

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$\int x \sin x dx$ is equal to:	A. $\sin x/x + \cos x$ B. $\sin x - \cos x/x$ C. $x \cos x + \sin x$ D. $-x \cos x + \sin x$
2	The set $\{1, -1\}$ is closed w.r.t.	A. Addition B. Multiplications C. Subtraction D. None of these
3	$\cos(\alpha + \beta) + \cos(\alpha - \beta) =$	A. $4 \cos \alpha \cos \beta$ B. $2 \cos \alpha \cos \beta$ C. $2 \sin \alpha \sin \beta$ D. $2 \sin \alpha \cos \beta$
4	0 (zero) is	A. An irrational number B. A rational number C. A negative integer D. A positive number
5	Question Image	A. $x^3 - x^2 + x + c$ B. $6x - 2 + c$ C. $x^3 - 2x + c$
6	Question Image	
7	The order of the matrix A is 3×2 and that of B is 2×3 . The order of the matrix BA is	A. 3×3 B. 3×2 C. 2×5 D. 5×2
8	An integral of $1/x dx$ is:	A. $1/x^2$ B. $1/x^2$ C. $1/\ln x$ D. $\ln x$
9	Question Image	A. x C. y
10	Question Image	
11	If $f: A \rightarrow B$ is an injective function and second elements of no two of its ordered pairs are equal, then f is called	A. 1-1 and onto B. Bijective C. 1-1 and into D. None of these
12	Which one is a pair of allied angles	A. $(180^\circ - \theta)$ B. $(180^\circ + \theta)$

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C. $(180^\circ + \text{<i></i>$

D. None of these

13 There are _____ types of rational fraction

- A. Three
- B. Four
- C. Five
- D. Two

14 In one hour, the minute hand of a clock turns through

15

- A. 0
- B. -1
- C. 1
- D. 1/2

16 A die is thrown, the probability that the dots on the top are prime numbers or odd numbers is

- A. 1/2
- B. 2/3
- C. 1/3
- D. 2/5

17 If $4 > b$ or $a < b$ then $a = b$ is a

- A. Additive property
- B. Transitive property
- C. Trichotomy property of inequality
- D. None of above

18 A man of height 6 ft observes the top of a tower and the foot of the tower at angles of 45° and 30° of elevation and depression respectively. The height of the tower is

19 The greatest term in the expansion of $(3+2x)^9$, when $x=1$ is

- A. 4th
- B. 4th and 5th
- C. 5th
- D. 6th

20 The period of $\tan [x/3]$ is _____

- A. 2π
- B. π
- C. 3π
- D. 5π