Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	if the value of the sphere, v =4/3πr^2, then the which of the following statement is true?	A. r is the function of v B. v is the function ofπ C. π is independent variable D. None of these
2	The line through the centre and perpendicular to the transverse axis is called the	A. Major axis B. Minor axis C. Focal axis D. Conjugate axis
3	If A is a skew-symmetric matrix of order n and P, any square matrix of order n.prove that P' AP is	A. Skew-symmetric B. Symmetric C. Null D. Diagonal
4	The set which has no proper subset is	A. {0} B. {} C. {∅} D. None of these
5	x = _____ is in the solution of $2x - 3 < 0$	A. 2 B. -2 C. 3 D. 4
6	If the angle between two vectors u and v is 0 orπ, then the vectors u and v are:	A. Orthogonal B. Collinear C. Perpendicular D. None of these
7	1/3 is _____	A. A prime number B. An integer C. A rational number D. An irrational number
8	IfΔABC is right, law of cosine reduce to	A. Law of sine B. Law of tangent C. Phthogorous theorem D. Hero's formula
9	Question Image	
10	The set {-1,1} is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
11	The st. lines whose direction cosines satisfy al + bm + cn = 0, fmn + gnl + hlm=0 are perpendicular if	
12	The period of 2 cos x is	A. 30π B. 7π C. 5π D. 2π
13	∫Sec^2 (ax + b) dx is equal to:	A. tan^2 (ax + b) B. 1/a tan^2 (ax + b) C. 1/atan (ax +b) D. tan (ax + b)
14	Tan(α-β)=	
15	If 4 sin$^2\theta$=1, then values of$\theta$are	
16	If S and P are the sum and the product of roots of a quadratic equation, then the quadratic equation is	A. x^2+ Sx - P = 0 B. x^2- Sx + P = 0 C. x^2- Sx - P = 0 D. X^2+ Sx + P = 0
17	Question Image	A. 2 b B. 2 a C. 2 ab D. a + b

18	Rational number is a number which can be written as a terminating decimal fraction or a	A. Non-terminating decimal fraction B. Non-recurring C. Recurring decimal fraction D. a, b and c
19	Question Image	A. cos 2x + c B. - cos 2x + c C. tan 2x + c D. cot 2x + c
20	(-28,12) divides the join of A(-6,3) and B(5,-2) in ratio	A. 1:2 B. 3:2 C. 2:3 D. 2:1