# National Testing Agency

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| **Question Paper Name:** | Paper II EH 7th April 2019 S1 S2 |
| **Subject Name:** | Paper II EH |
| **Creation Date:** | 2019-04-07 14:22:38 |
| **Duration:** | 180 |
| **Total Marks:** | 390 |
| **Display Marks:** | Yes |
| **Share Answer Key With Delivery Engine:** | Yes |
| **Actual Answer Key:** | Yes |

## Paper II

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|---|---|
| **Group Number :** | 1 |
| **Group Id :** | 416529184 |
| **Group Maximum Duration :** | 0 |
| **Group Minimum Duration :** | 180 |
| **Revisit allowed for view? :** | No |
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| **Break time:** | 0 |
| **Group Marks:** | 390 |

## Mathematics

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|---|---|
| **Section Id :** | 416529346 |
| **Section Number :** | 1 |
| **Section type :** | Online |
| **Mandatory or Optional:** | Mandatory |
| **Number of Questions:** | 30 |
| **Number of Questions to be attempted:** | 30 |
| **Section Marks:** | 120 |
| **Display Number Panel:** | Yes |
| **Group All Questions:** | No |

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|---|---|
| **Sub-Section Number:** | 1 |
| **Sub-Section Id:** | 416529518 |
| **Question Shuffling Allowed :** | Yes |

**Question Number : 1 Question Id : 41652915580 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let R be a relation defined on $\mathbf{Z} \times \mathbf{Z}$ by
(a, b) R (c, d) $\Leftrightarrow$ $a - d = b - c$, where $\mathbf{Z}$ is
the set of all integers, then R is :

**Options :**

41652960922. reflexive but neither symmetric nor transitive.

41652960923. symmetric but neither reflexive nor transitive.

41652960924. transitive but neither reflexive nor symmetric.

41652960925. symmetric and transitive but not reflexive.

**Question Number : 1 Question Id : 41652915580 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना $Z \times Z$ पर एक संबंध R निम्नरूप से परिभाषित है :

$(a, b)\ R\ (c, d) \Leftrightarrow a - d = b - c$, जहाँ Z सभी पूर्णांकों का समुच्चय है, तो सम्बंध R :

**Options :**

41652960922. स्वतुल्य है परन्तु न सममित है और न ही संक्रामक है।

41652960923. सममित है परन्तु न स्वतुल्य है और न ही संक्रामक है।

41652960924. संक्रामक है परन्तु न स्वतुल्य है और न ही सममित है।

41652960925. सममित तथा संक्रामक है परन्तु स्वतुल्य नहीं है।

**Question Number : 2 Question Id : 41652915581 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let $z(\neq -1)$ be any complex number such that $|z| = 1$. Then the imaginary part of

$\frac{\bar{z}(1 - z)}{z(1 + \bar{z})}$ is :

(Here $\theta = \arg z$)

**Options :**

41652960926. $-\tan\left(\frac{\theta}{2}\right)\sin\theta$

41652960927. $\tan\left(\frac{\theta}{2}\right)\cos\theta$

41652960928. $-\tan\left(\frac{\theta}{2}\right)\cos\theta$

41652960929. $\tan\left(\frac{\theta}{2}\right)\sin\theta$

**Question Number : 2 Question Id : 41652915581 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना $z\,(\neq -1)$ एक सम्मिश्र संख्या है, जबकि

$|z| = 1$ है, तो $\mathrm{Im}\left(\frac{\overline{z}(1-z)}{z(1+\overline{z})}\right)$ बराबर है :

(यहाँ $\theta = \arg z$)

**Options :**

41652960926. $-\tan\left(\frac{\theta}{2}\right)\sin\theta$

41652960927. $\tan\left(\frac{\theta}{2}\right)\cos\theta$

41652960928. $-\tan\left(\frac{\theta}{2}\right)\cos\theta$

41652960929. $\tan\left(\frac{\theta}{2}\right)\sin\theta$

**Question Number : 3 Question Id : 41652915582 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The set of all real values of $\alpha$ for which the equation, $|x+2|\cdot|x-2| = \alpha^2 - 2\alpha$ has real solutions for $x$, is :

**Options :**

41652960930. $(-\infty, 0] \cup [2, \infty)$

41652960931. $(-\infty, 0] \cup [2, 1+\sqrt{5}]$

41652960932. $[-1-\sqrt{5}, 1-\sqrt{5}] \cup [1+\sqrt{5}, \infty)$

41652960933. $[1-\sqrt{5}, 0] \cup [2, 1+\sqrt{5}]$

**Question Number : 3 Question Id : 41652915582 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

$\alpha$ के उन सभी वास्तविक मानों, जिनके लिए समीकरण

$|x+2| \cdot |x-2| = \alpha^2 - 2\alpha$, के $x$ में वास्तविक हल

हैं, का समुच्चय है :

**Options :**

41652960930. $(-\infty, 0] \cup [2, \infty)$

41652960931. $(-\infty, 0] \cup [2, 1+\sqrt{5}]$

41652960932. $[-1-\sqrt{5}, 1-\sqrt{5}] \cup [1+\sqrt{5}, \infty)$

41652960933. $[1-\sqrt{5}, 0] \cup [2, 1+\sqrt{5}]$

**Question Number : 4 Question Id : 41652915583 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let A be a $2\times 2$ matrix such that $A^2 + A + I = 0$, where $I = I_2$. Then $\left|\text{adj}\left((I - A)^6\right)\right|$ is equal to :

**Options :**

41652960934. $3^3$

41652960935. $3^4$

41652960936. $3^6$

41652960937. $3^9$

**Question Number : 4 Question Id : 41652915583 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना A एक $2\times 2$ आव्यूह, जिसके लिए $A^2+A+I=0$, जबकि $I=I_2$ है, तो $\left|\text{adj}\left((I-A)^6\right)\right|$ बराबर है :

**Options :**

41652960934. $3^3$

41652960935. $3^4$

41652960936. $3^6$

41652960937. $3^9$

**Question Number : 5 Question Id : 41652915584 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If the system of linear equations

$x+4y-3z=2$

$2x+7y-4z=\alpha$

$-x-5y+5z=\beta$

has infinitely many solutions, then the ordered pair $(\alpha, \beta)$ cannot take the value :

**Options :**

41652960938. $(4, -2)$

41652960939. $(2, -4)$

41652960940. $(3, -3)$

41652960941. $(-3, 3)$

**Question Number : 5 Question Id : 41652915584 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

यदि रैखिक समीकरण निकाय

$x+4y-3z=2$

$2x+7y-4z=\alpha$

$-x-5y+5z=\beta$

के अनन्त हल हैं, तो क्रमित युग्म $(\alpha, \beta)$ निम्न में से कौन सा युग्म **नहीं** हो सकता?

**Options :**

41652960938. $(4, -2)$

41652960939. $(2, -4)$

41652960940. $(3, -3)$

41652960941. $(-3, 3)$

**Question Number : 6 Question Id : 41652915585 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let A be the set of all 3-digit natural numbers and $B=\{x \in A : \text{H.C.F. } (x, 15)=1\}$.

Then the number of elements in B is :

**Options :**

41652960942. 420

41652960943. 360

41652960944. 480

41652960945. 240

**Question Number : 6 Question Id : 41652915585 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना A, तीन अंकों वाली सभी प्राकृत संख्याओं का समुच्चय है तथा $B=\{x \in A : \text{H.C.F. } (x, 15)=1\}$ है, तो B के अवयवों की संख्या है :

**Options :**

41652960942. 420

41652960943. $360$

41652960944. $480$

41652960945. $240$

**Question Number : 7 Question Id : 41652915586 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If r is the remainder obtained on dividing $(98)^5$ by 12, then the coefficient of $x^3$ in the Binomial expansion of $\left(1+\frac{x}{2}\right)^{2r}$ is :

**Options :**

41652960946. $\frac{55}{2}$

41652960947. $\frac{91}{2}$

41652960948. $102$

41652960949. $70$

**Question Number : 7 Question Id : 41652915586 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

यदि $(98)^5$ को 12 से विभाजित करने पर शेषफल r है, तो $\left(1+\frac{x}{2}\right)^{2r}$ के द्विपद प्रसार में, $x^3$ का गुणांक है :

**Options :**

41652960946. $\frac{55}{2}$

41652960947. $\frac{91}{2}$

41652960948. $102$

41652960949. $70$

**Question Number : 8 Question Id : 41652915587 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

In an increasing geometric series, the sum of the first and the sixth term is 66 and the product of the second and the fifth terms is 128. Then the sum of the first 6 terms of this series is :

**Options :**

41652960950. 127

41652960951. 129

41652960952. 126

41652960953. 128

**Question Number : 8 Question Id : 41652915587 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

एक वर्धमान गुणोत्तर श्रेढ़ी में, पहले और छटे पदों का योगफल 66 है और दूसरे तथा पाँचवे पदों का गुणनफल 128 है, तो श्रेढ़ी के पहले 6 पदों का योगफल है :

**Options :**

41652960950. 127

41652960951. 129

41652960952. 126

41652960953. 128

**Question Number : 9 Question Id : 41652915588 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The sum of the infinite series $1 + 2 + \frac{2}{3} + \frac{6}{3^2} + \frac{10}{3^3} + \frac{14}{3^4} + \ldots\ldots\ldots$ is :

**Options :**

41652960954. 4

41652960955. $5$

41652960956. $6$

41652960957. $\frac{9}{2}$

**Question Number : 9 Question Id : 41652915588 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

अनन्त श्रेणी

$$1 + 2 + \frac{2}{3} + \frac{6}{3^2} + \frac{10}{3^3} + \frac{14}{3^4} + \quad \ldots\ldots\ldots$$

का योगफल बराबर है :

**Options :**

41652960954. $4$

41652960955. $5$

41652960956. $6$

41652960957. $\frac{9}{2}$

**Question Number : 10 Question Id : 41652915589 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

$$\lim_{x \to 3} \frac{\sqrt{x+6} - \sin(x-3) - 3}{(x-3)\cos(x-3)}$$ is equal

to :

**Options :**

41652960958. $\frac{5}{6}$

41652960959. $\frac{1}{6}$

41652960960. $-\frac{2}{3}$

41652960961. $-\frac{5}{6}$

**Question Number : 10 Question Id : 41652915589 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

$\lim\limits_{x\to 3} \frac{\sqrt{x+6} - \sin(x-3) - 3}{(x-3)\cos(x-3)}$ बराबर है :

**Options :**

41652960958. $\frac{5}{6}$

41652960959. $\frac{1}{6}$

41652960960. $-\frac{2}{3}$

41652960961. $-\frac{5}{6}$

**Question Number : 11 Question Id : 41652915590 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let $f$ be a continuous function defined by

$$f(x) = \begin{cases} \frac{a\sin 2x - b\cos x}{\frac{\pi}{2} - x} & , \quad x > \frac{\pi}{2} \\ 4 & , \quad x = \frac{\pi}{2} \\ \frac{2b\cos x}{\frac{\pi}{2} - x} & , \quad x < \frac{\pi}{2} \end{cases}.$$

Then the value of a + b is :

**Options :**

41652960962. 1

41652960963. 4

41652960964. 5

41652960965. 8

**Question Number : 11 Question Id : 41652915590 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना संतत फलन $f$ निम्न प्रकार से परिभाषित है :

$$f(x)=\begin{cases}\dfrac{a\sin 2x-b\cos x}{\frac{\pi}{2}-x}, & x>\dfrac{\pi}{2}\\ 4, & x=\dfrac{\pi}{2}\\ \dfrac{2b\cos x}{\frac{\pi}{2}-x}, & x<\dfrac{\pi}{2}\end{cases}.$$

तो $a+b$ का मान है :

**Options :**

41652960962. 1

41652960963. 4

41652960964. 5

41652960965. 8

**Question Number : 12 Question Id : 41652915591 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let $y$ be an implicit function of $x$ defined

by $\begin{vmatrix}x+y & 2 & 1\\ 1 & x+y & 2\\ 1 & 2 & x+y\end{vmatrix}+12y=0.$

If $y(0)=-1$, then $\dfrac{dy}{dx}$ at $x=0$ is :

**Options :**

41652960966. $\dfrac{1}{2}$

41652960967. $-\dfrac{1}{2}$

41652960968. $\frac{5}{4}$

41652960969. $-\frac{4}{5}$

**Question Number : 12 Question Id : 41652915591 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना $y$, $x$ का अस्पष्ट (implicit) फलन निम्न प्रकार से परिभाषित है :

$$\begin{vmatrix} x+y & 2 & 1 \\ 1 & x+y & 2 \\ 1 & 2 & x+y \end{vmatrix} + 12y = 0.$$

यदि $y(0) = -1$, तो $x = 0$ पर $\frac{dy}{dx}$ का मान है :

**Options :**

41652960966. $\frac{1}{2}$

41652960967. $-\frac{1}{2}$

41652960968. $\frac{5}{4}$

41652960969. $-\frac{4}{5}$

**Question Number : 13 Question Id : 41652915592 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let $f : \mathbf{R} - \{0\} \to \mathbf{R}$ be defined by $f(x) = a \log_e |x| + bx^3 + x^2$.

If $x = -1$ and $x = 1$ are the critical points of $f(x)$, then :

**Options :**

41652960970. $f''(1) + f''(-1) = 0$

41652960971. $f''(1) - f''(-1) = 4$

41652960972. both $x=1$ and $x=-1$ are local minima of $f(x)$

41652960973. $x=1$ is a local minima and $x=-1$ is a local maxima of $f(x)$

**Question Number : 13 Question Id : 41652915592 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना $f: \mathrm{R}-\{0\} \to \mathrm{R}$, निम्न प्रकार से परिभाषित है :

$f(x)=\mathrm{a}\log_e|x|+\mathrm{b}x^3+x^2.$

यदि $x=-1$ तथा $x=1, f(x)$ के दो क्रांतिक बिन्दु हैं,

तो :

**Options :**

41652960970. $f''(1)+f''(-1)=0$

41652960971. $f''(1)-f''(-1)=4$

41652960972. $x=1$ तथा $x=-1$, दोनों $f(x)$ के स्थानीय निम्नतम बिन्दु हैं।

41652960973. $f(x)$ का $x=1$, एक स्थानीय निम्नतम बिन्दु है तथा $x=-1$, एक स्थानीय उच्चतम बिन्दु है।

**Question Number : 14 Question Id : 41652915593 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let $f: [0, 5] \to \mathrm{R}$ be a continuous function such that $|f(x)| \leq 3$ for all $x \in [0, 5]$ and $\int_0^5 f(t)dt = 3$. Then the value of $\int_0^3 f(t)dt$ can be :

**Options :**

41652960974. $-4$

41652960975. $6$

41652960976. $10$

41652960977. $12$

**Question Number : 14 Question Id : 41652915593 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना $f: [0, 5] \to R$ एक संतत फलन इस प्रकार है कि सभी $x \in [0, 5]$ के लिए $|f(x)| \leq 3$ तथा $\int_0^5 f(t)dt = 3$ है, तो $\int_0^3 f(t)dt$ निम्न में से किसके बराबर हो सकता है?

**Options :**

41652960974. $-4$

41652960975. $6$

41652960976. $10$

41652960977. $12$

**Question Number : 15 Question Id : 41652915594 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

$\int \frac{\sec x}{\sqrt{\sin x \cdot \cos^5 x}} dx$ is equal to :

(where C is a constant of integration)

**Options :**

41652960978. $2(\tan x)^{\frac{1}{2}} + \frac{2}{5}(\tan x)^{\frac{5}{2}} + C$

41652960979. $(\tan x)^{\frac{1}{2}} + \frac{2}{5}(\tan x)^{\frac{5}{2}} + C$

41652960980. $2(\tan x)^{\frac{1}{2}} + \frac{1}{5}(\tan x)^{\frac{5}{2}} + C$

41652960981. $2(\tan x)^{\frac{1}{2}} - \frac{2}{5}(\tan x)^{\frac{5}{2}} + C$

**Question Number : 15 Question Id : 41652915594 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

$\int \frac{\sec x}{\sqrt{\sin x \cdot \cos^5 x}} dx$ बराबर है :

(जहाँ C एक समाकलन अचर है)

**Options :**

41652960978. $2(\tan x)^{\frac{1}{2}} + \frac{2}{5}(\tan x)^{\frac{5}{2}} + C$

41652960979. $(\tan x)^{\frac{1}{2}} + \frac{2}{5}(\tan x)^{\frac{5}{2}} + C$

41652960980. $2(\tan x)^{\frac{1}{2}} + \frac{1}{5}(\tan x)^{\frac{5}{2}} + C$

41652960981. $2(\tan x)^{\frac{1}{2}} - \frac{2}{5}(\tan x)^{\frac{5}{2}} + C$

**Question Number : 16 Question Id : 41652915595 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The value of $\int_{-3}^{3} \frac{5x^4}{1 + e^{-x}} dx$ is :

**Options :**

41652960982. $2(3^5)$

41652960983. $3^5$

41652960984. $\frac{3^5}{5}$

41652960985. $3^4$

**Question Number : 16 Question Id : 41652915595 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

$\int_{-3}^{3} \frac{5x^4}{1 + e^{-x}} dx$ का मान बराबर है :

**Options :**

41652960982. $2(3^5)$

41652960983. $3^5$

41652960984. $\frac{3^5}{5}$

41652960985. $3^4$

**Question Number : 17 Question Id : 41652915596 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The area (in sq. units) above the $x$-axis bounded by the parabola, $x-y^2-1=0$ and the line $x-y-3=0$ is :

**Options :**

41652960986. $\frac{8}{3}$

41652960987. $\frac{10}{3}$

41652960988. $4$

41652960989. $\frac{13}{3}$

**Question Number : 17 Question Id : 41652915596 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

परवलय, $x-y^2-1=0$ तथा रेखा $x-y-3=0$ से घिरे हुए और $x$-अक्ष के ऊपर बने क्षेत्र का क्षेत्रफल (वर्ग इकाइयों में) है :

**Options :**

41652960986. $\frac{8}{3}$

41652960987. $\frac{10}{3}$

41652960988. $4$

41652960989. $\frac{13}{3}$

**Question Number : 18 Question Id : 41652915597 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let the tangent drawn at any point P$(x, y)$ on a curve intersect the $x$ and $y$ axes at two distinct points A and B respectively. If AP : PB = 5 : 1, and the curve passes through the point (2, 2) then an equation of the curve is :

**Options :**

41652960990. $xy^5 = 2^6$

41652960991. $xy^4 = 2^5$

41652960992. $x^4y = 2^5$

41652960993. $x^5y = 2^6$

**Question Number : 18 Question Id : 41652915597 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना एक वक्र के किसी बिन्दु P$(x, y)$ पर खींची गई स्पर्शरेखा $x$ तथा $y$-अक्षों को क्रमशः दो भिन्न बिन्दुओं A तथा B पर काटती है। यदि AP : PB = 5 : 1 है और वक्र बिन्दु (2, 2) से होकर जाता है, तो वक्र का एक समीकरण है :

**Options :**

41652960990. $xy^5 = 2^6$

41652960991. $xy^4 = 2^5$

41652960992. $x^4y = 2^5$

41652960993. $x^5y = 2^6$

**Question Number : 19 Question Id : 41652915598 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let A(1, 3) and C(5, 1) be two opposite vertices of a rectangle. The other two vertices B(a, b) and D(c, d) lie on the line $y = 2x + k$ for some k. Then the value of $(a + b) \cdot (c + d)$ is :

**Options :**

41652960994. 8

41652960995. 16

41652960996. 24

41652960997. 32

**Question Number : 19 Question Id : 41652915598 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना A(1, 3) तथा C(5, 1) एक आयत के सम्मुख शीर्ष हैं। इसके अन्य दो शीर्ष B(a, b) तथा D(c, d) किसी k के लिए, रेखा $y = 2x + k$ पर स्थित हैं, तो $(a + b) \cdot (c + d)$ का मान है :

**Options :**

41652960994. 8

41652960995. 16

41652960996. 24

41652960997. 32

**Question Number : 20 Question Id : 41652915599 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let the abscissae of two points A and B on a circle be the roots of $x^2 + 2x - 4 = 0$ and the ordinates of A and B be the roots of $y^2 + 4y - 16 = 0$. If AB is a diameter of this circle, then the radius of this circle is :

**Options :**

41652960998. $5$

41652960999. $6$

41652961000. $2\sqrt{6}$

41652961001. $2\sqrt{10}$

**Question Number : 20 Question Id : 41652915599 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना एक वृत्त पर दो बिन्दुओं A तथा B के भुज (abscissae), $x^2+2x-4=0$ के मूल हैं तथा A और B के कोटि (ordinates), $y^2+4y-16=0$ के मूल हैं। यदि AB इस वृत्त का एक व्यास है, तो इसकी त्रिज्या बराबर है :

**Options :**

41652960998. $5$

41652960999. $6$

41652961000. $2\sqrt{6}$

41652961001. $2\sqrt{10}$

**Question Number : 21 Question Id : 41652915600 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let P be the point on the parabola $y^2=3x$ such that OP makes an angle of $\frac{\pi}{6}$ with the $x$-axis, where O is the origin. A normal is drawn to the parabola at P intersecting the axis of the parabola at Q. If S is the focus of the parabola, then SQ is equal to :

**Options :**

41652961002. $\frac{39}{2}$

41652961003. $\frac{39}{4}$

41652961004. 9

41652961005. $\frac{41}{4}$

**Question Number : 21 Question Id : 41652915600 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना O मूलबिन्दु है, P परवलय, $y^2=3x$ पर एक बिन्दु है और OP तथा $x$-अक्ष के बीच का कोण $\frac{\pi}{6}$ है। परवलय के इस बिन्दु P पर खींचा गया अभिलम्ब, इसके अक्ष को Q पर काटता है। यदि परवलय का नाभिकेन्द्र S है, तो SQ बराबर है :

**Options :**

41652961002. $\frac{39}{2}$

41652961003. $\frac{39}{4}$

41652961004. 9

41652961005. $\frac{41}{4}$

**Question Number : 22 Question Id : 41652915601 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let the ellipse $x^2+16y^2=16$ be inscribed in a rectangle whose sides are parallel to the coordinate axes. If the rectangle is inscribed in another ellipse that passes through the point (16, 0), then the equation of the outer ellipse is :

**Options :**

41652961006. $x^2+256y^2=16^2$

41652961007. $x^2+248y^2=16^2$

41652961008. $x^2+240y^2=16^2$

41652961009. $x^2+232y^2=16^2$

**Question Number : 22 Question Id : 41652915601 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

एक दीर्घवृत्त, $x^2+16y^2=16$, एक आयत जिसकी भुजाएँ निर्देशांक अक्षों के समान्तर हैं, के अन्तर्गत बनाया गया है। यह आयत, एक और दीर्घवृत्त के अन्तर्गत बनाया गया है। यदि यह दीर्घवृत्त बिन्दु (16, 0) से हो कर जाता है, तो इसका समीकरण है :

**Options :**

41652961006. $x^2+256y^2=16^2$

41652961007. $x^2+248y^2=16^2$

41652961008. $x^2+240y^2=16^2$

41652961009. $x^2+232y^2=16^2$

**Question Number : 23 Question Id : 41652915602 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Let the planes $x-2y+kz=0$ and $x+5y-z=0$ be perpendicular. Then the plane through the point $(2, -2, -2)$ and perpendicular to the given planes also passes through the point :

**Options :**

41652961010. $(0, 5, 8)$

41652961011. $(0, 5, -8)$

41652961012. $(-1, 0, -7)$

41652961013. $(1, 0, 7)$

**Question Number : 23 Question Id : 41652915602 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

माना समतल $x-2y+kz=0$ तथा $x+5y-z=0$ परस्पर लम्बवत् हैं। तो वह समतल जो बिन्दु $(2,-2,-2)$ से होकर जाता है तथा दिए गए समतलों के लम्बवत् है, निम्न में से किस बिन्दु से होकर जाता है?

**Options :**

41652961010. $(0,5,8)$

41652961011. $(0,5,-8)$

41652961012. $(-1,0,-7)$

41652961013. $(1,0,7)$

**Question Number : 24 Question Id : 41652915603 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If the two lines $\frac{x-2m}{2m+5}=\frac{y}{8m}=\frac{z-4}{2}$ and $\frac{x-2}{m-2}=\frac{y}{-1}=\frac{z-2m}{1-3m}$ are parallel for some $m \in R$, then the distance between them is :

**Options :**

41652961014. $\sqrt{10}$

41652961015. $2\sqrt{5}$

41652961016. $\sqrt{29}$

41652961017. $\sqrt{34}$

**Question Number : 24 Question Id : 41652915603 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

यदि किसी $m \in R$ के लिए, दो रेखाएँ

$\frac{x-2m}{2m+5} = \frac{y}{8m} = \frac{z-4}{2}$ तथा

$\frac{x-2}{m-2} = \frac{y}{-1} = \frac{z-2m}{1-3m}$ समान्तर हैं, तो दोनों के बीच की दूरी है :

**Options :**

41652961014. $\sqrt{10}$

41652961015. $2\sqrt{5}$

41652961016. $\sqrt{29}$

41652961017. $\sqrt{34}$

**Question Number : 25 Question Id : 41652915604 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If three vectors $\vec{V_1} = \alpha\hat{i} + \hat{j} + \hat{k}$, $\vec{V_2} = \hat{i} + \beta\hat{j} - 2\hat{k}$ and $\vec{V_3} = \hat{i} + \hat{j}$ are coplanar, and $\vec{V_1}$ and $\vec{V_3}$ are perpendicular, then the vector $\vec{V_1} \times \vec{V_2}$ is :

**Options :**

41652961018. $-\hat{i} + \hat{j} + 2\hat{k}$

41652961019. $\hat{i} - \hat{j} + 2\hat{k}$

41652961020. $-\hat{i} + \hat{j}$

41652961021. $2\hat{i} - 2\hat{j} + \hat{k}$

**Question Number : 25 Question Id : 41652915604 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

यदि तीन सदिश $\vec{V_1} = \alpha\hat{i} + \hat{j} + \hat{k}$,

$\vec{V_2} = \hat{i} + \beta\hat{j} - 2\hat{k}$ तथा $\vec{V_3} = \hat{i} + \hat{j}$

समतलीय हैं, तथा $\vec{V_1}$ और $\vec{V_3}$ परस्पर लम्बवत् हैं,

तो सदिश $\vec{V_1} \times \vec{V_2}$ है :

**Options :**

41652961018. $-\hat{i} + \hat{j} + 2\hat{k}$

41652961019. $\hat{i} - \hat{j} + 2\hat{k}$

41652961020. $-\hat{i} + \hat{j}$

41652961021. $2\hat{i} - 2\hat{j} + \hat{k}$

**Question Number : 26 Question Id : 41652915605 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If $x_1, x_2, \ldots, x_n$ be the observed data such that $\sum_{i=1}^{n} x_i - 2n = 180$ and $\sum_{i=1}^{n} x_i - 7n = 30$, then the mean of the data $(x_1 - 3), (x_2 - 3), \ldots, (x_n - 3)$ is equal to :

**Options :**

41652961022. 5

41652961023. 8

41652961024. $\frac{13}{3}$

41652961025. $\frac{16}{3}$

**Question Number : 26 Question Id : 41652915605 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

यदि प्रेक्षण $x_1, x_2, \ldots, x_n$ इस प्रकार हैं कि $\sum_{i=1}^{n} x_i - 2n = 180$ तथा $\sum_{i=1}^{n} x_i - 7n = 30$, तो आँकड़ों $(x_1-3), (x_2-3), \ldots, (x_n-3)$ का माध्य है :

**Options :**

41652961022. $5$

41652961023. $8$

41652961024. $\frac{13}{3}$

41652961025. $\frac{16}{3}$

**Question Number : 27 Question Id : 41652915606 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If for two events A and B, in a random experiment, $P(A|B) = \frac{4}{5}$ and $P(B|A) = \frac{1}{4}$, then $P(A|A \cup B)$ is equal to :

**Options :**

41652961026. $\frac{5}{16}$

41652961027. $\frac{5}{17}$

41652961028. $\frac{16}{17}$

41652961029. $\frac{11}{16}$

**Question Number : 27 Question Id : 41652915606 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

यदि एक यादृच्छिक प्रयोग में, दो घटनाओं A तथा B के लिए $P(A|B)=\frac{4}{5}$ तथा $P(B|A)=\frac{1}{4}$ है, तो $P(A|A\cup B)$ बराबर है :

**Options :**

41652961026. $\frac{5}{16}$

41652961027. $\frac{5}{17}$

41652961028. $\frac{16}{17}$

41652961029. $\frac{11}{16}$

**Question Number : 28 Question Id : 41652915607 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If $6\cos^2\theta-2\cos2\theta-3=0$, then $\tan^2 3\theta$ is equal to :

**Options :**

41652961030. $\frac{1}{3}$

41652961031. $1$

41652961032. $3$

41652961033. $\frac{9}{2}$

**Question Number : 28 Question Id : 41652915607 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

यदि $6\cos^2\theta-2\cos2\theta-3=0$ है, तो $\tan^2 3\theta$ बराबर है :

**Options :**

41652961030. $\frac{1}{3}$

41652961031. $1$

41652961032. $3$

41652961033. $\frac{9}{2}$

**Question Number : 29 Question Id : 41652915608 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

If a, b and c (all distinct) are the sides of a triangle ABC opposite to the angles A, B and C, respectively, then $\frac{c\sin(A-B)}{a^2-b^2}-\frac{b\sin(C-A)}{c^2-a^2}$ is equal to :

**Options :**

41652961034. $0$

41652961035. $1$

41652961036. $2$

41652961037. $-1$

**Question Number : 29 Question Id : 41652915608 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

यदि a, b तथा c (सभी विभिन्न) एक त्रिभुज ABC की भुजाएँ हैं जो, क्रमशः, इसके कोणों A, B तथा C के सम्मुख हैं, तो $\frac{c\sin(A-B)}{a^2-b^2}-\frac{b\sin(C-A)}{c^2-a^2}$ बराबर है :

**Options :**

41652961034. $0$

41652961035. $1$

41652961036. $2$

41652961037. $-1$

**Question Number : 30 Question Id : 41652915609 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The expression $\sim(p \leftrightarrow q)$ is equivalent to :

**Options :**

41652961038. $(p \wedge \sim q) \wedge (q \wedge \sim p)$

41652961039. $p \vee q$

41652961040. $p \wedge \sim q$

41652961041. $(\sim p \wedge q) \vee (\sim q \wedge p)$

**Question Number : 30 Question Id : 41652915609 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

व्यंजक $\sim(p \leftrightarrow q)$ निम्न में से किसके समतुल्य है?

**Options :**

41652961038. $(p \wedge \sim q) \wedge (q \wedge \sim p)$

41652961039. $p \vee q$

41652961040. $p \wedge \sim q$

41652961041. $(\sim p \wedge q) \vee (\sim q \wedge p)$

Aptitude Test

| | |
|---|---|
| **Section Id :** | 416529347 |
| **Section Number :** | 2 |
| **Section type :** | Online |
| **Mandatory or Optional:** | Mandatory |
| **Number of Questions:** | 8 |
| **Number of Questions to be attempted:** | 8 |
| **Section Marks:** | 200 |
| **Display Number Panel:** | Yes |
| **Group All Questions:** | No |

| | |
|---|---|
| **Sub-Section Number:** | 1 |
| **Sub-Section Id:** | 416529519 |

**Question Shuffling Allowed :** Yes

**Question Id : 41652915610 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (31 to 45)**

Question Label : Comprehension

.

**Sub questions**

**Question Number : 31 Question Id : 41652915611 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

A small lift for carrying small loads only is known as which of the following ?

**Options :**

41652961042. A deaf bearer

41652961043. A dumb waiter

41652961044. A jockey boy

41652961045. A push upper

**Question Number : 32 Question Id : 41652915612 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Hindustan Parryware in the Indian market is known for which of the following product ?

**Options :**

41652961046. Pipes

41652961047. Sanitary ware

41652961048. Wall tiles

41652961049. Wooden tables

**Question Number : 33 Question Id : 41652915613 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following is a UNESCO World Heritage Site ?

**Options :**

41652961050. Kochi

41652961051. Hampi

41652961052. Bijnor

41652961053. Bijapur

**Question Number : 34 Question Id : 41652915614 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The most famous temple in the Khajuraho group of temples is which one of the following ?

**Options :**

41652961054. Shiva Temple

41652961055. Kandariya Mahadev Temple

41652961056. Ganesh Temple

41652961057. Krishna Temple

**Question Number : 35 Question Id : 41652915615 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Parquet flooring is usually made of which of the following ?

**Options :**

41652961058. Granite

41652961059. Marble

41652961060. Cement

41652961061. Wood

**Question Number : 36 Question Id : 41652915616 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The fort in Hyderabad is known as which of the following ?

**Options :**

41652961062. Bahubali

41652961063. Golconda

41652961064. Siladhari

41652961065. Virbanda

**Question Number : 37 Question Id : 41652915617 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following is the tallest building in Bengaluru ?

**Options :**

41652961066. World Trade Centre

41652961067. Mantri Pinnacle

41652961068. Concord Tower

41652961069. U B Tower

**Question Number : 38 Question Id : 41652915618 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The Sas Bahu Temple is located in which of the following ?

**Options :**

41652961070. Red Fort

41652961071. Jhansi Fort

41652961072. Gwalior Fort

41652961073. Jaipur Fort

**Question Number : 39 Question Id : 41652915619 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which amongst the following is the city in Italy that is known for its leaning tower ?

**Options :**

41652961074. Venice

41652961075. Florence

41652961076. Rome

41652961077. Pisa

**Question Number : 40 Question Id : 41652915620 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The Lotus Temple is located in which one of the following city ?

**Options :**

41652961078. New Delhi

41652961079. Nagpur

41652961080. Kanpur

41652961081. Lucknow

**Question Number : 41 Question Id : 41652915621 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Cement Plaster is used for which of the following ?

**Options :**

41652961082. Covering walls

41652961083. Making roofs

41652961084. Making staircases

41652961085. Making floors

**Question Number : 42 Question Id : 41652915622 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Helical staircases are which one of the following ?

**Options :**

41652961086. Dog leg staircases

41652961087. Curving staircases

41652961088. Straight flights

41652961089. Staircases with no railings

**Question Number : 43 Question Id : 41652915623 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

An escalator moves in which of the following directions ?

**Options :**

41652961090. Only vertically

41652961091. Only horizontally

41652961092. Vertically and Horizontally

41652961093. In steps

**Question Number : 44 Question Id : 41652915624 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Rooms with white painted walls appears to be which of the following ?

**Options :**

41652961094. Smaller

41652961095. Larger

41652961096. Darker

41652961097. Narrower

**Question Number : 45 Question Id : 41652915625 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Zaha Hadid was born in which country amongst the following ?

**Options :**

41652961098. Iran

41652961099. Iraq

41652961100. Afghanistan

41652961101. Turkistan

**Question Id : 41652915610 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (31 to 45)**

Question Label : Comprehension

.

**Sub questions**

**Question Number : 31 Question Id : 41652915611 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

केवल छोटे भार उठाने के लिए एक छोटी लिफ्ट को निम्नलिखित में से किसके रूप में जाना जाता है?

**Options :**

41652961042. एक बहरा वेटर

41652961043. गूंगा (डम्ब) वेटर

41652961044. एक जॉकी लड़का

41652961045. एक धक्का ऊपरी

**Question Number : 32 Question Id : 41652915612 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

भारतीय बाजार में हिंदुस्तान पैरीवेयर निम्नलिखित में से किस उत्पाद के लिए जाना जाता है?

**Options :**

41652961046. पाइप्स

41652961047. सेनेटरी वेयर (स्वच्छता सम्बन्धी सामान)

41652961048. दीवार की टाइल

41652961049. लकड़ी की मेज

**Question Number : 33 Question Id : 41652915613 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से कौन सा एक यूनेस्को विश्व धरोहर स्थल है?

**Options :**

41652961050. कोच्चि

41652961051. हम्पी

41652961052. बिजनौर

41652961053. बीजापुर

**Question Number : 34 Question Id : 41652915614 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

खजुराहो समूह के मंदिरों में सबसे प्रसिद्ध मंदिर निम्नलिखित में से कौन सा है?

**Options :**

41652961054. शिव मंदिर

41652961055. कंदरिया महादेव मंदिर

41652961056. गणेश मंदिर

41652961057. कृष्णा मंदिर

**Question Number : 35 Question Id : 41652915615 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

पारक्वेट फर्श आमतौर पर निम्नलिखित में से किससे बनता है?

**Options :**

41652961058. ग्रेनाइट

41652961059. संगमरमर

41652961060. सीमेंट

41652961061. लकड़ी

**Question Number : 36 Question Id : 41652915616 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

हैदराबाद में किले को निम्नलिखित में से किसके नाम से जाना जाता है?

**Options :**

41652961062. बाहुबली

41652961063. गोलकुंडा

41652961064. सिलाधारी

41652961065. वीरबन्दा

**Question Number : 37 Question Id : 41652915617 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

निम्नलिखित में से कौन-सी बेंगलुरु की सबसे ऊँची इमारत है?

**Options :**

41652961066. विश्व व्यापार केंद्र

41652961067. मन्त्री शिखर

41652961068. कॉनकॉर्ड टॉवर

41652961069. यू बी टॉवर

**Question Number : 38 Question Id : 41652915618 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

सास बहू मंदिर निम्नलिखित में से किस में स्थित है?

**Options :**

41652961070. लाल किला

41652961071. झाँसी का किला

41652961072. ग्वालियर का किला

41652961073. जयपुर किला

**Question Number : 39 Question Id : 41652915619 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

इटली का वह शहर कौन सा है जो अपने झुकाव टॉवर के लिए जाना जाता है?

**Options :**

41652961074. वेनिस

41652961075. फ्लोरेंस

41652961076. रोम

41652961077. पीसा

**Question Number : 40 Question Id : 41652915620 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

लोटस टेम्पल निम्नलिखित में से किस शहर में स्थित है?

**Options :**

41652961078. नई दिल्ली

41652961079. नागपुर

41652961080. कानपुर

41652961081. लखनऊ

**Question Number : 41 Question Id : 41652915621 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

सीमेंट प्लास्टर का उपयोग निम्नलिखित में से किसके लिए किया जाता है?

**Options :**

41652961082. दीवारों को ढंकना

41652961083. छत बनाना

41652961084. सीढ़ियाँ बनाना

41652961085. फर्श बनाना

**Question Number : 42 Question Id : 41652915622 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

चक्करदार सीढ़ियाँ निम्नलिखित में से कौन सी हैं?

**Options :**

41652961086. डॉग लेग सीढ़ियाँ

41652961087. घूमती सीढ़ियाँ

41652961088. सीधी उड़ान

41652961089. बिना किसी रेलिंग के सीढ़ियाँ

**Question Number : 43 Question Id : 41652915623 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

एस्केलेटर निम्नलिखित में से किस दिशा में चलता है?

**Options :**

41652961090. केवल लंबवत

41652961091. केवल क्षैतिज

41652961092. ऊर्ध्वाधर और क्षैतिज रूप से

41652961093. कदमों में

**Question Number : 44 Question Id : 41652915624 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

सफेद रंग की दीवारों वाले कमरे निम्नलिखित में से कौन से प्रतीत होते हैं?

**Options :**

41652961094. छोटे

41652961095. बड़े

41652961096. गहरे

41652961097. संकरे

**Question Number : 45 Question Id : 41652915625 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

ज़ाहा हदीद निम्नलिखित में से किस देश में पैदा हुई थी?

**Options :**

41652961098. ईरान

41652961099. इराक

41652961100. अफगानिस्तान

41652961101. तुर्किस्तान

| | |
|---|---|
| **Sub-Section Number:** | 2 |
| **Sub-Section Id:** | 416529520 |
| **Question Shuffling Allowed :** | Yes |

**Question Id : 41652915626 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (46 to 50)**

Question Label : Comprehension

**Directions** : One of the following answer figures is hidden in the problem figure in the same size and direction. Select the correct one.

**Sub questions**

**Question Number : 46 Question Id : 41652915627 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961102. 

41652961103. 

41652961104. 

41652961105. 

**Question Number : 47 Question Id : 41652915628 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961106. 

41652961107. 

41652961108. 

41652961109. 

**Question Number : 48 Question Id : 41652915629 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961110. 

41652961111. 

41652961112. 

41652961113. 

**Question Number : 49 Question Id : 41652915630 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961114. 

41652961115. 

41652961116. 

41652961117. 

**Question Number : 50 Question Id : 41652915631 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961118. 

41652961119. 

41652961120. 

41652961121. 

**Question Id : 41652915626 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (46 to 50)**

Question Label : Comprehension

**निर्देश :** नीचे दी गयी उत्तर आकृतियों में से एक आकृति माप और दिशा में सामान रूप से प्रश्न आकृति में छुपी है। कौन सी सही है, चुनिए।

**Sub questions**

**Question Number : 46 Question Id : 41652915627 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961102. 

41652961103. 

41652961104. 

41652961105. 

**Question Number : 47 Question Id : 41652915628 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961106. 

41652961107. 

41652961108. 

41652961109. 

**Question Number : 48 Question Id : 41652915629 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961110. 

41652961111. 

41652961112. 

41652961113. 

**Question Number : 49 Question Id : 41652915630 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961114. 

41652961115. 

41652961116. 

41652961117. 

**Question Number : 50 Question Id : 41652915631 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961118. 

41652961119. 

41652961120. 

41652961121. 

| | |
|---|---|
| **Sub-Section Number:** | 3 |
| **Sub-Section Id:** | 416529521 |
| **Question Shuffling Allowed :** | Yes |

**Question Id : 41652915632 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (51 to 55)**

Question Label : Comprehension

**Directions** : Which one of the answer figure will complete the sequence of the three problem figures ?

**Sub questions**

**Question Number : 51 Question Id : 41652915633 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961122. 

41652961123. 

41652961124. 

41652961125. 

**Question Number : 52 Question Id : 41652915634 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961126. 

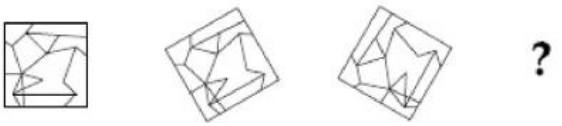
41652961127. 

41652961128. 

41652961129. 

**Question Number : 53 Question Id : 41652915635 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961130. 

41652961131. 

41652961132. 

41652961133. 

**Question Number : 54 Question Id : 41652915636 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961134. 

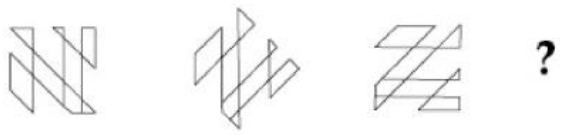
41652961135. 

41652961136. 

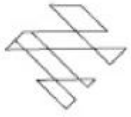
41652961137. 

**Question Number : 55 Question Id : 41652915637 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

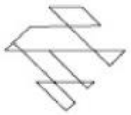
**Correct Marks : 4 Wrong Marks : 1**

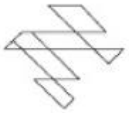


**Options :**

41652961138. 

41652961139. 

41652961140. 

41652961141. 

**Question Id : 41652915632 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (51 to 55)**

Question Label : Comprehension

**निर्देश :** उत्तर आकृतियों में से कौन सी आकृति को तीन प्रश्न आकृतियों में लगाने से अनुक्रम (sequence) पूरा हो जायेगा?

**Sub questions**

**Question Number : 51 Question Id : 41652915633 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961122. 

41652961123. 

41652961124. 

41652961125. 

**Question Number : 52 Question Id : 41652915634 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961126. 

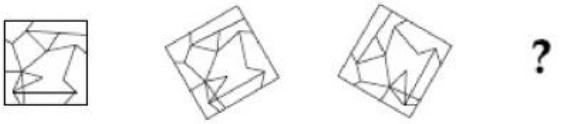
41652961127. 

41652961128. 

41652961129. 

**Question Number : 53 Question Id : 41652915635 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961130. 

41652961131. 

41652961132. 

41652961133. 

**Question Number : 54 Question Id : 41652915636 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961134. 

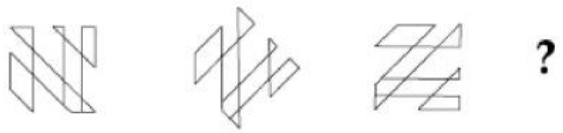
41652961135. 

41652961136. 

41652961137. 

**Question Number : 55 Question Id : 41652915637 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

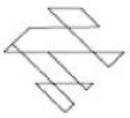
**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961138. 

41652961139. 

41652961140. 

41652961141. 

**Sub-Section Number:** 4

**Sub-Section Id:** 416529522

**Question Shuffling Allowed :** Yes

**Question Id : 41652915638 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (56 to 60)**

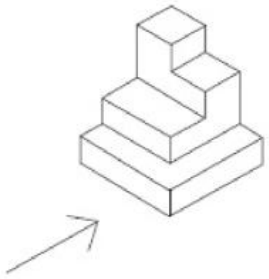
Question Label : Comprehension

**Directions** : The 3D figure shows the view of an object. Identify the correct front view looking in the direction of the arrow, from amongst the answer figures.

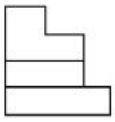
**Sub questions**

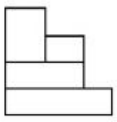
**Question Number : 56 Question Id : 41652915639 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

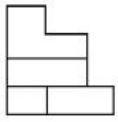
**Correct Marks : 4 Wrong Marks : 1**

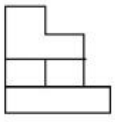


**Options :**

41652961142. 

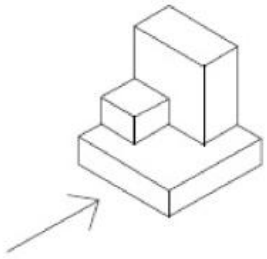
41652961143. 

41652961144. 

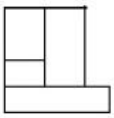
41652961145. 

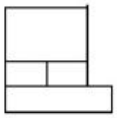
**Question Number : 57 Question Id : 41652915640 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

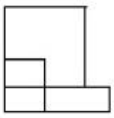
**Correct Marks : 4 Wrong Marks : 1**

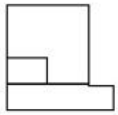


**Options :**

41652961146. 

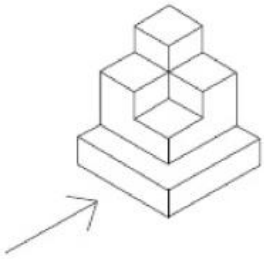
41652961147. 

41652961148. 

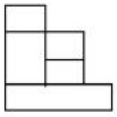
41652961149. 

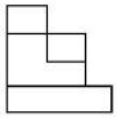
**Question Number : 58 Question Id : 41652915641 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

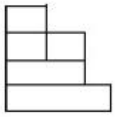
**Correct Marks : 4 Wrong Marks : 1**

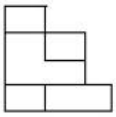


**Options :**

41652961150. 

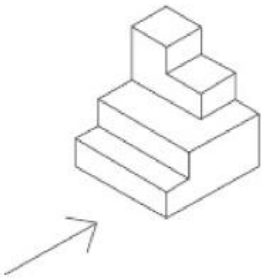
41652961151. 

41652961152. 

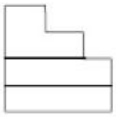
41652961153. 

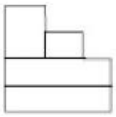
**Question Number : 59 Question Id : 41652915642 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

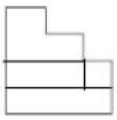
**Correct Marks : 4 Wrong Marks : 1**

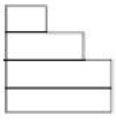


**Options :**

41652961154. 

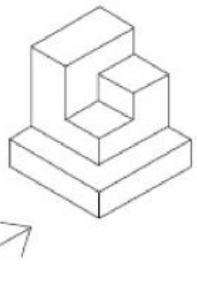
41652961155. 

41652961156. 

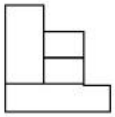
41652961157. 

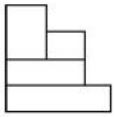
**Question Number : 60 Question Id : 41652915643 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

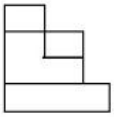
**Correct Marks : 4 Wrong Marks : 1**

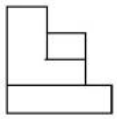


**Options :**

41652961158. 

41652961159. 

41652961160. 

41652961161. 

**Question Id : 41652915638 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (56 to 60)**

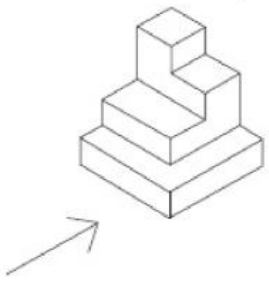
Question Label : Comprehension

**निर्देश :** 3D प्रश्न आकृति में एक वस्तु के एक दृश्य को दिखाया गया है। तीर की दिशा में देखते हुए, इसके सम्मुख दृश्य को उत्तर आकृतियों में से पहचानिये।

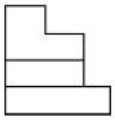
**Sub questions**

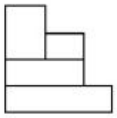
**Question Number : 56 Question Id : 41652915639 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

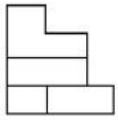
**Correct Marks : 4 Wrong Marks : 1**

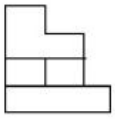


**Options :**

41652961142. 

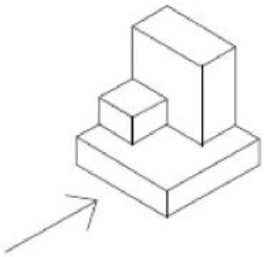
41652961143. 

41652961144. 

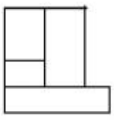
41652961145. 

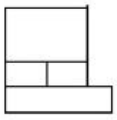
**Question Number : 57 Question Id : 41652915640 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

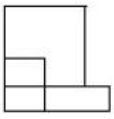
**Correct Marks : 4 Wrong Marks : 1**

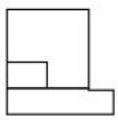


**Options :**

41652961146. 

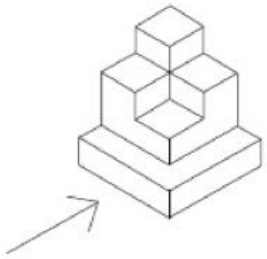
41652961147. 

41652961148. 

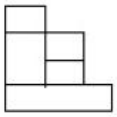
41652961149. 

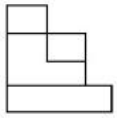
**Question Number : 58 Question Id : 41652915641 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

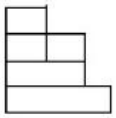
**Correct Marks : 4 Wrong Marks : 1**

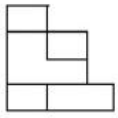


**Options :**

41652961150. 

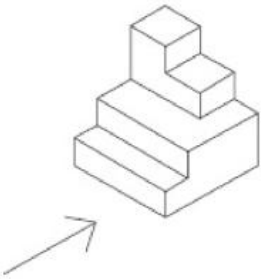
41652961151. 

41652961152. 

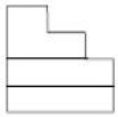
41652961153. 

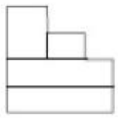
**Question Number : 59 Question Id : 41652915642 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

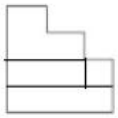
**Correct Marks : 4 Wrong Marks : 1**

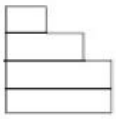


**Options :**

41652961154. 

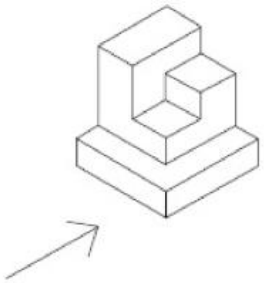
41652961155. 

41652961156. 

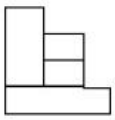
41652961157. 

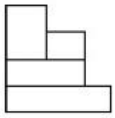
**Question Number : 60 Question Id : 41652915643 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

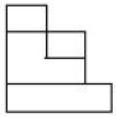
**Correct Marks : 4 Wrong Marks : 1**

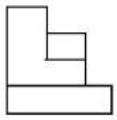


**Options :**

41652961158. 

41652961159. 

41652961160. 

41652961161. 

| | |
|---|---|
| **Sub-Section Number:** | 5 |
| **Sub-Section Id:** | 416529523 |
| **Question Shuffling Allowed :** | Yes |

**Question Id : 41652915644 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (61 to 65)**

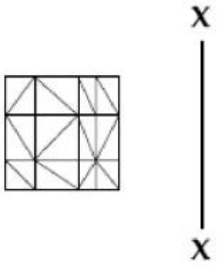
Question Label : Comprehension

**Directions** : Which one of the answer figures is the correct mirror image of the problem figure with respect to X - X ?

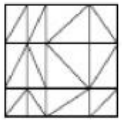
**Sub questions**

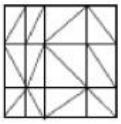
**Question Number : 61 Question Id : 41652915645 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

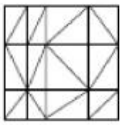
**Correct Marks : 4 Wrong Marks : 1**

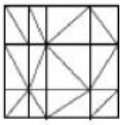



**Options :**

41652961162. 

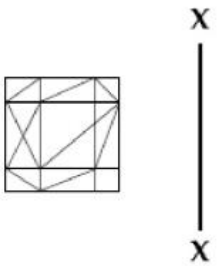
41652961163. 

41652961164. 

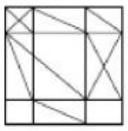
41652961165. 

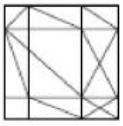
**Question Number : 62 Question Id : 41652915646 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

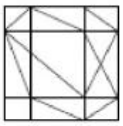
**Correct Marks : 4 Wrong Marks : 1**

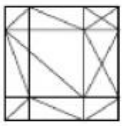


**Options :**

41652961166. 

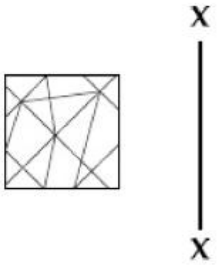
41652961167. 

41652961168. 

41652961169. 

**Question Number : 63 Question Id : 41652915647 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**




**Options :**

41652961170. 

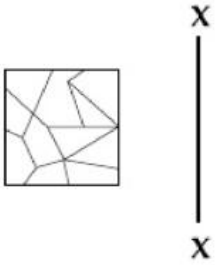
41652961171. 

41652961172. 

41652961173. 

**Question Number : 64 Question Id : 41652915648 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

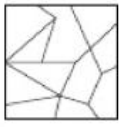
**Correct Marks : 4 Wrong Marks : 1**




**Options :**

41652961174. 

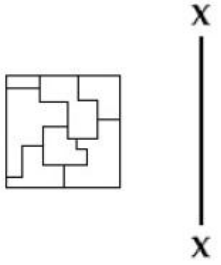
41652961175. 

41652961176. 

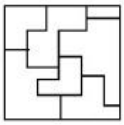
41652961177. 

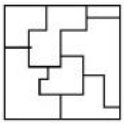
**Question Number : 65 Question Id : 41652915649 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

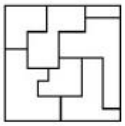
**Correct Marks : 4 Wrong Marks : 1**

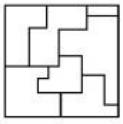



**Options :**

41652961178. 

41652961179. 

41652961180. 

41652961181. 

**Question Id : 41652915644 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (61 to 65)**

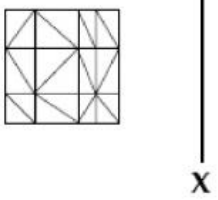
Question Label : Comprehension

**निर्देश :** उत्तर आकृतियों में से कौनसी आकृति दी गयी प्रश्न आकृति का X - X से सम्बंधित सही दर्पण प्रतिबिम्ब है?

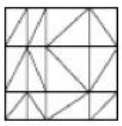
**Sub questions**

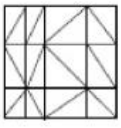
**Question Number : 61 Question Id : 41652915645 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

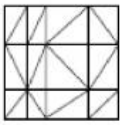
**Correct Marks : 4 Wrong Marks : 1**

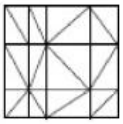



**Options :**

41652961162. 

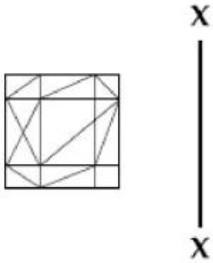
41652961163. 

41652961164. 

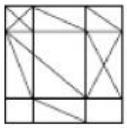
41652961165. 

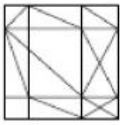
**Question Number : 62 Question Id : 41652915646 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

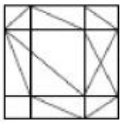
**Correct Marks : 4 Wrong Marks : 1**

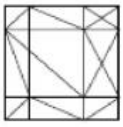



**Options :**

41652961166. 

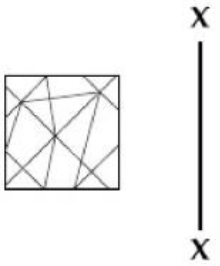
41652961167. 

41652961168. 

41652961169. 

**Question Number : 63 Question Id : 41652915647 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**




**Options :**

41652961170. 

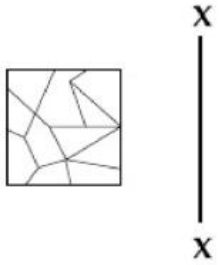
41652961171. 

41652961172. 

41652961173. 

**Question Number : 64 Question Id : 41652915648 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**




**Options :**

41652961174. 

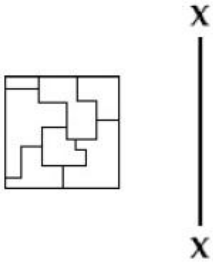
41652961175. 

41652961176. 

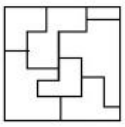
41652961177. 

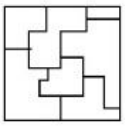
**Question Number : 65 Question Id : 41652915649 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

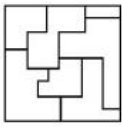
**Correct Marks : 4 Wrong Marks : 1**

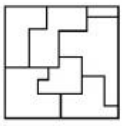



**Options :**

41652961178. 

41652961179. 

41652961180. 

41652961181. 

| | |
|---|---|
| **Sub-Section Number:** | 6 |
| **Sub-Section Id:** | 416529524 |
| **Question Shuffling Allowed :** | Yes |

**Question Id : 41652915650 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (66 to 70)**

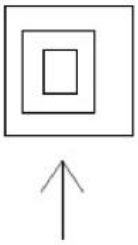
Question Label : Comprehension

**Directions** : The problem figure shows the top view of an object. Identify the correct elevation from amongst the answer figures looking in the direction of the arrow.

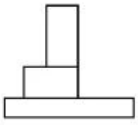
**Sub questions**

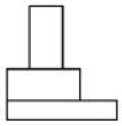
**Question Number : 66 Question Id : 41652915651 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

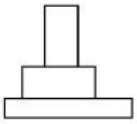
**Correct Marks : 4 Wrong Marks : 1**

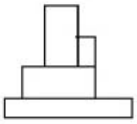


**Options :**

41652961182. 

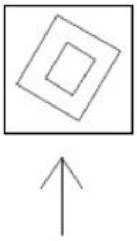
41652961183. 

41652961184. 

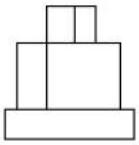
41652961185. 

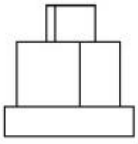
**Question Number : 67 Question Id : 41652915652 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

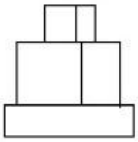
**Correct Marks : 4 Wrong Marks : 1**

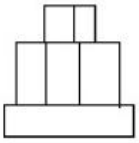


**Options :**

41652961186. 

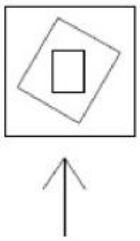
41652961187. 

41652961188. 

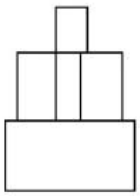
41652961189. 

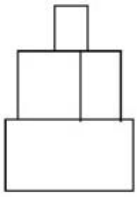
**Question Number : 68 Question Id : 41652915653 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

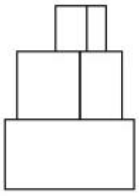
**Correct Marks : 4 Wrong Marks : 1**

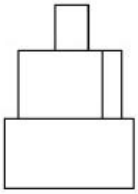


**Options :**

41652961190. 

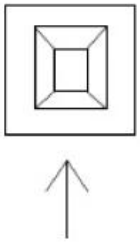
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41652961192. 

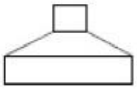
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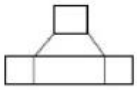
**Question Number : 69 Question Id : 41652915654 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

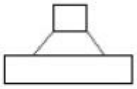
**Correct Marks : 4 Wrong Marks : 1**

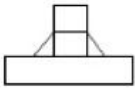


**Options :**

41652961194. 

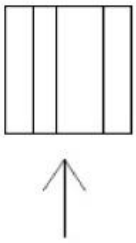
41652961195. 

41652961196. 

41652961197. 

**Question Number : 70 Question Id : 41652915655 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961198. 

41652961199. 

41652961200. 

41652961201. 

**Question Id : 41652915650 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (66 to 70)**

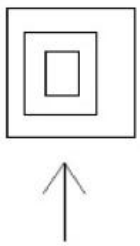
Question Label : Comprehension

**निर्देश :** प्रश्न आकृति में किसी वस्तु का ऊपरी दृश्य दिखाया गया है। तीर की दिशा में देखते हुए, उत्तर आकृतियों में से इसका सही सम्मुख दृश्य पहचानिये।

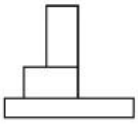
**Sub questions**

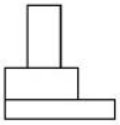
**Question Number : 66 Question Id : 41652915651 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

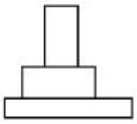
**Correct Marks : 4 Wrong Marks : 1**

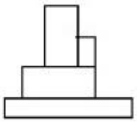


**Options :**

41652961182. 

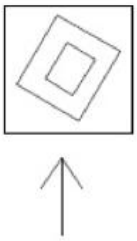
41652961183. 

41652961184. 

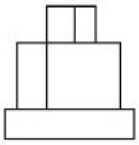
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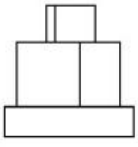
**Question Number : 67 Question Id : 41652915652 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

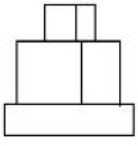
**Correct Marks : 4 Wrong Marks : 1**

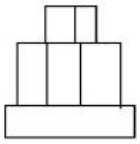


**Options :**

41652961186. 

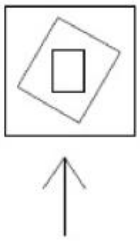
41652961187. 

41652961188. 

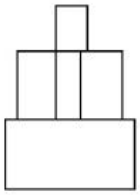
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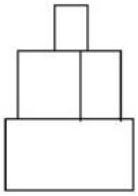
**Question Number : 68 Question Id : 41652915653 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

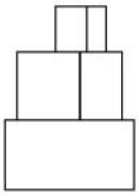
**Correct Marks : 4 Wrong Marks : 1**

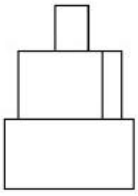


**Options :**

41652961190. 

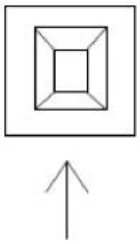
41652961191. 

41652961192. 

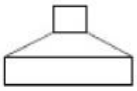
41652961193. 

**Question Number : 69 Question Id : 41652915654 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

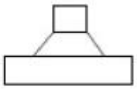
**Correct Marks : 4 Wrong Marks : 1**

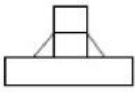


**Options :**

41652961194. 

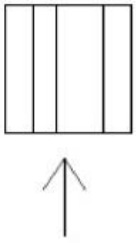
41652961195. 

41652961196. 

41652961197. 

**Question Number : 70 Question Id : 41652915655 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961198. 

41652961199. 

41652961200. 

41652961201. 

| | |
|---|---|
| **Sub-Section Number:** | 7 |
| **Sub-Section Id:** | 416529525 |
| **Question Shuffling Allowed :** | Yes |

**Question Id : 41652915656 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (71 to 75)**

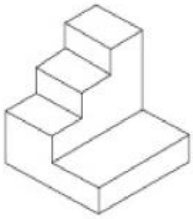
Question Label : Comprehension

**Directions** : The 3D figure shows the view of an object. Identify the correct top view from amongst the answer figures.

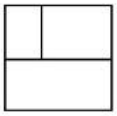
**Sub questions**

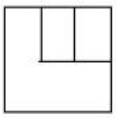
**Question Number : 71 Question Id : 41652915657 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

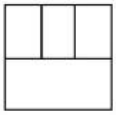
**Correct Marks : 4 Wrong Marks : 1**

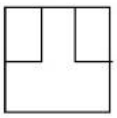


**Options :**

41652961202. 

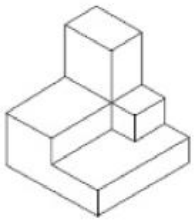
41652961203. 

41652961204. 

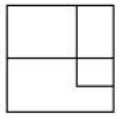
41652961205. 

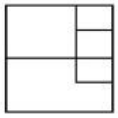
**Question Number : 72 Question Id : 41652915658 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

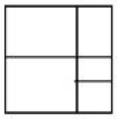
**Correct Marks : 4 Wrong Marks : 1**

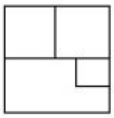


**Options :**

41652961206. 

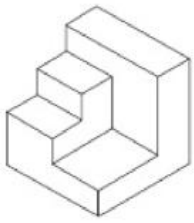
41652961207. 

41652961208. 

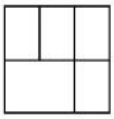
41652961209. 

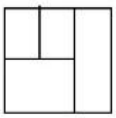
**Question Number : 73 Question Id : 41652915659 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

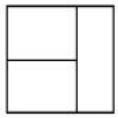
**Correct Marks : 4 Wrong Marks : 1**

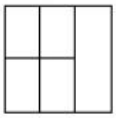


**Options :**

41652961210. 

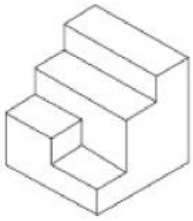
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41652961212. 

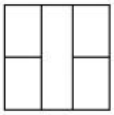
41652961213. 

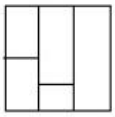
**Question Number : 74 Question Id : 41652915660 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

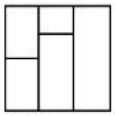
**Correct Marks : 4 Wrong Marks : 1**

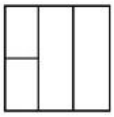


**Options :**

41652961214. 

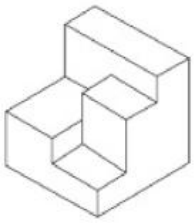
41652961215. 

41652961216. 

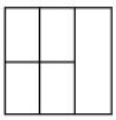
41652961217. 

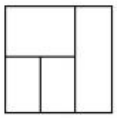
**Question Number : 75 Question Id : 41652915661 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

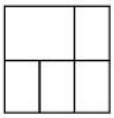
**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961218. 

41652961219. 

41652961220. 

41652961221. 

**Question Id : 41652915656 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (71 to 75)**

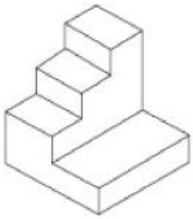
Question Label : Comprehension

**निर्देश :** 3D प्रश्न आकृति में एक वस्तु के एक दृश्य को दिखाया गया है। इसका सही ऊपरी दृश्य, उत्तर आकृतियों में से पहचानिये।

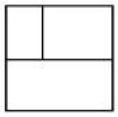
**Sub questions**

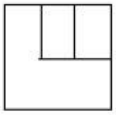
**Question Number : 71 Question Id : 41652915657 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

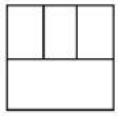
**Correct Marks : 4 Wrong Marks : 1**

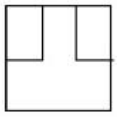


**Options :**

41652961202. 

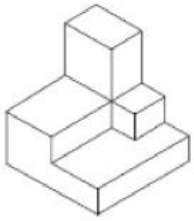
41652961203. 

41652961204. 

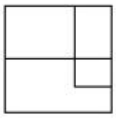
41652961205. 

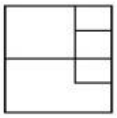
**Question Number : 72 Question Id : 41652915658 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

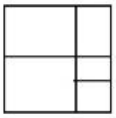
**Correct Marks : 4 Wrong Marks : 1**

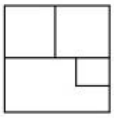


**Options :**

41652961206. 

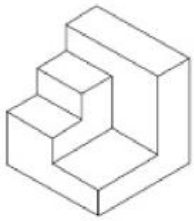
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41652961208. 

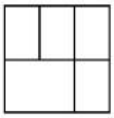
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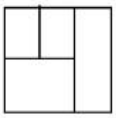
**Question Number : 73 Question Id : 41652915659 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

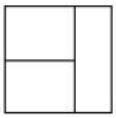
**Correct Marks : 4 Wrong Marks : 1**

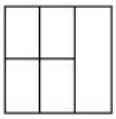


**Options :**

41652961210. 

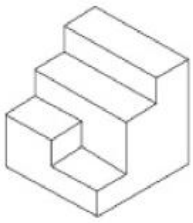
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41652961212. 

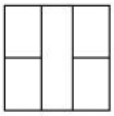
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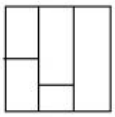
**Question Number : 74 Question Id : 41652915660 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

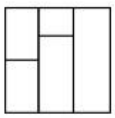
**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961214. 

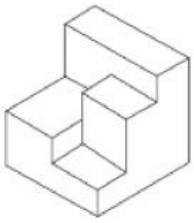
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41652961216. 

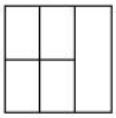
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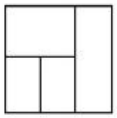
**Question Number : 75 Question Id : 41652915661 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

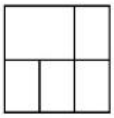
**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961218. 

41652961219. 

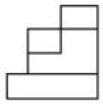
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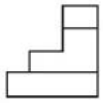
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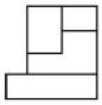
**Sub-Section Number:** 8

**Sub-Section Id:** 416529526

[redacted]

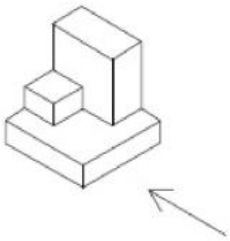
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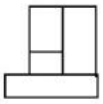
41652961225. 

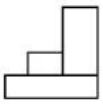
**Question Number : 77 Question Id : 41652915664 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

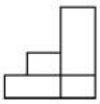
**Correct Marks : 4 Wrong Marks : 1**

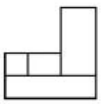


**Options :**

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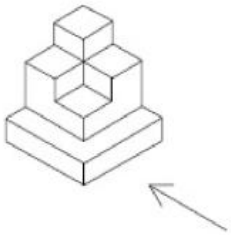
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41652961228. 

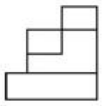
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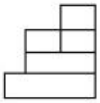
**Question Number : 78 Question Id : 41652915665 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

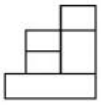
**Correct Marks : 4 Wrong Marks : 1**

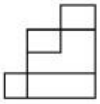


**Options :**

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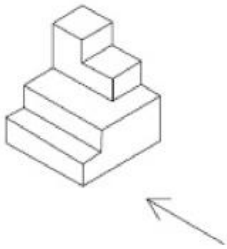
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41652961232. 

41652961233. 

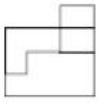
**Question Number : 79 Question Id : 41652915666 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

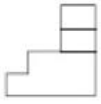
**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961234. 

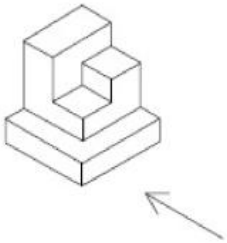
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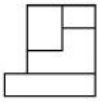
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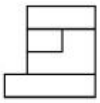
**Question Number : 80 Question Id : 41652915667 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

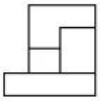
**Correct Marks : 4 Wrong Marks : 1**

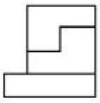


**Options :**

41652961238. 

41652961239. 

41652961240. 

41652961241. 

**Question Id : 41652915662 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**

**Question Numbers : (76 to 80)**

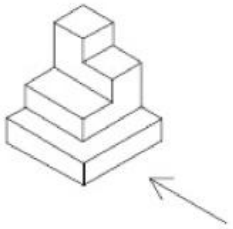
Question Label : Comprehension

**निर्देश :** 3D प्रश्न आकृति में एक वस्तु के एक दृश्य को दिखाया गया है। तीर की दिशा में देखते हुए, इसके पार्श्व दृश्य को उत्तर आकृतियों में से पहचानिये।

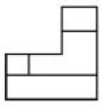
**Sub questions**

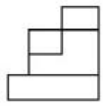
**Question Number : 76 Question Id : 41652915663 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

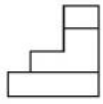
**Correct Marks : 4 Wrong Marks : 1**

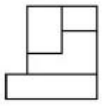


**Options :**

41652961222. 

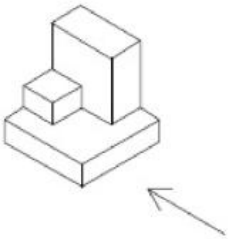
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41652961224. 

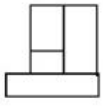
41652961225. 

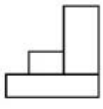
**Question Number : 77 Question Id : 41652915664 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

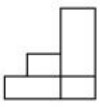
**Correct Marks : 4 Wrong Marks : 1**

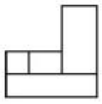


**Options :**

41652961226. 

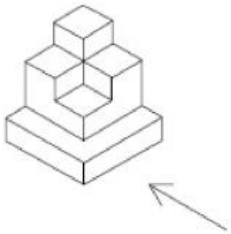
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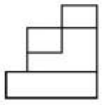
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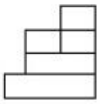
**Question Number : 78 Question Id : 41652915665 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

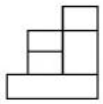
**Correct Marks : 4 Wrong Marks : 1**

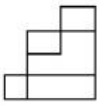


**Options :**

41652961230. 

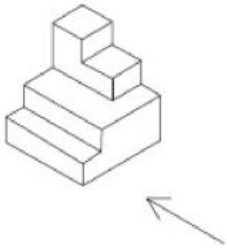
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41652961232. 

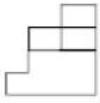
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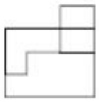
**Question Number : 79 Question Id : 41652915666 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

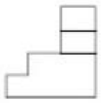
**Correct Marks : 4 Wrong Marks : 1**



**Options :**

41652961234. 

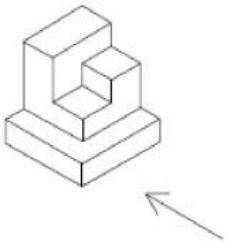
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41652961236. 

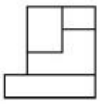
41652961237. 

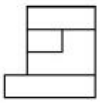
**Question Number : 80 Question Id : 41652915667 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical**

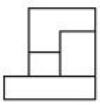
**Correct Marks : 4 Wrong Marks : 1**

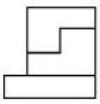


**Options :**

41652961238. 

41652961239. 

41652961240. 

41652961241. 

Drawing

| | |
|---|---|
| **Section Id :** | 416529348 |
| **Section Number :** | 3 |
| **Section type :** | Offline |
| **Mandatory or Optional:** | Mandatory |
| **Number of Questions:** | 3 |
| **Number of Questions to be attempted:** | 3 |

| | |
|---|---|
| **Section Marks:** | 70 |
| **Display Number Panel:** | Yes |
| **Group All Questions:** | No |

| | |
|---|---|
| **Sub-Section Number:** | 1 |
| **Sub-Section Id:** | 416529527 |
| **Question Shuffling Allowed :** | No |

**Question Number : 81 Question Id : 41652915668 Question Type : SUBJECTIVE Display Question Number : Yes Correct Marks : 20**

In the space provided in the answer sheet for this question, draw margin lines to form a frame. In this frame create an aesthetic composition using only cubes. These can be of any size, and may be placed separate, overlapping or within each other. The idea is to produce an aesthetic and visually exciting composition of these shapes in the frame without making it represent any realistic form like house face etc. These shapes and the other spaces should be filled with some colors of your choice so that the visual quality of the composition is enhanced. 20 marks

**Question Number : 81 Question Id : 41652915668 Question Type : SUBJECTIVE Display Question Number : Yes Correct Marks : 20**

इस प्रश्न के लिए उत्तर पत्रक में प्रदान की गई जगह में, फ्रेम बनाने के लिए मार्जिन लाइनों को खींचे। इस फ्रेम में केवल घनक्षेत्रों का उपयोग कर एक सौंदर्य रचना बनाते हैं। ये घनक्षेत्र किसी भी आकार के हो सकते हैं, और इन्हें एक दूसरे के भीतर, अलग-अलग, या अतिव्यापी रखा जा सकता है। इस के पीछे विचार यह है कि फ्रेम में इन आकृतियों की एक सौंदर्य और नेत्र रोमांचक रचना का निर्माण करना है, बिना किसी यथार्थवादी रूप जैसे घर के चेहरे आदि का प्रतिनिधित्व करना। इन आकृतियों और अन्य स्थानों को आपकी पसंद के कुछ रंगों से भरा होना चाहिए ताकि रचना की गुणवत्ता को बढ़ाया जा सके। 20 अंक

**Question Number : 82 Question Id : 41652915669 Question Type : SUBJECTIVE Display Question Number : Yes Correct Marks : 20**

Copy the graphic image shown in the space provided for the answer of this question. Credit will be given to the exactness of your answer. **20 marks**



**Question Number : 82 Question Id : 41652915669 Question Type : SUBJECTIVE Display Question Number : Yes Correct Marks : 20**

इस प्रश्न के उत्तर के लिए प्रदान की गई जगह में दिखाए गए ग्राफिक चित्र की प्रतिलिपि बनाएँ। आपके उत्तर की सटीकता को श्रेय दिया जाएगा। **20 अंक**



| | |
|---|---|
| **Sub-Section Number:** | 2 |
| **Sub-Section Id:** | 416529528 |
| **Question Shuffling Allowed :** | No |

**Question Number : 83 Question Id : 41652915670 Question Type : SUBJECTIVE Display Question Number : Yes Correct Marks : 30**

In the space provided for the answer of this question attempt any ONE of the following : **30 marks**

Design and draw an appropriate pattern for a square table cloth. Color or shade it to enhance its visual quality.

**OR**

Draw a picture of a classroom looking towards the teacher from behind the students.

**OR**

Draw from imagination a picture of an officer sitting in his office.

**Question Number : 83 Question Id : 41652915670 Question Type : SUBJECTIVE Display Question Number : Yes Correct Marks : 30**

इस प्रश्न के उत्तर के लिए दिए गए स्थान में निम्नलिखित में से किसी **एक** का प्रयास करें : **30 अंक**

एक मेज़ को ढकने का वर्ग कपड़े के लिए एक पैटर्न डिज़ाइन और चित्रित करें। इसकी दृश्य गुणवत्ता बढ़ाने के लिए इसे रंग या छाया दें।

**अथवा**

छात्रों के पीछे से शिक्षक की ओर देख रहे क्लासरूम की तस्वीर चित्रित करें।

**अथवा**

कल्पना से चित्रित करें अपने कार्यालय में बैठे एक अधिकारी की तस्वीर।