

DPP-2

- Domain of the function $f(x) = \frac{1}{\sqrt{x+2}}$ is-
 (A) \mathbb{R} (B) $(-2, \infty)$ (C) $[2, \infty)$ (D) $[0, \infty)$.
 - The domain where function $f(x) = 2x^2 - 1$ and $g(x) = 1 - 3x$ are equal, is-
 (A) $\{1/2\}$ (B) $\{2\}$ (C) $\{1/2, 2\}$ (D) $\{1/2, -2\}$
 - The domain of the function $\log \sqrt{\frac{3-x}{2}}$ is-
 (A) $(3, \infty)$ (B) $(-\infty, 3]$ (C) $(0, 3)$ (D) $(-3, 3)$
 - Domain of the function $\cos^{-1}(4x-1)$ is-
 (A) $(0, 1/2)$ (B) $[0, 1/2]$ (C) $[1/2, 2]$ (D) None of these
 - Domain of the function $\log |x^2 - 9|$ is-
 (A) \mathbb{R} (B) $\mathbb{R} - [-3, 3]$ (C) $\mathbb{R} - \{-3, 3\}$ (D) None of these
 - The domain of the function-
 $f(x) = \sqrt{x-1} + \sqrt{6-x}$ is-
 (A) $(1, 6)$ (B) $[1, 6]$ (C) $[1, \infty)$ (D) $(-\infty, 6]$.
 - The domain of the function
 $f(x) = \sqrt{(2-2x-x^2)}$ is-
 (A) $-\sqrt{3} \leq x \leq \sqrt{3}$ (B) $-1-\sqrt{3} \leq x \leq -1+\sqrt{3}$
 (C) $-2 \leq x \leq 2$ (D) $-2+\sqrt{3} \leq x \leq -2-\sqrt{3}$.
 - Domain of a function $f(x) = \sin^{-1} 5x$ is-
 (A) $\left(-\frac{1}{5}, \frac{1}{5}\right)$ (B) $\left[-\frac{1}{5}, \frac{1}{5}\right]$ (C) \mathbb{R} (D) $\left(0, \frac{1}{5}\right)$.
 - Domain and range of $f(x) = \frac{|x-3|}{x-3}$ are respectively-
 (A) \mathbb{R}_+ $[-1, 1]$ (B) $\mathbb{R} - \{3\}$, $\{1, -1\}$ (C) \mathbb{R}^+ , \mathbb{R} (D) None of these
 - The domain of the function $f(x) = \sin \frac{1}{x}$ is -
 (A) \mathbb{R} (B) \mathbb{R}^+ (C) \mathbb{R}_0 (D) \mathbb{R}^-
 - If the domain of the function $f(x) = \frac{|x|}{x}$ be $[3, 7]$ then its range is-
 (A) $[-1, 1]$ (B) $\{-1, 1\}$ (C) $\{1\}$ (D) $\{-1\}$
 - The domain of the function $f(x) = \frac{1}{\sqrt{x-[x]}}$ is- [] is GIF
 (A) \mathbb{R} (B) $\mathbb{R}-\mathbb{Z}$ (C) \mathbb{Z} (D) None of these
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- If $f(x) = \frac{1}{x+1}$ and $g(x) = \frac{1}{\sqrt{x-1}}$, then common domain of function is -
 (A) $\{x|x < 1, x \in \mathbb{R}\}$ (B) $\{x|x \geq 0, x \neq 1, x \in \mathbb{R}\}$
 (C) $\{1\}$ (D) $\{-1\}$
 - If $f(x) = \left(\frac{x}{1-|x|}\right)^{1/2}$, $x \in \mathbb{R}$ then domain of the function $f(x)$ is -
 (A) $(-1, 0]$ (B) $(-\infty, -1) \cup [0, 1)$
 (C) $(-1, \infty) - \{1\}$ (D) None of these
 - The function $f(x) = \cos^{-1}\left(\frac{|x|-3}{2}\right) + [\log_e(4-x)]^{-1}$ is defined for-
 (A) $[-1, 0] \cup [1, 5]$ (B) $[-5, -1] \cup [1, 4]$
 (C) $[-5, -1] \cup ([1, 4] - \{3\})$ (D) $[1, 4] - \{3\}$

1.	2.	3.	4.	5.
B	D	B	B	C
6.	7.	8.	9.	10.

B	B	B	B	C
11.	12.	13.	14.	15.
C	B	B	B	C