

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	The set R is _____ w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group
3	In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The students enrolled for English cannot any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics	A. 40 B. 30 C. 50 D. 20
4	If $c = 2i+j+k$ and $d = -1 + 4j + 2k$, then $[c-d]=$	A. $\sqrt{7}$ B. $\sqrt{41}$ C. $\sqrt{19}$ D. $\sqrt{(2\&7)}$
5	Some of two real numbers is also a real number , this property is called:	A. Commutative property w.r.t addition B. Closure property w.r.t. addition C. Associative property w.r.t. addition D. Distributive property w.r.t addition
6	An equation containing at least one derivative of a depends variable with respect to independent variable is a (an)	A. Implicit equation B. Differential equation C. General equation D. None of these
7	If $n(X) = 18$, $n(X \cap Y) = 7$, $n(X \cup Y) = 40$ then $n(Y) =$	A. 1 B. 12 C. 5 D. 29
8	$2/9, 5/7 \in R, (2 \mid 9)(5 \mid 7) = 10/63 \in R$ this property is called	A. Associative property B. Identity property C. Commutative property D. Closure property w.r.t multiplication
9	Question Image	A. 1 B. 0
10	The multiplicative inverse of 0 is	A. 1 B. -1 C. 0 D. Does not exist
11	Question Image	
12	A circle drawn inside a triangle and touching its sides is called	A. In-circle B. Circum circle C. Escribed circle D. None of these
13	The solution set of $\sin x + \cos x = 0$ is	
14	Question Image	A. <i>π</i> B. <i>π</i> C. <i>π</i> D. <i>π</i>

/ 3
 D. <i>2π</i>/ 3

15	Question Image	
16	Question Image	
17	The sum of an indicated number of terms in a sequence is called	A. sequence B. progression C. Series D. Mean
18	A monoid (G, *) is said to be group if	A. have identity element B. is commutative C. have inverse of each element D. None of these
19	The roots of the equation $ax^2 + bx + c = 0$ are real and equal if	A. $b^2 - 4ac < 0$ B. $b^2 - 4ac = 0$ C. $b^2 - 4ac > 0$ D. None of these
20	In quadratic equation $y = ax^2 + bx + c$, 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