

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	1	<p>Which of the following points are collinear?</p> <p>A1 : (0,0,-10), (0,3,0), (1,4,5)</p> <p>A2 : (2,0,0), (0,4,0), (0,0,6)</p> <p>A3 : (5,3,-2), (3,2,1), (-1,0,7)</p> <p>A4 : (2,3,0), (34,35,0), (2,2,2)</p>	4.0	1.00
Objective Question				
2	2	<p>The acute angle between the line joining the points (3,1,-2), (4,0,-4) and (4,-3,3), (6,-2,2) is</p> <p>A1 $\frac{\pi}{3}$:</p> <p>A2 $\frac{\pi}{6}$:</p> <p>A3 $\frac{\pi}{7}$:</p> <p>A4 $\frac{\pi}{4}$:</p>	4.0	1.00
Objective Question				
3	3	<p>The angle between the planes $2x-y+z = 6$ and $x+y+2z = 3$ is</p> <p>A1 $\frac{\pi}{3}$:</p> <p>A2 $\frac{\pi}{6}$:</p> <p>A3 $\frac{\pi}{7}$:</p> <p>A4 $\frac{\pi}{4}$:</p>	4.0	1.00
Objective Question				
4	4	<p>The function $f: R \rightarrow R$ defined by $f(x)=\tan x$ is</p> <p>A1 : bijective</p>	4.0	1.00

		<p>A2 injective but not surjective :</p> <p>A3 surjective but not injective :</p> <p>A4 neither injective nor surjective :</p>		
Objective Question				
5	5	<p>How many odd numbers in the range 1000-9999 have no repeated digits and end with 2?</p> <p>A1 3456 :</p> <p>A2 1792 :</p> <p>A3 0 :</p> <p>A4 2296 :</p>	4.0	1.00
Objective Question				
6	6	<p>Let X and Y be sets with $X =m$ and $Y =n$, $m < n$. How many injective functions are there from X to Y?</p> <p>A1 $m!$:</p> <p>A2 $n!$:</p> <p>A3 1 :</p> <p>A4 $n(n-1)(n-2)\dots(n-m+1)$:</p>	4.0	1.00
Objective Question				
7	7	<p>If there are 3 boys and 4 girls, how many way can they it in a row if the first is always a boy and last is always a girl?</p> <p>A1 7! :</p> <p>A2 $3! \times 4!$:</p> <p>A3 $5! \times 3 \times 4$:</p> <p>A4 5! :</p>	4.0	1.00
Objective Question				
8	8		4.0	1.00

		<p>What is the coefficient of x^{11} in the expansion of $\left(2x^2 - \frac{x}{2}\right)^{12}$?</p> <p>A1 $\frac{1}{16} \binom{12}{8}$:</p> <p>A2 $\frac{1}{12} \binom{12}{8}$:</p> <p>A3 $\frac{1}{8} \binom{12}{8}$:</p> <p>A4 0 :</p>		
Objective Question				
9	9	<p>If z_1 & z_2 are two complex numbers such that $\text{Im}(z_1 + z_2) = 0$ and $\text{Im}(z_1 z_2) = 0$ then</p> <p>A1 $z_1 = z_2$:</p> <p>A2 $z_1 = -z_2$:</p> <p>A3 $z_1 = \bar{z}_2$:</p> <p>A4 $z_1 = -\bar{z}_2$:</p>	4.0	1.00
Objective Question				
10	10	<p>If a person has 100 letter in his hand and there are 20 letter boxes, in how many ways can he post the 100 letters in the 20 letter boxes?</p> <p>A1 20 x 100 :</p> <p>A2 20^{100} :</p> <p>A3 100^{20} :</p> <p>A4 20! :</p>	4.0	1.00
Objective Question				
11	11	<p>$\int \frac{x}{\sqrt{x+2}} dx =$</p> <p>A1 $\frac{2}{3}(x-4)\sqrt{x+2} + c$:</p> <p>A2 $\frac{2}{3}(x+8)\sqrt{x+2} + c$:</p>	4.0	1.00

		$A^3 \quad (2x - 4)\sqrt{x + 2} + c$		
		$A^4 \quad (2x + 4)\sqrt{x + 2} + c$		

Objective Question

12	12	<p>The possible number of different orders that a matrix can have when it has 48 elements, is</p>	4.0	1.00
		<p>A1 8</p>		
		<p>A2 16</p>		
		<p>A3 10</p>		
		<p>A4 48</p>		

Objective Question

13	13	<p>The angle between two diagonals of a cube</p>	4.0	1.00
		<p>A1 $\cos^{-1} \frac{1}{2}$</p>		
		<p>A2 $\cos^{-1} \frac{1}{\sqrt{2}}$</p>		
		<p>A3 $\cos^{-1} \frac{1}{\sqrt{3}}$</p>		
		<p>A4 $\cos^{-1} \frac{1}{3}$</p>		

Objective Question

14	14	<p>The value of $x = \sqrt{12 + \sqrt{12 + \sqrt{12 + \dots}}}$ is</p>	4.0	1.00
		<p>A1 3</p>		
		<p>A2 1</p>		
		<p>A3 4</p>		
		<p>A4 ∞</p>		

Objective Question

15	15	<p>Let $\Delta = \begin{vmatrix} 0 & b-a & c-a \\ a-b & 0 & c-b \\ a-c & b-c & 0 \end{vmatrix}$ then Δ equal to</p>	4.0	1.00
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		<p>A1 $a+b+c$:</p> <p>A2 $-(a+b+c)$:</p> <p>A3 abc :</p> <p>A4 0 :</p>		
Objective Question				
16	16	<p>What is the midpoint of the line joining the points (4,5,3) and (10,11,7)?</p> <p>A1 (1,4,5) :</p> <p>A2 (2,4,3) :</p> <p>A3 (1,2,5) :</p> <p>A4 (7,8,5) :</p>	4.0	1.00
Objective Question				
17	17	<p>If an unbiased coin is tossed 5 times, what is the probability to get 2 heads and 3 tails?</p> <p>A1 $5/16$:</p> <p>A2 $2/32$:</p> <p>A3 $5/32$:</p> <p>A4 $6/32$:</p>	4.0	1.00
Objective Question				
18	18	<p>Sum of the series $S = 1^2 - 2^2 + 3^2 - 4^2 + 5^2 - 6^2 + \dots - 1000^2 + 1001^2$ is</p> <p>A1 100051 :</p> <p>A2 100501 :</p> <p>A3 501501 :</p> <p>A4 201201 :</p>	4.0	1.00

Objective Question

19	19	<p>If $f(x) = [x] + [-x]$, where $[x]$ denotes the greatest integer not greater than x, then for any integer m</p> <p>A1 f is continuous at $x=m$:</p> <p>A2 $\lim_{x \rightarrow m} f(x)$ exists and is equal to $f(m)$:</p> <p>A3 $\lim_{x \rightarrow m} f(x)$ exists and is not equal to $f(m)$:</p> <p>A4 f is differentiable at $x=m$:</p>	4.0	1.00
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Objective Question

20	20	<p>If $S = \{[1], [3], [4], [5], [9]\}$ is an abelian group under multiplication modulo 11, then the inverse of $[9]$ is</p> <p>A1 $[4]$:</p> <p>A2 $[1]$:</p> <p>A3 $[3]$:</p> <p>A4 $[5]$:</p>	4.0	1.00
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Objective Question

21	21	<p>In the multiplicative group of non-zero congruence class modulo 7, the order of the element $[3]$ is</p> <p>A1 6 :</p> <p>A2 4 :</p> <p>A3 7 :</p> <p>A4 3 :</p>	4.0	1.00
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Objective Question

22	22	<p>In the power set of $\{1, 2, 3, 4, 5, 6\}$, how many sets contain the elements 2 and 6?</p> <p>A1 2^0 :</p> <p>A2 2^2 :</p> <p>A3 2^6 :</p> <p>A4 2^4</p>	4.0	1.00
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Objective Question				
23	23	<p>Angel between the parabolas $y^2 = x$ and $x^2 = y$ at origin is</p> <p>A1 : $2 \tan^{-1}(3/4)$</p> <p>A2 : $\tan^{-1}(4/3)$</p> <p>A3 : $\frac{\pi}{2}$</p> <p>A4 : $\frac{\pi}{4}$</p>	4.0	1.00
Objective Question				
24	24	<p>Sum of all the values of x satisfying the equation $\log_{100} \log_7(\sqrt{x+7} + \sqrt{x}) = 0$ is</p> <p>A1 : 25</p> <p>A2 : 9</p> <p>A3 : 171</p> <p>A4 : 10</p>	4.0	1.00
Objective Question				
25	25	<p>When the eccentricity of an ellipse becomes zero then ellipse becomes a</p> <p>A1 : straight line</p> <p>A2 : circle</p> <p>A3 : point</p> <p>A4 : pair of straight lines</p>	4.0	1.00
Objective Question				
26	26	<p>Let $A = \{1, 2, \{3, 4\}, 5\}$. Which of the following statements is incorrect?</p> <p>A1 : $\{\emptyset\} \subset A$</p> <p>A2 : $\{\{3, 4\}\} \subset A$</p> <p>A3 : $1 \in A$</p>	4.0	1.00

		: A4 $\{1,2,5\} \subset A$:		
Objective Question				
27	27	For a set A , let $P(A)$ denote its power set. Then $P(P(\emptyset))$ is A1 \emptyset : A2 $\{\emptyset\}$: A3 $\{\{\emptyset\}\}$: A4 $\{\emptyset, \{\emptyset\}\}$:	4.0	1.00
Objective Question				
28	28	Let A and B be two finite sets. Which of the following statements is FALSE? [Here $P(A)$ denotes the power set of A and $ A $ denotes the number of elements of A] A1 $P(A) = P(B) \Rightarrow A = B$: A2 $P(A \cup B) = P(A) \cup P(B)$: A3 $P(A \cap B) = P(A) \cap P(B)$: A4 $ P(A \times B) = 2^{ A \times B }$:	4.0	1.00
Objective Question				
29	29	The value of $\sin 15^\circ$ is A1 $\frac{\sqrt{3}-1}{2\sqrt{2}}$: A2 $\frac{\sqrt{3}+1}{2\sqrt{2}}$: A3 $\frac{\sqrt{3}-1}{\sqrt{2}}$: A4 $\frac{\sqrt{3}+1}{\sqrt{2}}$:	4.0	1.00
Objective Question				
30	30	The value of $\tan \frac{\pi}{8}$ is A1 $\sqrt{2}-1$:	4.0	1.00

		$\begin{matrix} A^2 \\ : \end{matrix} \sqrt{2} + 1$ $\begin{matrix} A^3 \\ : \end{matrix} 1 - \sqrt{2}$ $\begin{matrix} A^4 \\ : \end{matrix} -1 - \sqrt{2}$		
Objective Question				
31	31	<p>How many two digit even numbers can be formed from the digits 1,2,3,4,5, if the digits can be repeated?</p> $\begin{matrix} A^1 \\ : \end{matrix} 10$ $\begin{matrix} A^2 \\ : \end{matrix} 25$ $\begin{matrix} A^3 \\ : \end{matrix} 120$ $\begin{matrix} A^4 \\ : \end{matrix} 60$	4.0	1.00
Objective Question				
32	32	<p>How many four digit numbers can be formed using the digits 1 to 9, if repetition of digits is not allowed?</p> $\begin{matrix} A^1 \\ : \end{matrix} 3024$ $\begin{matrix} A^2 \\ : \end{matrix} 2034$ $\begin{matrix} A^3 \\ : \end{matrix} 3042$ $\begin{matrix} A^4 \\ : \end{matrix} 4203$	4.0	1.00
Objective Question				
33	33	<p>What is the number of ways of choosing four cards of the same colour from a pack of 52 playing cards?</p> $\begin{matrix} A^1 \\ : \end{matrix} 20099$ $\begin{matrix} A^2 \\ : \end{matrix} 29900$ $\begin{matrix} A^3 \\ : \end{matrix} 4$ $\begin{matrix} A^4 \\ : \end{matrix} 14950$	4.0	1.00
Objective Question				
34	34	<p>The equation of the parabola with vertex at (0,0) and focus at (0,2) is</p>	4.0	1.00

		<p>A1 $y^2=8x$:</p> <p>A2 $x^2=8y$:</p> <p>A3 $y^2=4x$:</p> <p>A4 $x^2=4y$:</p>		
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Objective Question

35	35	<p>The value of $\lim_{x \rightarrow 0} \frac{x^{15}-1}{x^{10}-1}$ is</p> <p>A1 $3/4$:</p> <p>A2 $3/2$:</p> <p>A3 $-3/4$:</p> <p>A4 $-3/2$:</p>	4.0	1.00
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Objective Question

36	36	<p>The value of $\lim_{x \rightarrow 0} \frac{\tan x}{x}$ is</p> <p>A1 1 :</p> <p>A2 0 :</p> <p>A3 -1 :</p> <p>A4 ∞ :</p>	4.0	1.00
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Objective Question

37	37	<p>If $f: \mathbb{R} \rightarrow \mathbb{R}$ is defined as $f(x) = \begin{cases} \frac{ x }{x}, & x \neq 0 \\ 0, & x = 0 \end{cases}$, then the $\lim_{x \rightarrow 0} f(x)$ is equal to</p> <p>A1 0 :</p> <p>A2 1 :</p> <p>A3 -1 :</p>	4.0	1.00
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		A4 Does not exist :		
Objective Question				
38	38	<p>If the function $f(x)$ satisfies $\lim_{x \rightarrow 1} \frac{f(x)-2}{x^2-1} = \pi$ then $\lim_{x \rightarrow 1} f(x)$ is equal to</p> <p>A1 2 :</p> <p>A2 0 :</p> <p>A3 $-\pi$:</p> <p>A4 π :</p>	4.0	1.00
Objective Question				
39	39	<p>Let $f: \mathbb{R} \setminus \{-\frac{4}{3}\} \rightarrow \mathbb{R}$ be a function defined as $f(x) = \frac{4x}{3x+4}$. The inverse of f is the map $g: \text{Range } f \rightarrow \mathbb{R} \setminus \{-\frac{4}{3}\}$ given by</p> <p>A1 $g(y) = \frac{3y}{3-4y}$:</p> <p>A2 $g(y) = \frac{4y}{4-3y}$:</p> <p>A3 $g(y) = \frac{4y}{3-4y}$:</p> <p>A4 $g(y) = \frac{3y}{4-3y}$:</p>	4.0	1.00
Objective Question				
40	40	<p>The binary operation $*$ on \mathbb{N} defined as $a * b = a^3 + b^3$ is</p> <p>A1 Both associative and commutative :</p> <p>A2 Commutative but not associative :</p> <p>A3 Associative but not commutative :</p> <p>A4 Neither commutative nor associative :</p>	4.0	1.00
Objective Question				
41	41	<p>Let $A = \{a, b, c\}$. Then number of relations containing (a,b) and (a,c) which are reflexive and symmetric but not transitive is</p> <p>A1 1 :</p>	4.0	1.00

		A2 2 :		
		A3 3 :		
		A4 4 :		

Objective Question

42	42	<p>Let $A = \{1, 2, 3\}$. Then number of equivalence relations containing (1,2) is</p> <p>A1 1 :</p> <p>A2 2 :</p> <p>A3 3 :</p> <p>A4 4 :</p>	4.0	1.00
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Objective Question

43	43	<p>The value of the $\int_0^1 \frac{\tan^{-1} x}{1+x^2} dx$ is</p> <p>A1 $\frac{\pi^2}{32}$:</p> <p>A2 $\frac{\pi^2}{36}$:</p> <p>A3 $-\frac{\pi^2}{36}$:</p> <p>A4 $\frac{\pi^2}{8}$:</p>	4.0	1.00
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Objective Question

44	44	<p>The value of the $\int_{-1}^1 \sin^5 x \cos^4 x dx$ is</p> <p>A1 $\frac{\pi}{2}$:</p> <p>A2 $-\frac{\pi}{2}$:</p> <p>A3 1 :</p> <p>A4 0 :</p>	4.0	1.00
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Objective Question

45	45	<p>The area of the region bounded by the two parabolas $y = x^2$ and $x = y^2$ is</p>	4.0	1.00
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		<p>A1 $\frac{1}{3}$:</p> <p>A2 $\frac{2}{3}$:</p> <p>A3 1 :</p> <p>A4 $\frac{1}{\sqrt{3}}$:</p>		
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Objective Question

46	46	<p>The area bounded by the curve $y = \cos x$ between $x = 0$ and $x = 2\pi$ is</p> <p>A1 $\sqrt{3}\pi$:</p> <p>A2 $2\sqrt{3}$:</p> <p>A3 2π :</p> <p>A4 4 :</p>	4.0	1.00
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Objective Question

47	47	<p>The area of the region $\{(x,y): y \geq x^2 \text{ and } y \leq x \}$ is</p> <p>A1 $\frac{1}{3}$:</p> <p>A2 $\frac{2}{3}$:</p> <p>A3 $\frac{1}{2}$:</p> <p>A4 1 :</p>	4.0	1.00
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Objective Question

48	48	<p>The area bounded by the curve $y = x x$, X-axis and the ordinates $x = 1$ and $x = -1$ is given by</p> <p>A1 0 :</p> <p>A2 $\frac{1}{3}$:</p> <p>A3 $\frac{2}{3}$:</p> <p>A4 $\frac{4}{3}$:</p>	4.0	1.00
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Objective Question				
49	49	<p>The degree of the differential equation $\left(\frac{d^2y}{dx^2}\right)^3 + \left(\frac{dy}{dx}\right)^2 + \sin\left(\frac{dy}{dx}\right) + 1 = 0$ is</p> <p>A1 3 :</p> <p>A2 2 :</p> <p>A3 1 :</p> <p>A4 Not defined :</p>	4.0	1.00
Objective Question				
50	50	<p>The particular solution of the differential equation $\frac{dy}{dx} = -4xy^2$, given that $y = 1$, when $x = 0$ is</p> <p>A1 $y = \frac{1}{2x^2+1}$:</p> <p>A2 $y = \frac{1}{2x^2-1}$:</p> <p>A3 $y = \frac{x}{2x^2+1}$:</p> <p>A4 $y = \frac{x}{2x^2-1}$:</p>	4.0	1.00
Objective Question				
51	51	<p>The function $f: \mathbb{R} \rightarrow \mathbb{R}$ defined as $f(x) = \begin{cases} x^2 \sin \frac{1}{x}, & \text{if } x \neq 0 \\ 0, & \text{if } x = 0 \end{cases}$ is</p> <p>A1 Continuous at 0 but not differentiable at 0 :</p> <p>A2 Differentiable at 0 but not continuous at 0 :</p> <p>A3 Neither differentiable nor continuous at 0 :</p> <p>A4 Both differentiable and continuous at 0 :</p>	4.0	1.00
Objective Question				
52	52	<p>The number of elements in a set $\{(a,b) \mid 2a^2 + 3b^2 = 35, a,b \text{ integers}\}$</p> <p>A1 2 :</p> <p>A2 4 :</p>	4.0	1.00

		<p>A3 8 :</p> <p>A4 12 :</p>		
Objective Question				
53	53	<p>If $H_a = \{an: n \in N\}$ then $H_3 \cap H_7$ equal to</p> <p>A1 H_3 :</p> <p>A2 H_7 :</p> <p>A3 H_1 :</p> <p>A4 H_{21} :</p>	4.0	1.00
Objective Question				
54	54	<p>Let S be the set of integers, the relation \sim defined on $S \times S$ as $(a,b) \sim (c,d)$ if $ad = -bc$, then</p> <p>A1 \sim is transitive but not symmetric :</p> <p>A2 \sim is symmetric but not transitive. :</p> <p>A3 \sim is neither symmetric nor transitive :</p> <p>A4 \sim is reflexive, symmetric and transitive. :</p>	4.0	1.00
Objective Question				
55	55	<p>Let $f(x) = \frac{ax+b}{cx+d}$. If $f(f(x)) = x$ then</p> <p>A1 $a=0$:</p> <p>A2 $ab=bd$:</p> <p>A3 $d=0$:</p> <p>A4 $a=-d$:</p>	4.0	1.00
Objective Question				
56	56	Which one of the following is a bijective mapping from Z , the ring of integers, to itself	4.0	1.00

		<p>A1 : $f(x) = 5$</p> <p>A2 : $f(x) = 5x$</p> <p>A3 : $f(x) = 5 + x$</p> <p>A4 : $f(x) = 5x^2$</p>		
Objective Question				
57	57	<p>If the roots of the equation $2x^2 - (p+1)x + p - 1 = 0$ are a and b with $a - b = ab$, then</p> <p>A1 : $p = 2$</p> <p>A2 : $p = 4$</p> <p>A3 : $p = 8$</p> <p>A4 : $p = 0$</p>	4.0	1.00
Objective Question				
58	58	<p>If a and b are the roots of the equation $x^2 - \sqrt{a}x + b = 0$ then</p> <p>A1 : $a = 0$ and $b = 1$</p> <p>A2 : $a = 1$ and $b = 1$</p> <p>A3 : $a = 1$ and $b = -1$</p> <p>A4 : $a = 1$ and $b = 0$</p>	4.0	1.00
Objective Question				
59	59	<p>If A is a square matrix, with $A^2 = A$ then $(I - A)^n$ is equal to</p> <p>A1 : $I + 2^n A$</p> <p>A2 : $I - (2^n + 1) A$</p> <p>A3 : $I + (2^n - 1) A$</p> <p>A4 : $I + (2^n + 1) A$</p>	4.0	1.00

Objective Question				
60	60	<p>If A and B are square matrices such that $A^2 - B^2 = (A + B)(A - B)$</p> <p>A1 : $A = B$</p> <p>A2 : $A = B = I$</p> <p>A3 : $AB = -BA$</p> <p>A4 : $AB = BA$</p>	4.0	1.00

Objective Question				
61	61	<p>How many four letter words can be formed from the set of alphabets {a,b,c,d,e,f,g}</p> <p>A1 : $7^4 - 7$</p> <p>A2 : ${}^7P_4 - 7$</p> <p>A3 : $7^4 - {}^7P_4$</p> <p>A4 : $7!$</p>	4.0	1.00

Objective Question				
62	62	<p>There are n different locks and there are n different keys for them. To match the locks with correct keys the maximum number of needed trials is</p> <p>A1 : $n!$</p> <p>A2 : $2n$</p> <p>A3 : n^2</p> <p>A4 : $n(n+1)/2$</p>	4.0	1.00

Objective Question				
63	63	<p>The coefficient of x^{11} in the expansion $(1 + 3x + 2x^2)^6$ is</p> <p>A1 : 264</p> <p>A2 : 576</p> <p>A3 : 624</p>	4.0	1.00

		A4 744 :		
Objective Question				
64	64	<p>The sum of first $(2n + 1)$ terms in the series $a - (a+d) + (a+2d) - (a+3d) \dots$ is equal to</p> <p>A1 2nd :</p> <p>A2 $a + 2nd$:</p> <p>A3 $a - nd$:</p> <p>A4 $a + nd$:</p>	4.0	1.00
Objective Question				
65	65	<p>Suppose f is a real valued function defined on Real numbers such that $f(x+y) = f(x) + f(y)$. Then</p> <p>A1 f is an even function :</p> <p>A2 f is an odd function :</p> <p>A3 f is neither even nor odd function :</p> <p>A4 f is not a sum of an odd function and an even function :</p>	4.0	1.00
Objective Question				
66	66	<p>Let $x_1 = 5$ and $x_{n+1} = \sqrt{2 + x_n}$ $n > 0$, then $\lim_{n \rightarrow \infty} x_n$ equal to</p> <p>A1 0 :</p> <p>A2 2 :</p> <p>A3 3 :</p> <p>A4 infinity :</p>	4.0	1.00
Objective Question				
67	67	<p>$\lim_{x \rightarrow \infty} x^{1/x}$ is equal to</p> <p>A1 0 :</p> <p>A2 1 :</p>	4.0	1.00

		<p>A3 e :</p> <p>A4 infinity :</p>		
Objective Question				
68	68	<p>If $\lim_{x \rightarrow a} \frac{a^x - x^a}{x^x - a^a} = -1$ with $a > 0$ then</p> <p>A1 a = 0 :</p> <p>A2 a = 1 :</p> <p>A3 a = e :</p> <p>A4 a = 1/e :</p>	4.0	1.00
Objective Question				
69	69	<p>If $\overrightarrow{AO} + \overrightarrow{OB} = \overrightarrow{BO} + \overrightarrow{OC}$, then A, B, C are</p> <p>A1 coplanar :</p> <p>A2 non coplanar :</p> <p>A3 coplanar but need not be collinear :</p> <p>A4 collinear :</p>	4.0	1.00
Objective Question				
70	70	<p>Let A be a subset of S such that $A \cup B = B$ for every finite subset B of S. Then</p> <p>A1 S is empty set :</p> <p>A2 A is empty set :</p> <p>A3 S = A :</p> <p>A4 A is an infinite subset :</p>	4.0	1.00
Objective Question				
71	71	<p>Let A be a subset of B. (i) each element of A is an element of B (ii) if x is not an element of B then x is not an element of A.</p>	4.0	1.00

		<p>A1 Both (i) and (ii) are true. :</p> <p>A2 (i) is true but (ii) is not true. :</p> <p>A3 (ii) is true but (i) is not true. :</p> <p>A4 Neither (i) nor (ii) is true :</p>		
Objective Question				
72	72	<p>If an integer n divides a product ab and n does not divide a</p> <p>A1 n always divides b :</p> <p>A2 n divides b if b is a composite number :</p> <p>A3 n divides b if n is a prime number :</p> <p>A4 n divides b if b is a prime number :</p>	4.0	1.00
Objective Question				
73	73	<p>The function $f(x) = 3x(x-2)$ has</p> <p>A1 maximum at $x = 1$:</p> <p>A2 minimum at $x = 1$:</p> <p>A3 minimum at $x = 2$:</p> <p>A4 maximum at $x = -1$:</p>	4.0	1.00
Objective Question				
74	74	<p>If z and w be two complex numbers such that $z \leq 1, w \leq 1$ and $z + iw = z - iw = 2$ then z equals</p> <p>A1 1 or i :</p> <p>A2 i or $-i$:</p> <p>A3 1 or -1 :</p> <p>A4 i or -1 :</p>	4.0	1.00

Objective Question

75	75	<p>If z_1 and z_2 be complex numbers such that $z_1 \neq z_2$ and $z_1 = z_2$. If z_1 has positive real part and z_2 has negative imaginary part then $\frac{z_1 + z_2}{z_1 - z_2}$ may be</p> <p>A1 : Zero</p> <p>A2 : Real and positive</p> <p>A3 : Real and negative</p> <p>A4 : None of these</p>	4.0	1.00
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Objective Question

76	76	<p>If ω is an imaginary cube root of unity the $(1 + \omega + \omega^2)^7$ equals</p> <p>A1 : 128ω</p> <p>A2 : -128ω</p> <p>A3 : $128 \omega^2$</p> <p>A4 : $-128 \omega^2$</p>	4.0	1.00
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Objective Question

77	77	<p>The complex number z_1, z_2 and z_3 satisfying $\frac{z_1 - z_3}{z_2 - z_3} = \frac{1 - i\sqrt{3}}{2}$ are the vertices of a triangle which is</p> <p>A1 : of area zero</p> <p>A2 : Right angled isosceles triangle</p> <p>A3 : Equilateral triangle</p> <p>A4 : Obtuse angle isosceles triangle</p>	4.0	1.00
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Objective Question

78	78	<p>If z_1 and z_2 be the n^{th} roots of unity which subtend a right angle at the origin, then 'n' must be of the form</p> <p>A1 : $4k+1$</p> <p>A2 : $4k+2$</p>	4.0	1.00
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		<p>A3 $4k+3$:</p> <p>A4 $4k$:</p>		
Objective Question				
79	79	<p>What is $\sqrt{-6}\sqrt{-6}$?</p> <p>A1 6 :</p> <p>A2 -6 :</p> <p>A3 $6i$:</p> <p>A4 $-6i$:</p>	4.0	1.00
Objective Question				
80	80	<p>The complex number z is such that $z = 1$, $z \neq 1$ and $w = \frac{z-1}{z+1}$, then real part of w is</p> <p>A1 $\frac{1}{ z+1 ^2}$:</p> <p>A2 $\frac{-1}{ z+1 ^2}$:</p> <p>A3 $\frac{\sqrt{2}}{ z+1 ^2}$:</p> <p>A4 0 :</p>	4.0	1.00
Objective Question				
81	81	<p>Mean of 10 observations is 5, if a constant 4 is added to every observation, then the new mean is</p> <p>A1 New Mean > Old Mean :</p> <p>A2 New Mean < Old Mean :</p> <p>A3 New Mean = Old Mean :</p> <p>A4 New Mean is no way related to Old Mean :</p>	4.0	1.00
Objective Question				
82	82	<p>The median of 10 observations is equal to 50 if 3 is added to each observation, then the new median value is</p> <p>A1 10 :</p>	4.0	1.00

		<p>A2 : 13</p> <p>A3 : 50</p> <p>A4 : 53</p>		
Objective Question				
83	83	<p>The following relation holds good with GM =</p> <p>A1 : $(A.M. * H.M)^2$</p> <p>A2 : $(A.M.* H.M)^{1/2}$</p> <p>A3 : $(A.M. * H.M)$</p> <p>A4 : $(A.M. +H.M)/2$</p>	4.0	1.00
Objective Question				
84	84	<p>Which of the following measure can make use of the 100% data</p> <p>A1 : Median</p> <p>A2 : Minimum</p> <p>A3 : Mean</p> <p>A4 : Maximum</p>	4.0	1.00
Objective Question				
85	85	<p>A.M. of 'n' numbers of a series is \bar{X}. After calculations, it was observed that two number 'a' and 'b' misread in the place of 'c' and 'd'. what is the corrected mean value</p> <p>A1 : $\frac{n\bar{X} - (a + b) + (c + d)}{n}$</p> <p>A2 : $\frac{\bar{X} - (a + b) + (c + d)}{n}$</p> <p>A3 : $\frac{n\bar{X} - (a + b) + (c + d)}{(n + 1)}$</p> <p>A4 : $\frac{n\bar{X} - (a + b) + (c + d)}{(n - 1)}$</p>	4.0	1.00
Objective Question				

86	86	<p>The Range of the following data is 23,1,21,24,43,51,15,26,13</p> <p>A1 1 :</p> <p>A2 25 :</p> <p>A3 50 :</p> <p>A4 51 :</p>	4.0	1.00
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Objective Question

87	87	<p>The limits of Standard Deviation are</p> <p>A1 $-\infty$ to $+\infty$:</p> <p>A2 0 to ∞ :</p> <p>A3 0 to 1 :</p> <p>A4 -1 to +1 :</p>	4.0	1.00
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Objective Question

88	88	<p>Axiomatic approach to the probability was due to</p> <p>A1 A.N.Kolmogorov :</p> <p>A2 De-moivre :</p> <p>A3 Von-mises :</p> <p>A4 Pascal :</p>	4.0	1.00
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Objective Question

89	89	<p>A card is drawn from a well shuffled pack of cards. The probability of the card drawn is either spade or Ace is =</p> <p>A1 $13/52$:</p> <p>A2 $4/52$:</p> <p>A3 $17/52$:</p> <p>A4 $16/52$:</p>	4.0	1.00
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Objective Question				
90	90	<p>Probability of getting Diamond King card from a well shuffled pack of cards is equal to</p> <p>A1 : $\frac{21}{36}$</p> <p>A2 : $\frac{1}{4}$</p> <p>A3 : $\frac{1}{52}$</p> <p>A4 : $\frac{1}{13}$</p>	4.0	1.00
Objective Question				
91	91	<p>If a bag contains 3 Red balls, 6 Green balls and 9 Yellow balls, a ball is drawn at random from the bag. What is the chance that randomly drawn ball is either Green or Red</p> <p>A1 : $\frac{3}{18}$</p> <p>A2 : $\frac{6}{18}$</p> <p>A3 : $\frac{9}{18}$</p> <p>A4 : $\frac{12}{18}$</p>	4.0	1.00
Objective Question				
92	92	<p>Probability of getting both dice shown the same number when pair of dice are rolled simultaneously</p> <p>A1 : $\frac{3}{6}$</p> <p>A2 : $\frac{1}{6}$</p> <p>A3 : $\frac{2}{6}$</p> <p>A4 : $\frac{4}{6}$</p>	4.0	1.00
Objective Question				
93	93	<p>Given that $P(A) = \frac{1}{3}$, $P(B) = \frac{3}{4}$, $P(A \cup B) = \frac{11}{12}$, the probability, $P(B/A) =$</p> <p>A1 : $\frac{1}{6}$</p> <p>A2 : $\frac{4}{9}$</p> <p>A3 : $\frac{1}{2}$</p>	4.0	1.00

		A4 : 1/4		
Objective Question				
94	94	<p>The odds in favour of a certain event are 5:4 and odds against another event are 4:3. the chance that at least one of them will happen is by assuming the events are independent</p> <p>A1 : 15/63</p> <p>A2 : 51/63</p> <p>A3 : 47/63</p> <p>A4 : 7/63</p>	4.0	1.00
Objective Question				
95	95	<p>If the probabilities of passing in an examination for a boy and a girl are $\frac{3}{5}$ and $\frac{2}{5}$ respectively, then the chance passing at least one of them is</p> <p>A1 : $\frac{6}{25}$</p> <p>A2 : $\frac{15}{25}$</p> <p>A3 : $\frac{19}{25}$</p> <p>A4 : $\frac{2}{25}$</p>	4.0	1.00
Objective Question				
96	96	<p>Probability of getting a square number as outcome when a single die is thrown is</p> <p>A1 : $\frac{1}{6}$</p> <p>A2 : $\frac{2}{6}$</p> <p>A3 : $\frac{3}{6}$</p> <p>A4 : $\frac{4}{6}$</p>	4.0	1.00
Objective Question				
97	97	<p>Let the event A be getting even number and B be the event of getting even squared number when a die is thrown. Then the probability of getting $A \cap B$</p> <p>A1 : $\frac{3}{6}$</p>	4.0	1.00

		<p>A2 $\frac{2}{6}$:</p> <p>A3 $\frac{1}{6}$:</p> <p>A4 $\frac{4}{6}$:</p>		
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Objective Question

98	98	<p>Probability of getting either all tails of all heads when 5 coins are tossed simultaneously,</p> <p>A1 $\frac{4}{32}$:</p> <p>A2 $\frac{3}{32}$:</p> <p>A3 $\frac{1}{32}$:</p> <p>A4 $\frac{2}{32}$:</p>	4.0	1.00
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Objective Question

99	99	<p>A box contains 'a' white balls and 'b' black balls; If 'c' balls are drawn from the box then the expected number of white balls among the c balls is</p> <p>A1 : $c * \left(\frac{a-b}{a+b} \right)$</p> <p>A2 : $c * \left(\frac{a}{a+b} \right)$</p> <p>A3 : $c * \left(\frac{a}{a-b} \right)$</p> <p>A4 : $c * \left(\frac{ab}{a+b} \right)$</p>	4.0	1.00
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Objective Question

100	100	<p>If A and B are exclusive events then $P(A/B) =$</p> <p>A1 $P(A)$:</p> <p>A2 $P(B)$:</p> <p>A3 0 :</p> <p>A4 1 :</p>	4.0	1.00
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