Objective
Paper Code
6196

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	For any two real numbers a and b, G^2 is equal to:	AH	$\frac{H}{A}$	$\frac{A}{H}$	$\sqrt{AH}$
2	If $\frac{1}{5}$, $\frac{1}{8}$ are two harmonic means between a and b, then value of b is:	$\frac{1}{3}$	$\frac{1}{10}$	$\frac{1}{11}$	$\frac{1}{13}$
3	If $a_n = n + (-1)^n$, then a_{10} = :	10	11	9	–11
4	$\frac{P(x)}{x^2+1}$ is proper fraction, if degree of the polynomial P(x) is:	Equal to 2	Greater than 2	Not equal to 2	Less than 2
5	Degree of a constant polynomial is:	1	0	2	Arbitrary
6	If one root of $x^2 + ax + 2 = 0$ is 2, then value of a is:	3	4	3	-2
7	If $A = \begin{bmatrix} 2 & 1 \\ 6 & 3 \end{bmatrix}$, then cofactor of 6 is:	1	-6	-1	3
8	The matrix [7] is:	Row matrix	Square matrix	Column matrix	All these
9	If $\sim p \rightarrow q$ is a conditional, then its converse is:	$q \rightarrow \sim p$	$\sim q \rightarrow p$	$p \rightarrow \sim q$	$\sim q \rightarrow \sim p$
10	If r is the radius and C is the circumference of a circle, then value of $\frac{C}{r}$ = :	π	$\frac{\pi}{2}$	2π	$\frac{1}{2\pi}$
11	The solution of equation $\tan x = \frac{1}{\sqrt{3}}$ lies in quadrants:	I & II	I & III	II & IV	I & IV
12	If $x = \sin^{-1}\frac{\sqrt{3}}{2}$, then value of x is:	$\frac{-\pi}{2}$	$\frac{-\pi}{3}$	$\frac{\pi}{3}$	$\frac{\pi}{6}$
13	With usual notations, $\frac{abc}{\Delta}$ = :	4R	r	R	rs
14	In any triangle ABC, if two sides and their included angle is given, then area of triangle is:	$\Delta = \frac{1}{2}bc\sin\alpha$	$\frac{1}{2}ab\sin\gamma$	$\Delta = \frac{1}{2}ac\sin\beta$	All these
15	Period of $2\,\text{cosec}\frac{x}{4}$ is:	$\frac{\pi}{2}$	4π	2π	8π
16	Value of $\sin 7\pi$ is equal to:	1	$\frac{1}{2}$	-1	0
17	Angle $\frac{5\pi}{9}$ lies in quadrant:	I	III	II	IV
18	If $\ell = 1.5\text{cm}$, $r = 2.5\text{cm}$, then value of θ is:	3.75 rad	$\frac{3}{5}$ rad	0.60 rad	$\frac{5}{3}$ rad
19	The 2nd term in the expansion of $(1-2x)^{\frac{1}{3}}$ is:	$-\frac{2}{3}x$	$\frac{2}{3}x$	$\frac{4}{9}x^2$	$\frac{3}{2}x$
20	The number of permutations of the word PANAMA are:	10	60	20	120