

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$f(x) = x$ is	A. trigonometric function B. exponential function C. quadratic function D. identify function
2	Question Image	A. $Y = -x \log x - x + c$ B. $Y = x \log x + x$ C. $Y = x \log x - x + c$ D. None of these
3	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. $x^2 + Sx + P = 0$
4	Question Image	
5	The degree of differential equation is the power of the	A. Lowest order derivative B. Highest order derivative C. Integral D. All are correct
6	Question Image	
7	In the function $f: A \rightarrow B$, the elements of a are called	A. Images B. Pre-images C. ranges D. Parameters
8	Question Image	A. R B. $2R$ C. r D. $2r$
9	Question Image	
10	Consider the equation $px^2 + qx + r = 0$ where p,q,r are real The roots are equal in magnitude but opposite in sign when	A. $q = 0, r = 0, p \neq 0$ B. $p = 0, qr \neq 0$ C. $r = 0, pq \neq 0$ D. $q = 0, pq \neq 0$
11	The coefficient of x^{18} in $(ax^4 - bx)^9$ after expansion is	A. $84a^3b^6$ B. $22a^3b^6$ C. $27a^4b^5$ D. $28a^3b^6$
12	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the curve of intersection is:	A. an ellipse B. a circle C. a parabola D. a hyperbola
13	The contra positive of $p \rightarrow q$ is	A. $q \rightarrow p$ B. $\sim q \rightarrow \sim p$ C. $\sim p \rightarrow \sim q$ D. None of these
14	A line joining two distinct points on a parabola is called a _____ of the parabola.	A. Chord B. Tangent C. Latus rectum D. directrix
15	The process of finding a function whose derivative is given is called a	A. Differentiation B. Integration C. Differential D. None
16	The angle of depression of the point at a distance 70 meters from the foot of the tower from the top of the tower is 45° . The height of the tower is	A. 37m B. 97m C. 101m D. 70m
17	Let A,B and C be any sets such that $A \cup B = A \cup C$ and $A \cap B = A \cap C$ then	A. $A = B$ B. $B = C$ C. $A \neq C$ D. $A = C$

D. $A \neq B$

18

Question Image

19

Question Image

A. 3×1

B. 1×3

C. 3×3

D. 1×1

20

$(7,9) + (3,-5) =$

A. $(4,4)$

B. $(10,4)$

C. $(9,-5)$

D. $(7,3)$