Chapter 04

Trigonometric Equation

RANKER'S STUFF

SINGLE CORRECT QUESTION

Q.1 Let P = {θ : sin θ – cos θ = $\sqrt{2}$ cos θ} and Q = {θ : sin θ + cos θ = $\sqrt{2}$ sin θ} be two sets. Then

(1) $P \subset Q$ and $Q - P \neq \phi$

(2) $Q \not\subset P$

(3) $P \not\subset Q$

(4) P = Q

Q.2 The general solution of the equation $7\cos^2 x + \sin x \cos x - 3 = 0$ is given by-

(1) $n\pi + \frac{\pi}{2}$ $(n \in I)$

(2) $n\pi - \frac{\pi}{4}$ $(n \in I)$

(3) $n\pi + \tan^{-1}\frac{4}{3}$ $(n \in I)$

(4) $n\pi + \frac{3\pi}{4}$, $k\pi + \tan^{-1}\frac{4}{3}$ $(n, k \in I)$

Q.3 The solution of

$$\frac{3\sin\theta - \sin 3\theta}{1+\cos\theta} + \frac{3\cos\theta + \cos 3\theta}{1-\sin\theta} = 4\sqrt{2}\cos\left(\theta + \frac{\pi}{4}\right) \text{ is}$$

(1) $n\pi$ (2) $n\pi + \frac{\pi}{12}$

(3) $n\pi \pm \frac{\pi}{2}$ (4) $2n\pi$

Q.4 Find the general solution of x,

$\cos^2 2x + \cos^2 3x = 1$

(1) $(2k+1)\frac{\pi}{10}$, $k \in I$

(2) $(\pi k + 1)\frac{\pi}{10}$; $k \in I$

(3) $(2k-1)\frac{\pi}{10}$, $k \in I$

(4) Both (1) and (3)

Q.5 The set of values of x for which

$\sin x \cdot \cos^3 x > \cos x \cdot \sin^3 x$, $0 \le x \le 2\pi$, is-

(1) $(0, \pi)$ (2) $\left(0, \frac{\pi}{4}\right)$

(3) $\left(\frac{\pi}{4}, \pi\right)$ (4) None of these

Q.6 The number of solution of $\log_{\sin x} 2^{\tan x} > 0$ in the interval $\left(0, \frac{\pi}{2}\right)$ is -

(1) 0 (2) 1 (3) 2 (4) 3

Q.7 If $0 \le x \le 2\pi$, $0 \le y \le 2\pi$ and

$\sin x + \sin y = 2$ then, the value of x + y is-

(1) π (2) $\frac{\pi}{2}$

(3) 3π (4) None of these

Q.8 If $x \in \left[-\frac{5\pi}{2}, \frac{5\pi}{2}\right]$, the greatest positive solution of $1 + \sin^4 x = \cos^2 3x$ is-

(1) π (2) 2π

(3) $\frac{5\pi}{2}$ (4) None of these

Q.9 If α, β satisfy the equation $\cos x - \frac{\cot p \ \sin x}{2} = \frac{\sqrt{3}}{2}$ then the value of $\tan \frac{\alpha}{2} + \tan \frac{\beta}{2}$ is-

(1) $\frac{\sqrt{3}-2}{\sqrt{3}+2}$ (2) $2(\sqrt{3}-2)\cot p$

(3) $2(2-\sqrt{3})\cot p$ (4) None of these

Q.10 If $\cos x = \sqrt{1-\sin 2x}$, $0 < x < \pi$, then a value of x is-

(1) $\tan^{-1} 2$ (2) 0

(3) π (4) None of these

Q.11 The most general solution of

$2^{\sin x} + 2^{\cos x} = 2^{1-\frac{1}{\sqrt{2}}}$ is-

(1) $n\pi + \frac{\pi}{4}$ (2) $n\pi - \frac{\pi}{4}$

(3) $n\pi + (-1)^n \frac{\pi}{4}$ (4) $2n\pi + \frac{\pi}{4}$

Q.12 The number of values of x in $[0, 5\pi]$ satisfying the equation $3\cos 2x - 10\cos x + 7 = 0$ are-

(1) 5 (2) 6 (3) 8 (4) 10

Q.13 Total number of solution of

$16^{\cos^2 x} + 16^{\sin^2 x} = 10$ in $x \in [0, 3\pi]$ is equal to-

(1) 4 (2) 8 (3) 12 (4) 16

Q.14 The equation $3^{\sin 2x + 2\cos^2 x} + 3^{1-\sin 2x + 2\sin^2 x} = 28$ is satisfied for the values of x given by –

(1) $\cos x = 0, \tan x = -1$

(2) $\tan x = 0$

(3) $\tan x = 1$

(4) None of these

Q.15 The solution of the equation

$\log_2(\sin x + \cos x) - \log_2(\cos x) + 1 = 0$:

(1) $\tan^{-1}\left(-\frac{1}{2}\right)$ (2) 0

(3) $\tan^{-1}\left(\frac{1}{2}\right)$ (4) None of these

Q.16

he most general values of x for which $\sqrt{3}\sin x - \cos x = \min_{\lambda \in R}\{2, e^2, \pi, \lambda^2 - 4\lambda + 7\}$ are given by -

(1) $2n\pi$ (2) $2n\pi + \frac{2\pi}{3}$

(3) $n\pi + (-1)^n \frac{\pi}{4} + \frac{\pi}{6}$ (4) $n\pi + (-1)^{n+1}\frac{\pi}{4} - \frac{\pi}{3}$

Q.17 The solution set of equation $\cos^5 x = 1 + \sin^4 x$ is-

(1) $n\pi$ ($n \in I$) (2) $2n\pi$ (n I)

(3) $4n\pi$ ($n \in I$) (4) None of these

Q.18 Number of solutions of the equation

$2^{\sin^2 x} + 5.2^{\cos^2 x} = 7$ in the interval $[-\pi, \pi]$ is

(1) 4 (2) 2 (3) 6 (4) 0

Q.19 The number of ordered pairs (x, y) satisfying $y = 2\sin x$ and $y = 5x^2 + 2x + 3$ is -

(1) 0 (2) 1 (3) 2 (4) ∞

Q.20 If $0 \le x \le 3\pi$, $0 \le y \le 3\pi$ and $\cos x \cdot \sin y = 1$ then the possible number of values of the ordered pair (x, y) is -

(1) 6 (2) 12 (3) 8 (4) 15

Q.21 $3^{\log \tan x} + 3^{\log \cot x} = 2$ then x is -

(1) $n\pi + \frac{\pi}{2}$ (2) $(4n + 1)\frac{\pi}{4}$

(3) $n\pi - \frac{\pi}{4}$ (4) $n\pi$

Q.22 The most general values of x for which $\sin x + \cos x = \min_{a \in R}\{1, a^2 - 4a + 6\}$ are given by -

(1) $2n\pi$

(2) $2n\pi + \frac{\pi}{2}$

(3) $n\pi + (-1)^n \cdot \frac{\pi}{4} - \frac{\pi}{4}$

(4) None of these

Q.23 If $\frac{\sin^3\theta - \cos^3\theta}{\sin\theta - \cos\theta} - \frac{\cos\theta}{\sqrt{1 + \cot^2\theta}} - 2\tan\theta\cot\theta = -1$ $\theta \in [0, 2\pi]$, then

(1) $\theta \in \left(0, \frac{\pi}{2}\right) - \left\{\frac{\pi}{4}\right\}$

(2) $\theta \in \left(\frac{\pi}{2}, \pi\right) - \left\{\frac{3\pi}{4}\right\}$

(3) $\theta \in \left(\pi, \frac{3\pi}{2}\right) - \left\{\frac{5\pi}{4}\right\}$

(4) $\theta \in (0, \pi) - \left\{\frac{\pi}{4}, \frac{\pi}{2}\right\}$

Q.24 The number of distinct solutions of $\sin 5\theta \cdot \cos 3\theta = \sin 9\theta \cdot \cos 7\theta$ in $\left[0, \frac{\pi}{2}\right]$ is-

(1) 4 (2) 5 (3) 8 (4) 9

Q.25 The equation $k \cos x - 3 \sin x = k + 1$ is solvable only if k belongs to the interval -

(1) $[4, +\infty)$ (2) $[-4, 4]$

(3) $(-\infty, 4]$ (4) None of these

Q.26 The values of $x \in [-2\pi, 2\pi]$ such that $\frac{\sin x + i\cos x}{1 + i}$, $i = \sqrt{-1}$, is purely imaginary, are given by -

(1) $n\pi - \frac{\pi}{4}$ (2) $n\pi + \frac{\pi}{4}$

(3) $n\pi$ (4) None of these

Q.27 If $\log_{\cos x} \sin x \ge 2$ and $0 \le x \le 3\pi$, then sin x is in the interval

(1) $\left[\frac{\sqrt{5} - 1}{2}, 1\right]$ (2) $\left(0, \frac{\sqrt{5} - 1}{2}\right]$

(3) $\left[0, \frac{1}{2}\right]$ (4) None of these

Q.28 Number of ordered pairs (a, x) satisfying the equation $\sec^2 (a + 2)x + a^2 - 1 = 0$; $-\pi < x < \pi$ is-

(1) 2 (2) 1 (3) 3 (4) Infinite

Q.29 If $\max_{\theta \in R}\{5\sin\theta + 3\sin(\theta - \alpha)\} = 7$ then the set of possible values of α is

(1) $\left\{x \mid x = 2n\pi \pm \frac{\pi}{3}; n \in I\right\}$

(2) $\left\{x \mid x = 2n\pi \pm \frac{2\pi}{3}; n \in I\right\}$

(3) $\left[\frac{\pi}{3}, \frac{2\pi}{3}\right]$

(4) None of these

Q.30 The general solution of the equation

$\sin^{50}x - \cos^{50}x = 1$ is-

(1) $2n\pi + \frac{\pi}{2}$ (2) $2n\pi + \frac{\pi}{3}$

(3) $n\pi + \frac{\pi}{2}$ (4) $n\pi + \frac{\pi}{3}$

Q.31 The number of values of x in the interval $[0, 5\pi]$ satisfying the equation $3\sin^2x - 7\sin x + 2 = 0$ is

(1) 0 (2) 5 (3) 6 (4) 10

Q.32 For any real value of $\theta \neq \pi$, the value of the expression $y = \frac{\cos^2\theta - 1}{\cos^2\theta + \cos\theta}$ is-

(1) $1 \leq y \leq 2$ (2) $y < 0$ and $y > 2$

(3) $-1 \leq y \leq 1$ (4) $y \geq 1$

Q.33 The number of solutions of the pair of equations $2\sin^2\theta - \cos 2\theta = 0$ and $2\cos^2\theta - 3\sin\theta = 0$ in the interval $[0, 2\pi]$ is -

(1) zero (2) one (3) two (4) four

Q.34 Total number of integral values of 'n' so that $\sin x(\sin x + \cos x) = n$ has at least one solution is-

(1) 2 (2) 1 (3) 3 (4) Zero

Q.35 If $1 + \sin x + \sin^2x + \sin^3x + \ldots\ldots\infty$ is equal to $4 + 2\sqrt{3}$, $0 < x < \pi$, then x is equal to :

(1) $\frac{\pi}{6}$ (2) $\frac{\pi}{4}$

(3) $\frac{\pi}{3}$ or $\frac{\pi}{6}$ (4) $\frac{\pi}{3}$ or $\frac{2\pi}{3}$

Q.36 If $r > 0$, $-\pi \leq \theta \leq \pi$ and r, θ satisfy $r\sin\theta = 3$ and $r = 4(1 + \sin\theta)$, then the number of possible solutions of the pair (r, θ) is-

(1) 2 (2) 4 (3) 0 (4) Infinite

Q.37 Find the number of roots of the equation $\tan x + \sec x = 2\cos x$ in the interval $[0, 2\pi]$-

(1) 1 (2) 2 (3) 3 (4) 4

Q.38 In a triangle ABC, angle A is greater than angle B. If the measure of angles A and B satisfy the equation $3\sin x - 4\sin^3x - k = 0$, $0 < k < 1$, then the measure of angle C is-

(1) $\frac{\pi}{3}$ (2) $\frac{\pi}{2}$ (3) $\frac{2\pi}{3}$ (4) $\frac{5\pi}{6}$

Q.39 The general solution of

$\sin x - 3\sin 2x + \sin 3x = \cos x - 3\cos 2x + \cos 3x$ is-

(1) $n\pi + \frac{\pi}{8}$ (2) $\frac{n\pi}{2} + \frac{\pi}{8}$

(3) $(-1)^n \frac{n\pi}{2} + \frac{\pi}{8}$ (4) $2n\pi + \cos^{-1}\frac{3}{2}$

Q.40 The number of values of x in the interval $[0, 3\pi]$ satisfying the equation $2\sin^2 x + 5\sin x - 3 = 0$ is –

(1) 6 (2) 1 (3) 2 (4) 4

Q.41 The number of solutions of the equation

$\sin(e)^x = 5^x + 5^{-x}$ is:

(1) 0 (2) 1

(3) 2 (4) Infinitely many

Q.42 The possible values of $\theta \in (0, \pi)$ such that $\sin(\theta) + \sin(4\theta) + \sin(7\theta) = 0$ are –

(1) $\frac{\pi}{4}, \frac{5\pi}{12}, \frac{\pi}{2}, \frac{2\pi}{3}, \frac{3\pi}{4}, \frac{8\pi}{9}$

(2) $\frac{2\pi}{9}, \frac{\pi}{4}, \frac{\pi}{2}, \frac{2\pi}{3}, \frac{3\pi}{4}, \frac{35\pi}{36}$

(3) $\frac{2\pi}{9}, \frac{\pi}{4}, \frac{\pi}{2}, \frac{2\pi}{3}, \frac{3\pi}{4}, \frac{8\pi}{9}$

(4) $\frac{2\pi}{9}, \frac{\pi}{4}, \frac{4\pi}{9}, \frac{\pi}{2}, \frac{3\pi}{4}, \frac{8\pi}{9}$

NUMERICAL VALUE TYPE QUESTIONS

Q.43 Number of solutions of $5\cos^2\theta - 3\sin^2\theta + 6\sin\theta\cos\theta = 7$ in the interval $[0, 2\pi]$ is_____.

Q.44 Number of solutions of the equation $\tan x + \sec x = 2\cos x$ lying in the interval $[0, 2\pi]$ is _____.

Q.45 The number of solutions of $\cos\theta + \sqrt{3}\sin\theta = 5$, $0 \le \theta \le 5\pi$ is _____.

Q.46 If $\cos^6 x + \sin^6 x + k\sin^2 2x = 1\ \forall\ x \in \left(0, \frac{\pi}{2}\right)$ then $k = \frac{\lambda}{4}$ what is λ _____.

Q.47 The number of values of x between 0 to 2π which satisfy $e^x \cot x = 1$ is _____.

Q.48 $(1-\cot 1°)(1-\cot 2°)(1-\cot 3°)\ldots(1-\cot 44°) = 2^n$, then $n = 10k + k$. What is k _____.

Q.49 The number of solutions in $0 \le x \le \frac{\pi}{2}$ of the equation $\cos 3x \tan 5x = \sin 7x$ is _____.

Q.50 The number of integral values of λ for which the equation $7\cos x + 5\sin x = 2\lambda + 1$ has a solution is__.

Q.51 If equation $\cot^4 x - 2\operatorname{cosec}^2 x + a^2 = 0$ has at least one solution then, sum of all possible integral values of a is _____.

Q.52 If the sum of all values of x satisfying the system of equations $\tan x + \tan y + \tan x \cdot \tan y = 5$, $\sin(x + y) = 4\cos x \cdot \cos y$ is $\frac{k\pi}{2}$, where $x \in \left(0, \frac{\pi}{2}\right)$, then find the values of k.

Q.53 Let k be sum of all x in the interval $[0,2\pi]$ such that $3\cot^2 x + 8\cot x + 3 = 0$, then the value of $\frac{k}{\pi}$ is _____

Q.54 Number of integral value(s) of m for which the equation $\sin x - \sqrt{3}\cos x = \frac{4m-6}{4-m}$ has solution, $x \in [0, 2\pi]$, is _____.

STATEMENT TYPE QUESTIONS

Each of the questions given below consist of Statement -I and Statement- II. Use the following key to choose the appropriate answer.

(A) Both Statement-I and Statement-II are true, and Statement-II is the correct explanation of Statement-I.

(B) Both Statement-I and Statement-II are true but Statement-II is not the correct explanation of Statement-I.

(C) Statement-I is true but Statement-II is false.

(D) Statement-I is false but Statement-II is true.

Q.55 **Statement I :** If $\sec x + \cos x = 2$ then $(\sec x)^n + (\cos x)^n = 2$.

Statement II : If $A + B = 2$ and $AB = 1$, then $A = B = 1$.

(1) A (2) B (3) C (4) D

Q.56 **Statement I :** General solution of $\frac{\tan 4x - \tan 2x}{1 + \tan 4x.\tan 2x} = 1$ is $x = \frac{n\pi}{2} + \frac{\pi}{8}$, $n \in I$

Statement II : General solution of $\tan\alpha = 1$ is $\alpha = n\pi + \frac{\pi}{4}$, $n \in I$

(1) A (2) B (3) C (4) D

Q.57 **Statement I :** In $(0, \pi)$, the number of solutions of the equation

$\tan\theta + \tan 2\theta + \tan 3\theta = \tan\theta \tan 2\theta . \tan 3\theta$ is 2.

Statement II : Each solution of $\tan 6\theta = 0$ is a solution of

$\tan\theta + \tan 2\theta + \tan 3\theta = \tan\theta . \tan 2\theta . \tan 3\theta$

(1) A (2) B (3) C (4) D

Q.58 **Statement I:** The set of all x in $(-\pi, \pi)$ satisfying $|4\sin x - 1| < \sqrt{5}$ is given by $\left(-\frac{\pi}{10}, \frac{3\pi}{10}\right)$.

Statement II: We know if $|x| < 1$, then $-1 < x < 1$.

(1) A (2) B (3) C (4) D

Q.59 **Statement I :** The number of solutions of the equation $\tan^2 x - \sec^{10} x + 1 = 0$ in (0, 10) is 3.

Statement II: $\sec^2 x = 1$ at $x = n\pi$ where $n \in I$.

(1) A (2) B (3) C (4) D

MORE THAN ONE CORRECT TYPE QUESTIONS

Q.60 The equation $\sin^6 x + \cos^6 x = a^2$ has real solution if

(1) $a \in [-1, 1]$ (2) $a \in \left[-1, \frac{-1}{2}\right]$

(3) $a \in \left[\frac{-1}{2}, \frac{1}{2}\right]$ (4) $a \in \left[\frac{1}{2}, 1\right]$

Q.61 For a given value of k the number of different solutions of the equation

$3\cos\theta + 4\sin\theta = k$ in the range $0° \le \theta \le 360°$ is-

(1) zero if $|k| > 5$ (2) two if $|k| < 5$

(3) one if $|k| = 5$ (4) no solution for any k

Q.62 Let $f(x) = e^{\cos^{-1}\sin\left(x+\frac{\pi}{3}\right)}$, then-

(1) $f\left(\frac{8\pi}{9}\right) = e^{\frac{5\pi}{18}}$ (2) $f\left(\frac{8\pi}{9}\right) = e^{\frac{13\pi}{18}}$

(3) $f\left(-\frac{7\pi}{9}\right) = e^{\frac{\pi}{12}}$ (4) $f\left(-\frac{7\pi}{4}\right) = e^{\frac{11\pi}{12}}$

Q.63 If $\sin x + 7\cos x = 5$, then $\cos(x - \phi) = \frac{1}{\sqrt{2}}$ if-

(1) $\cos\phi = \frac{7}{\sqrt{50}}$ (2) $\sin\phi = \frac{1}{\sqrt{50}}$

(3) $\cos\phi = \frac{1}{7}$ (4) $\sin\phi = \frac{5}{7}$

Q.64 $4\sin^4 x + \cos^4 x = 1$ if

(1) $x = n\pi$; $(n \in I)$

(2) $x = n\pi \pm \frac{1}{2}\cos^{-1}\left(\frac{1}{5}\right)$; $(n \in I)$

(3) $x = \frac{n\pi}{2}$; $(n \in I)$

(4) $x = -n\pi$; $(n \in I)$

COMPREHENSION TYPE QUESTIONS

Q.65 Let p be the product of the sines of the angles of a triangle ABC and q is the product of the cosines of the angles.

(i) In this triangle, $\tan A + \tan B + \tan C$ is equal to

(1) $p + q$ (2) $p - q$

(3) $\frac{p}{q}$ (4) none of these

(ii) $\tan A \tan B + \tan B \tan C + \tan C \tan A$ is equal to

(1) $1 + q$ (2) $\frac{1+q}{q}$ (3) $1 + p$ (4) $\frac{1+p}{p}$

(iii) The value of $\tan^3 A + \tan^3 B + \tan^3 C$ is

(1) $\frac{p^3-3pq^2}{q^3}$ (2) $\frac{q^3}{p^3}$

(3) $\frac{p^3}{q^3}$ (4) $\frac{p^3-3pq}{q^3}$

Q.66 If $P_n = \sin^n\theta + \cos^n\theta$ where $n \in N$ then answer the following

(i) If $P_1 = m$, then value of $4(1 - P_6)$ is

(1) $3(m-1)^2$ (2) $3(m^2-1)^2$

(3) $3(m^2+1)^2$ (4) none

(ii) Value of $2P_6 - 3P_4 + 10$ is-

(1) 0 (2) 6 (3) 9 (4) none

(iii) If $P_{n-2} - P_n = \sin^2\theta \cos^2\theta P_\lambda$, then value of λ is

(1) n – 1 (2) n – 2

(3) n – 3 (4) none

MATCH THE COLUMN TYPE QUESTIONS

Q.67 Match the column-

Column-I	Column-II
(A) The equation $\cos 2x + a \sin x = 2a - 7$ posses a solution if a belongs to the interval	(P) $[1, \infty)$
(B) The equation $7 \cos x + 5 \sin x = 2k + 1$ has a solution if k belongs to the interval	(Q) [2, 6]
(C) If $\cos^4 x + a \cos^2 x + 1 = 0$ has at least one solution then a belongs to the interval	(R) $(-\infty, -2]$
(D) If the equation $\lvert\sin 2x\rvert - \lvert x\rvert - a = 0$ does not have any real solution then a belongs to the Interval	(S) [–4, 3]
	(T) $(0, \infty)$

Q.68 Match the column :

Column -I	Column-II
(A) Number of solutions of the equation $\sin x = -\frac{1}{6}$ in the interval $[-7\pi, 5\pi]$ is	(P) 1
(B) $(\cos n\pi)^{12}$, $n \in I$ is equal to	(Q) 12
(C) If the equation $\sec^2\theta = -x^2 + 14x - 23$ is possible, then the greatest integral value of x, is	(R) 0
(D) Solution(s) of the equation $6.9^{1/x} - 13.6^{1/x} + 6.4^{1/x} = 0$ is	(S) – 1 (T) 4

ANSWER KEY

PRACTICE SECTION-01

Que.	1	2	3	4	5	6	7	8
Ans.	1	2	3	2	1	2	1	3

PRACTICE SECTION-02

Que.	1	2	3	4	5	6	7	8	9	10	11	12
Ans.	3	1	1	2	2	2	4	1	1	2	1	2

TOPIC WISE QUESTIONS

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	2	1	3	2	3	1	3	4	1	1	2	3	3	1	4
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	2	2	3	2	1	2	4	1	3	3	4	2	2	4	1
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	3	3	3	3	4	1	3	1	4	3	4	1	1	3	4
Que.	46	47	48	49	50	51									
Ans.	3	1	1	3	4	4									

RANKER'S STUFF

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	4	4	4	1	2	1	1	2	2	1	1	3	3	1	1
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	2	2	2	1	1	2	3	4	4	3	1	2	3	1	3
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	3	2	3	1	4	1	3	3	2	4	1	4	0	2	0
Que.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	3	2	2	6	8	0	1	5	4	1	4	3	1	1	2,4
Que.	61	62	63	64	65(i)	65(ii)	65(iii)	66(i)	66(ii)	66(iii)					
Ans.	1,2,3	2,3	1,2	1,2,4	3	2	4	2	3	4					

Q.67 A → Q, B → S, C → R, D → P, Q

Q.68 A → Q, B → P, C → Q, D → P,S

JEE-FLASHBACK

JEE MAINS QUESTIONS

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	3	4	4	3	4	4	2	3	3	1	4	2	8	2	4
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	4	1	11	1	2	3	4	1	56	1	3	3	3	5	16
Que.	31	32													
Ans.	1	4													

JEE ADVANCED QUESTIONS

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13
Ans.	2	4	3	3,4	3	1,3,4	4	8	3	0.5	4	3	2