

Roll No. : _____

Objective

Paper Code

6194

Intermediate Part First

MATHEMATICS (Objective) Group – II

Time: 30 Minutes

Marks: 20



Q.No.1

You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill the relevant circle in front of that question number on computerized answer sheet. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero marks in that question. Attempt as many questions as given in objective type question paper and leave other circles blank.

S.#	Questions	A	B	C	D
1	If $\sin x = \frac{1}{2}$, then $x =$:	$\frac{\pi}{6}, \frac{5\pi}{6}$	$-\frac{\pi}{6}, \frac{5\pi}{6}$	$-\frac{\pi}{6}, -\frac{5\pi}{6}$	$\frac{\pi}{3}, \frac{2\pi}{3}$
2	Domain of $y = \tan^{-1} x$ is:	\mathbb{R}	\mathbb{Q}	\mathbb{N}	\mathbb{Z}
3	Angle below the horizontal line is called:	Right angle	Oblique angle	Angle of depression	Angle of elevation
4	Period of $\cos \theta$ is:	2π	$\frac{3\pi}{2}$	π	$\frac{\pi}{2}$
5	$\cos(\theta - 90^\circ) - \cos(\theta + 90^\circ)$ equals to:	$-2\cos \theta$	$2\cos \theta$	$-2\sin \theta$	$2\sin \theta$
6	The angle $\frac{\pi}{12}$ in degree measure is:	30°	20°	45°	15°
7	If $n^2 > n + 3$ then it is true for:	$n = 0$	$n < 1$	$n \geq 2$	$n \geq 3$
8	For an event A, the range of $P(A)$ is:	$0 < P(A) \leq 1$	$0 \leq P(A) < 1$	$0 \leq P(A) \leq 1$	$0 < P(A) < 1$
9	If $a = 1, b = 5$ then $A \times H$ is equal to:	5	-5	$-\frac{5}{2}$	$\frac{2}{5}$
10	Sum of infinite geometric series is valid if:	$r < 1$	$ r < 1$	$ r = 1$	$ r > 1$
11	The fraction $\frac{x+1}{x^2+2}$ is:	Proper fraction	Improper fraction	Identity	Mixed
12	Complex cube roots of -1 are :	ω, ω^2	$1, \omega, \omega^2$	$-1, -\omega, -\omega^2$	$-\omega, -\omega^2$
13	Sum of all the three cube roots of unity is:	1	-1	3	0
14	The additive inverse of matrix A is:	A	-A	A^2	1
15	The trivial solution of homogeneous linear equations is:	(1, 0, 0)	(0, 1, 0)	(0, 0, 1)	(0, 0, 0)
16	The domain of $f = \{(a, 1), (b, 1), (c, 1)\}$ is:	{a, b, c}	{1}	{b, c}	{a, b, c, 1}
17	A function which is onto is called:	Injective	Surjective	Objective	Bijjective
18	The set $\{(a, b)\}$ is called:	Infinite set	Set with two elements	Singleton set	Empty set
19	Imaginary part of $\frac{i}{1+i}$ is:	1	$\frac{1}{2}$	$\frac{i}{2}$	$-\frac{i}{2}$
20	$\sqrt{-5}$ belongs to the set of:	Rational numbers	Real numbers	Complex numbers	Integers

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