Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If A = [aij]mxpand B =[aij]pxnthen order of BA is	A. m x n B. p x n C. n x m D. None of these
2	The magnitude of a vector can never be	A. Zero B. Negative C. Positive D. None of these
3	Question Image	
4	Each point of the feasible region is called	A. Solution B. feasible solution C. Both a & b D. None
5	Power set of X i.e P(X) _____ under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
6	u,v,wand u x (v.w) are	A. Equal B. Parallel C. Additive immense of each other D. Meaningless
7	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
8	sin(a-90°)=_____;	A. sina B. cosa C. -sinθ D. -cosa
9	Question Image	A. 6x - 2 + c B. x³- x²+ x + c C. 6x - x²+ c D. 6x³- x²+ c
10	$(x + 2)^2 = x^2 + 4x + 4$ is	A. A linear equation B. A cubic equation C. A quadratic equation D. None
11	For any equilateral r :R :η :r1 :r2 :r3 =	A. 1:2:3:4:5 B. 1:2:3:3:3 C. 1:2:4:4:4 D. 2:1 :2 :2 :2
12	Question Image	A. cosec x + c B. -cosec x + c C. -sec x + c D. sec x + c
13	Question Image	
14	To express a single rational fraction as a sum of two or more single rational fractions which are called	A. improper fractions B. Partial fractions C. mixed form D. Polynomials
15	$\cos h^2 x + \sin h^2 x$	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
16	The direction cosines of any normal to the xy-plane are	A. <1, 0, 0> B. <0, 1, 0> C. <1, 1, 0>

		D. <0, 0, 1>
17	In R, the additive identity is	A. 0 B. 1 C. -1 D. None
18	A non-homogeneous linear system AX = B has no solution if	A. |A| = 0 B. |A|≠ 0 C. Rank (a) = no of variables D. Rank > no of variables
19	Two circles x2 +y2 +8x -9= 0 and x2+y2+6y +k =0 touchinternallyif the value of k is	A. k = 9 B. k = ±9 C. k=-9 D. k=11
20	If $2x^{1/3}+ 2x^{-1/3}= 5$, then x is equal to	A. 1 or -1 B. 2 or 1/2 C. 8 or 1/8 D. 4 or 1/4