3 a C. 3cos3 a - 4cos a D. 4cos3a - 3cos a
3	Sin-1(-x)=	A. x B. -x C. -sin-1 x D. cos-1 x
4	Fifteen girls compete in a race. The first three places can be taken by them in	A. 3! ways B. 12! ways C. 15 x 14 x 13 ways D. 42 ways
5	A bag contains 7 whit, 5 black and 4 rd balls. If two balls are drawn at random from the bag, the probability that they are not of the same color is	A. 73 / 120 B. 83 / 120 C. 67 / 120 D. 43 / 120
6	Question Image	A. 1, 2, 3 B. 1, 5, 9 C. 2, 5, 8 D. 3, 6, 9
7	r + 3 >5 then which is true	A. r + 2 > 4 B. r + 2 < 4 C. r + 2 = 4 D. None
8	Question Image	C. 2x D. 2
9	Question Image	A. a sec(ax + b) + c B. - a sec(ax + b) + c
10	If A∩B=B, then n(A∩B) is equal to	A. n(a) B. n(a)+n(c) C. n(c) D. None of these
11	The smallest positive root of the equation tan x - x = 0 lies on	
12	Latus rectum = 4 x _____	A. focal distance of the vertex B. Chord C. Focus D. 1/2
13	The set which has no proper subset is	A. {0} B. {} C. {∅} D. None of these
14	The set of integer is	A. Finite group B. A group w.r.t addition C. A group w.r.t multiplication D. Not a group
15	Question Image	A. 0 B. Independent of a C. Independent of b D. Independent of c
16	In quadratic equation $y=ax^3+bx+c$, if b and c are both zero then the graph is	A. Symmetric w.r.t.y-axis B. Symmetric w.r.t.x-axis C. Straight Line D. Circle
17	Question Image	A. 3, -3, 11 B. 3, 3, 11 C. -3, 3, -11

		D. -3, -3, 11
18	Question Image	
19	I f the focus is F (0,-a) and directrix is the line v=a, then equation of the parabola is:	A. x² = 4ay B. y² = 4ax C. y² = -4ax D. x² = 4ax
20	The points (5, 0, 2), (2, -6, 0), (4, -9, 6) and (7, -3, 8) are vertices of a	A. Square B. Rhombus C. Rectangle D. Parallelogram