

National Testing Agency

Question Paper Name :	B Arch 2 Sep 2021 Shift 2
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B ARCH

Group Number :	1
Group Id :	864351271
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	400
Is this Group for Examiner? :	No

Mathematics Section A

Section Id :	8643511048
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory

Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	80
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	8643511275
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 86435122444 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1

The domain of the function, $f(x) = \sqrt{\frac{\log_{0.6} |x - 2|}{|x|}}$ is :

Options :

86435174421. $[1, 2) \cup [3, \infty)$

86435174422. $[1, 2) \cup (2, 3]$

86435174423. $(0, 1) \cup (2, 3]$

86435174424. $(-\infty, 0) \cup [1, 2)$

Question Number : 2 Question Id : 86435122445 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1

Let α and β be the roots of the quadratic equation $x^2 + \sqrt{3}x + 1 = 0$.

Then $\alpha^{2022} + \beta^{2022}$ is equal to :

Options :

86435174425. 2

86435174426. -2

86435174427. 0

86435174428. $-\sqrt{3}$

Question Number : 3 Question Id : 86435122446 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If $A = \begin{pmatrix} 0 & 0 & 2 \\ 1 & 0 & 0 \\ 0 & -1 & 0 \end{pmatrix}$, then :

Options :

86435174429. $A^6 = 2 A^3$

86435174430. $2A^6 = A^3$

86435174431. $A^{12} = 4 A^6$

86435174432. $A^{12} = 2 A^6$

Question Number : 4 Question Id : 86435122447 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The sum of all values of λ , for which the system of equations

$$x + y + z = 1$$

$$x + 2y + 4z = \lambda$$

$$x + 4y + 10z = \lambda^2$$

has infinitely many solutions, is :

Options :

86435174433. 2

86435174434. - 2

86435174435. 3

86435174436. - 3

Question Number : 5 Question Id : 86435122448 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Let $f(x) = \max\{x^2, x^3\}$ for all $x \in \mathbf{R}$. Then which of the following is **NOT** true ?

Options :

86435174437. f is continuous for all x .

86435174438. f is not differentiable exactly at one point in \mathbf{R} .

86435174439. f is not differentiable exactly at two points in \mathbf{R} .

86435174440. $f'\left(-\frac{1}{2}\right) + f'\left(\frac{1}{8}\right) + f'\left(\frac{3}{2}\right) = 6$

Question Number : 6 Question Id : 86435122449 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The sum of the series

$$\frac{1}{6} + \frac{5}{6^2} + \frac{19}{6^3} + \dots + \frac{3^{10} - 2^{10}}{3^{10} \cdot 2^{10}} \text{ is :}$$

Options :

86435174441. $\frac{511}{2^{10}}$

86435174442. $1 + \frac{2^9 - 3^{10}}{6^{10}}$

86435174443. $\frac{(255) \cdot 3^{10} + 2^9}{6^{10}}$

86435174444. $\frac{(511) \cdot 3^{10} + 2^9}{6^{10}}$

Question Number : 7 Question Id : 86435122450 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

$$\lim_{x \rightarrow 0} \frac{1}{x^2} \left(e^{x^2} - \cos \frac{x}{2} \right) \text{ is equal to :}$$

Options :

86435174445.

$\frac{3}{2}$

86435174446. $\frac{5}{8}$

86435174447. $\frac{9}{8}$

86435174448. $\frac{9}{4}$

Question Number : 8 Question Id : 86435122451 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

$$\text{If } \int \frac{\sqrt{\cos(x-\theta)}}{\sqrt{\cos(x+\theta)}} dx = \alpha \sin^{-1}\left(\frac{\sin x}{\cos\theta}\right) + \beta \log_e |\cos x + \sqrt{\cos^2 x - \sin^2 \theta}| + C,$$

where C is a constant of integration and $\frac{\pi}{6} < \theta < \frac{\pi}{4}$, then $\alpha \sin\theta + \beta \cos\theta$ is equal to :

Options :

86435174449. 0

86435174450. 1

86435174451. $\cos 2\theta$

86435174452. $\sin 2\theta$

Question Number : 9 Question Id : 86435122452 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If $I = \int_0^1 \tan^{-1}(\sqrt{x} + 1) dx$, $J = \int_0^1 \frac{\sqrt{x} dx}{x + 2\sqrt{x} + 2}$, then the value of $2I + J$ is equal to :

Options :

86435174453. $2 \tan^{-1}\left(\frac{1}{2}\right)$

86435174454. $2 \tan^{-1}(2) - \frac{\pi}{2}$

86435174455. $2 \tan^{-1}(2)$

86435174456. $\tan^{-1}(2)$

Question Number : 10 Question Id : 86435122453 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Let $y = y(x)$ be the solution of the differential equation $x \frac{dy}{dx} = (2x + 3)e^x + xy$, $x > 0$.

If $y(e) = (2e + 3)e^e$, then $\frac{d^2y}{dx^2} - \frac{dy}{dx}$ at $x = 1$ is equal to :

Options :

86435174457. $3e$

86435174458. e

86435174459. 0

86435174460. $2e$

Question Number : 11 Question Id : 86435122454 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Let f be a non-zero polynomial function such that

$$f(3x) = f'(x) f''(x).$$

Then the value of $f(6)$ is :

Options :

86435174461. 648

86435174462. 324

86435174463. 136

86435174464. 108

Question Number : 12 Question Id : 86435122455 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

A rod AB of length 4 units rests against a vertical wall with A on the horizontal floor.

P is a point on AB such that $AP : PB = 2 : 1$. If the rod slides down along the wall in a vertical plane, then the point $P(x, y)$ moves on the curve :

Options :

86435174465. $36x^2 + 9y^2 = 64$

86435174466. $36x^2 + 9y^2 = 16$

86435174467. $9x^2 + 36y^2 = 64$

86435174468. $9x^2 + 36y^2 = 16$

Question Number : 13 Question Id : 86435122456 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Let A(1, 2) and B(3, 6) are two points on a circle of radius R, whose one of the diameters is along the line $2x - y + 4 = 0$. Then R^2 is equal to :

Options :

86435174469. 17

86435174470. $\frac{37}{3}$

86435174471. $\frac{31}{5}$

86435174472. $\frac{41}{5}$

Question Number : 14 Question Id : 86435122457 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

A line perpendicular to the line $4x = 3y$ is a tangent to the parabola $y^2 = 3x + 1$ at a point P on it. If S is the focus of the parabola, then the equation of the line SP is :

Options :

86435174473. $24x + 5y = 10$

86435174474. $24x - y = 26$

86435174475. $24x + 7y = 10$

86435174476. $8x + y = 6$

Question Number : 15 Question Id : 86435122458 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If a line $px + qy = 12$ is a tangent to the ellipse $4x^2 + 9y^2 = 16$, then pq can NOT be equal to :

Options :

86435174477. 29

86435174478. 26

86435174479. 23

86435174480. 21

Question Number : 16 Question Id : 86435122459 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If the angle between the line $\frac{x+1}{1} = \frac{y-1}{2} = \frac{z+2}{-1}$ and the plane $P : 2x - y - \lambda z + 4 = 0$,

$\lambda > 0$, is $\sin^{-1}\left(\frac{1}{9\sqrt{6}}\right)$, then the distance of the point $(-1, 1, -2)$ from the plane P is :

Options :

86435174481. $\frac{2}{3}$

86435174482. 1

86435174483. $\frac{3}{2}$

86435174484. $\frac{2}{9}$

Question Number : 17 Question Id : 86435122460 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Let the distinct numbers a, b, c be the $p^{\text{th}}, q^{\text{th}}$ and r^{th} terms of a geometric progression of positive terms. Then the angle between the vectors $\vec{u} = (\log_e a^2)\hat{i} + (\log_e b^2)\hat{j} + (\log_e c^2)\hat{k}$ and

$\vec{v} = (q-r)\hat{i} + (r-p)\hat{j} + (p-q)\hat{k}$ is :

Options :

86435174485. 0

86435174486. $\frac{\pi}{4}$

86435174487. $\frac{\pi}{3}$

86435174488. $\frac{\pi}{2}$

Question Number : 18 Question Id : 86435122461 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

For $0 < x < \pi$, the sum of the solutions of the equation $4\left(\frac{1}{2}\sin x + \frac{1}{4}\sin^2 x + \frac{1}{8}\sin^3 x + \dots\right) = 2^{\frac{2}{3}}$ is :

Options :

86435174489. $\frac{\pi}{3}$

86435174490. $\frac{2\pi}{3}$

86435174491. π

86435174492. $\frac{\pi}{2}$

Question Number : 19 Question Id : 86435122462 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The domain of the function

$$f(x) = \tan^{-1}(\sqrt{x^2 + x - 2}) + \sec^{-1}(x^2 - 5x + 3) \text{ is :}$$

Options :

86435174493. $(-\infty, -2] \cup [1, \infty)$

86435174494. $[1, 4] \cup \left[\frac{5 + \sqrt{17}}{2}, \infty \right)$

86435174495. $\left(-\infty, \frac{5 - \sqrt{17}}{2} \right] \cup [1, 4] \cup \left[\frac{5 + \sqrt{17}}{2}, \infty \right)$

86435174496. $(-\infty, -2] \cup [1, 4] \cup \left[\frac{5 + \sqrt{17}}{2}, \infty \right)$

Question Number : 20 Question Id : 86435122463 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following is equivalent to $p \leftrightarrow q$?

Options :

86435174497. $(\sim p \wedge \sim q) \vee (p \vee q)$

86435174498. $(p \wedge q) \vee (\sim p \wedge \sim q)$

86435174499. $(p \vee q) \wedge (\sim p \vee \sim q)$

86435174500. $(p \wedge q) \vee (p \vee q)$

Mathematics Section B

Section Id :	8643511049
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	5
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	8643511276
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 86435122464 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

Three fair dice are thrown. The number of ways to obtain a total of 11 is _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 22 Question Id : 86435122465 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

If a plane, that contains the line $\vec{r} = (1, -1, 1) + \lambda(2, 3, -6), \lambda \in \mathbf{R}$, passes through the point $(2, 0, 2)$ and is at a distance d from the origin, then the value of $73 d^2$ is _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 23 Question Id : 86435122466 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

Number of real roots of the equation

$$\sqrt{x+2} - \sqrt{x-2} = \sqrt{4x-1} \text{ is } \underline{\hspace{2cm}}.$$

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 24 Question Id : 86435122467 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

Between 1 and 31, n numbers have been inserted in such a way that the resulting sequence is an A.P. If the ratio of $(n-1)^{\text{th}}$ and 7^{th} inserted numbers is $9 : 5$, then n is equal to _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 25 Question Id : 86435122468 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

The sum of absolute maximum and absolute minimum values of the function $f(x) = |4x^2 + 3x - 10| + x^2 - 2x + 5$, $x \in [-3, 1]$ is _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 26 Question Id : 86435122469 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

If the area (in sq. units) of the region bounded by the curve $y = |x - 2| + |2x - 3| + |3x - 4|$ and the line $y = 3$ is A, then $12A$ is equal to _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 27 Question Id : 86435122470 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

The coefficient of $a^4b^6c^6$ in the expansion of $(ab + bc + ca)^8$ is _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 28 Question Id : 86435122471 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

The number of ordered pairs (a, b) , such that the function $f(x) = 4x^3 - (3a + 2b)x^2 + 2abx$ is

decreasing in $\left[\frac{3}{2}, \frac{5}{3}\right]$ and increasing in $\mathbf{R} - \left[\frac{3}{2}, \frac{5}{3}\right]$, is _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 29 Question Id : 86435122472 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

Three numbers are randomly picked from the set $\{0, 1, 2, 3, 4, 5, 6, 7, 8, 9\}$ one after another without replacement. If p be the probability that the smallest of these three numbers is less than 4, then $18p$ is equal to _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 30 **Question Id :** 86435122473 **Question Type :** SA

Correct Marks : 4 **Wrong Marks :** 0

If the mean of the numbers 3, 4, a , b , 10 is 6 and their standard deviation is $\sqrt{6.8}$, then $a^3 + b^3$ is equal to _____.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Aptitude Test

Section Id : 8643511050

Section Number : 3

Section type : Online

Mandatory or Optional : Mandatory

Number of Questions : 50

Number of Questions to be attempted : 50
Section Marks : 200
Enable Mark as Answered Mark for Review and Clear Response : Yes
Sub-Section Number : 1
Sub-Section Id : 8643511277
Question Shuffling Allowed : Yes

Question Number : 31 Question Id : 86435122474 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Match List - I with List - II :

List - I	List - II
(A) Jaisalmer	(I) Pink city
(B) Jodhpur	(II) Golden city
(C) Jaipur	(III) Lake city
(D) Udaipur	(IV) Blue city

Options :

86435174511. (A)-(IV), (B)-(II), (C)-(III), (D)-(I)

86435174512. (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

86435174513. (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

86435174514. (A)-(II), (B)-(IV), (C)-(III), (D)-(I)

Question Number : 32 Question Id : 86435122475 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Match List - I with List - II :

List - I	List - II
(A) Jod Gumbaz	(I) Mahabalipuram
(B) Cave temples	(II) Madhurai
(C) Rangnatha temple	(III) Bijapur
(D) Minakshi temple	(IV) Srirangam

Options :

86435174515. (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

86435174516. (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

86435174517. (A)-(IV), (B)-(I), (C)-(III), (D)-(II)

86435174518. (A)-(I), (B)-(IV), (C)-(III), (D)-(II)

Question Number : 33 Question Id : 86435122476 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which is the largest monestry in India ?

Options :

86435174519. Tawang

86435174520. Leh

86435174521. Dharamshala

86435174522. Labrang

Question Number : 34 Question Id : 86435122477 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Where is 'Junagadh fort' choose the correct option amongst the following ?

Options :

86435174523. Udaipur

86435174524. Jodhpur

86435174525. Bikaner

86435174526. Jaisalmer

Question Number : 35 Question Id : 86435122478 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

'Kyoto protocol' summit was held in which country ?

Options :

86435174527. Japan

86435174528. Korea

86435174529. Malyasia

86435174530. China

Question Number : 36 Question Id : 86435122479 Question Type : MCQ Option S

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What was Delhi's old name ?

Options :

86435174531. Old Delhi

86435174532. Shahjahanpur

86435174533. Shahpur Jat

86435174534. Shahajahanabad

Question Number : 37 Question Id : 86435122480 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Match List - I with List - II :

List - I : Name of the cities/towns where traditional Ghats are situated.

List - II : Name of the river on which traditional Ghats are constructed.

List - I

List - II

(A) Maheshwar, MP

(I) Ganga

(B) Kolhapur, Maharashtra

(II) Shipra

(C) Ujjain, MP

(III) Narmada

(D) Varanasi, UP

(IV) Panchganga

Options :

86435174535. (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

86435174536. (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

86435174537. (A)-(IV), (B)-(II), (C)-(III), (D)-(I)

86435174538. (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

Question Number : 38 Question Id : 86435122481 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

'Rani Ki Vav' is an example of :

Options :

86435174539. Haveli

86435174540. Stepwell

86435174541. Temple

86435174542. Fort

Question Number : 39 Question Id : 86435122482 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

'Al-Khazneh' the treasury is located in :

Options :

86435174543. Jordan

86435174544. Turkey

86435174545. UAE

86435174546. Saudi-Arabia

Question Number : 40 Question Id : 86435122483 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Proposed 'Central Vista' project is located in which city ?

Options :

86435174547. New Delhi

86435174548. Lucknow

86435174549. Mumbai

86435174550. Varanasi

Question Number : 41 Question Id : 86435122484 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Originally there were five 'Jantar Mantars' (Architectural Observatories) constructed by 'Raja Jai Singh'. Which out of those got destroyed in the 19th century ?

Options :

86435174551. Jantar Mantar at Ujjain.

86435174552. Jantar Mantar at Mathura.

86435174553. Jantar Mantar at Varanasi.

86435174554. Jantar Mantar at Delhi.

Question Number : 42 Question Id : 86435122485 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The local term 'Barsati' in a building mean.

Options :

86435174555. Mumty

86435174556. Balcony

86435174557. Canopy

86435174558. Parapet

Question Number : 43 Question Id : 86435122486 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Lingraj temple is situated in :

Options :

86435174559. Cuttack

86435174560. Puri

86435174561. Bhubaneshwar

86435174562. Konark

**Question Number : 44 Question Id : 86435122487 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No**

Correct Marks : 4 Wrong Marks : 1

Porcelain is a product made up of :

Options :

86435174563. Steel

86435174564. Stone

86435174565. Clay

86435174566. Timber

**Question Number : 45 Question Id : 86435122488 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No**

Correct Marks : 4 Wrong Marks : 1

Bhagalpur is known for :

Options :

86435174567. Cotton

86435174568. Silk

86435174569. Tea

86435174570. Rice

Question Number : 46 Question Id : 86435122489 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which one of the following terms is used to describe trade between two or more countries ?

Options :

86435174571. Internal trade

86435174572. External trade

86435174573. International trade

86435174574. Local trade

Question Number : 47 Question Id : 86435122490 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Who has designed the 'India Habitat Center' building situated at New Delhi ?

Options :

86435174575. B.V. Doshi

86435174576. Joseph Alleen Stein

86435174577. Charles Correa

86435174578. I.M. Pei

Question Number : 48 Question Id : 86435122491 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

X.....Y
S U C C E S S

Mirror the words along X-Y axis and choose the correct option amongst the following.

Options :

86435174579. S U C C E S S

86435174580. S U C C E S S

86435174581. S U C C E S S

86435174582. S S E C C S S

Question Number : 49 Question Id : 86435122492 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Match List - I with List - II :

List - I

List - II

(A) Dubai

(I)



(B) London

(II)



(C) New York

(III)



(D) Kuala Lumpur

(IV)



Choose correct answer.

Options :

86435174583. (A)-(I), (B)-(III), (C)-(IV), (D)-(II)

86435174584. (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

86435174585. (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

86435174586. (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

Question Number : 50 Question Id : 86435122493 Question Type : MCQ Option Sh...

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Match List - I with List - II :

List - I

List - II

(A) Empire state building

(I)



(B) Opera House

(II)



(C) Hagia Sophia

(III)



(D) Guggenheim Museum

(IV)



Choose correct answer from the options given below :

Options :

86435174587. (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

86435174588. (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

86435174589. (A)-(I), (B)-(II), (C)-(IV), (D)-(III)

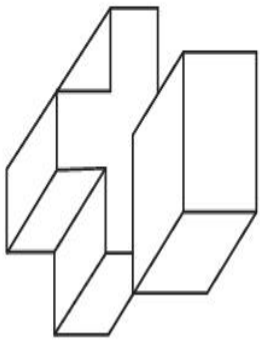
86435174590. (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

Question Number : 51 Question Id : 86435122494 Question Type : MCQ Option Shuffling : Yes

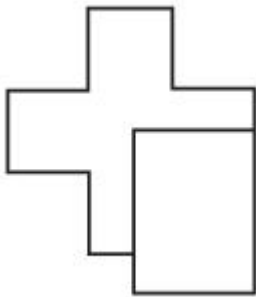
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

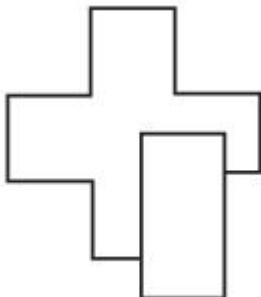
The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figure's.



Options :

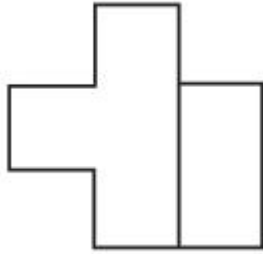
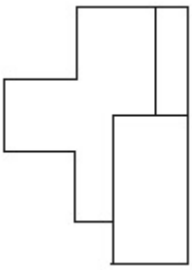


86435174591.



86435174592.

86435174593.

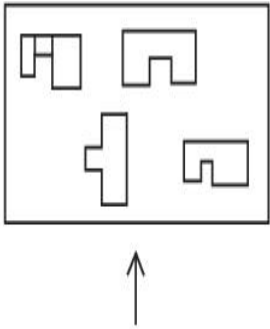


86435174594.

Question Number : 52 Question Id : 86435122495 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

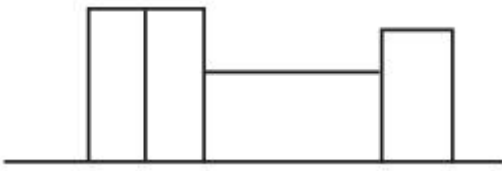
The problem figure shows the top view of an object. Identify the correct elevation looking in the direction of arrow, amongst the answer figure's.



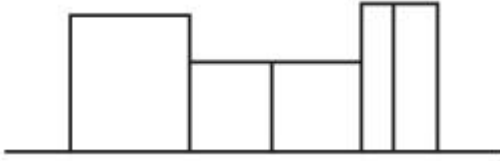
Options :



86435174597.



86435174598.



**Question Number : 53 Question Id : 86435122496 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No**

Correct Marks : 4 Wrong Marks : 1

A tennis ball is cut according to the pattern of the grooves of a screw. Which of the following is the correct output :

Options :

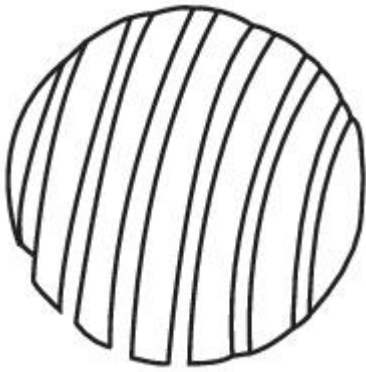


86435174599.



86435174600.

86435174601.



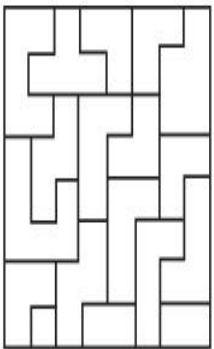
86435174602.

Question Number : 54 Question Id : 86435122497 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

One of the following answer figure is hidden in the problem figure in same size and direction select correct one.



Options :

86435174603.



86435174604.



86435174605.



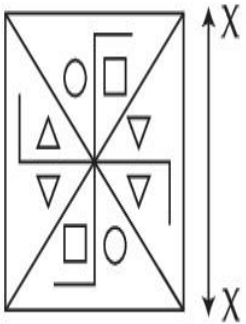
86435174606.



Question Number : 55 Question Id : 86435122498 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

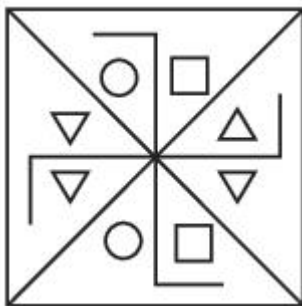
Correct Marks : 4 Wrong Marks : 1

Which of the answer figure is correct mirror image of the problem figure with respect to X-X ?

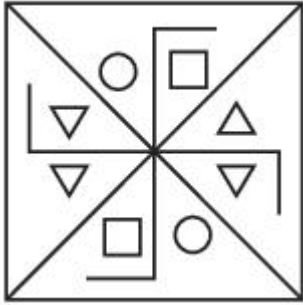
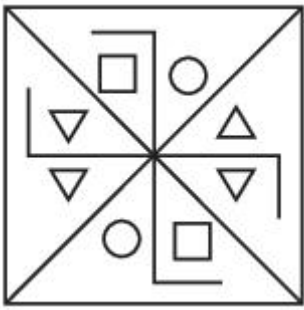


Options :

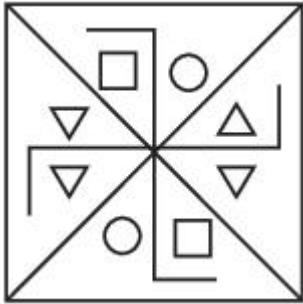
86435174607.



86435174608.



86435174609.



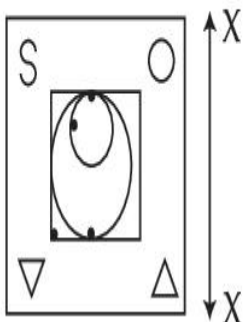
86435174610.

Question Number : 56 Question Id : 86435122499 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

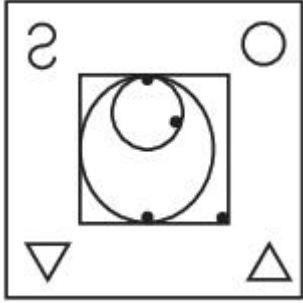
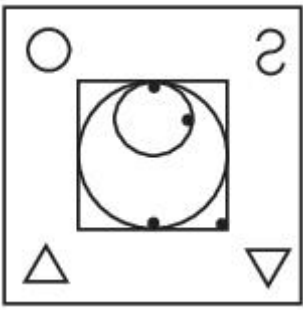
Correct Marks : 4 Wrong Marks : 1

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

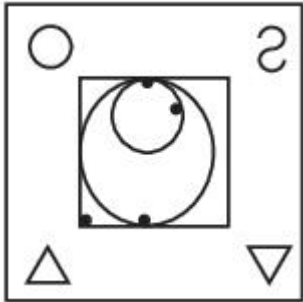


Options :

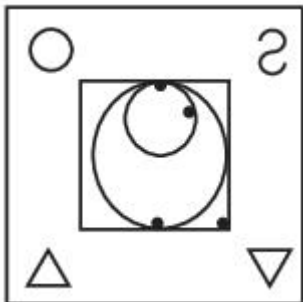
86435174611.



86435174612.



86435174613.



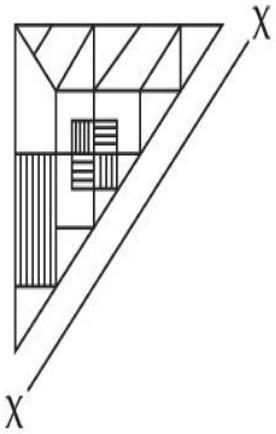
86435174614.

Question Number : 57 Question Id : 86435122500 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

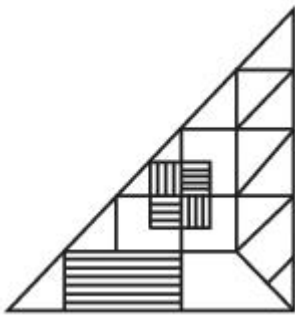
Correct Marks : 4 Wrong Marks : 1

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

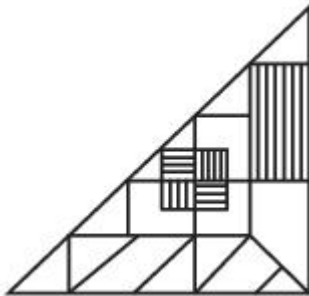


Options :

86435174615.



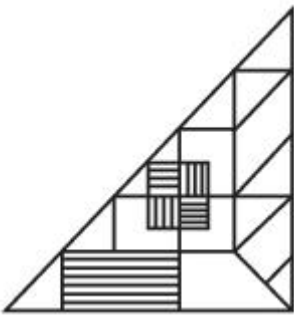
86435174616.



86435174617.



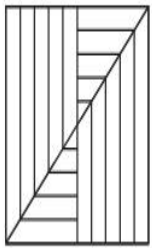
86435174618.



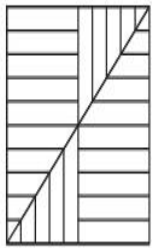
**Question Number : 58 Question Id : 86435122501 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No**

Correct Marks : 4 Wrong Marks : 1

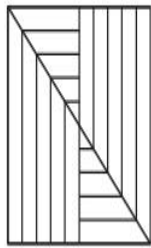
Which one of the answer figure will complete the sequence of the problem figure ? Choose correct one.



(a)



(b)

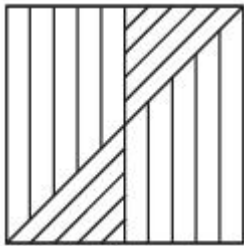


(c)

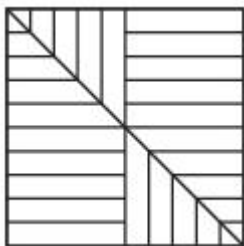
?

(d)

Options :

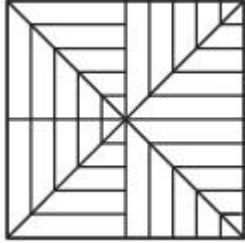
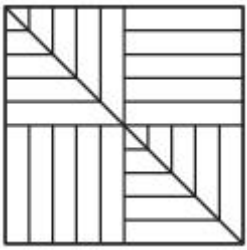


86435174619.



86435174620.

86435174621.



86435174622.

Question Number : 59 Question Id : 86435122502 Question Type : MCQ Option Shuffling : Yes

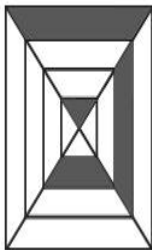
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which one of the answer figure will complete the sequence of the problem figure ? Choose the correct one.



(a)



(b)



(c)



(d)

Options :



86435174623.

86435174624.



86435174625.



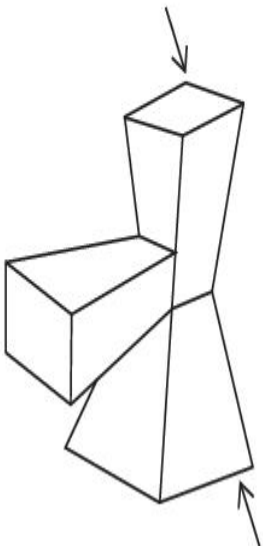
86435174626.

Question Number : 60 Question Id : 86435122503 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

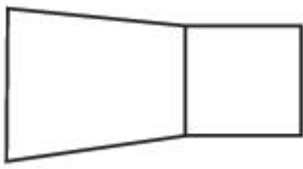
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Find out the odd shape from the answer figures which is not related to 3D figure.

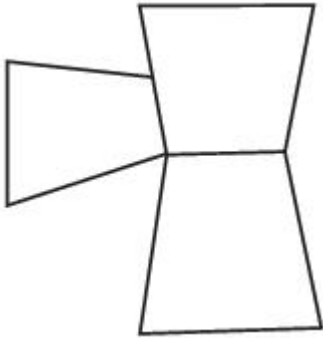


Options :

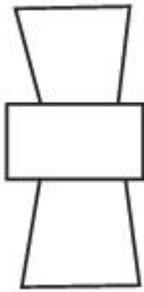
86435174627.



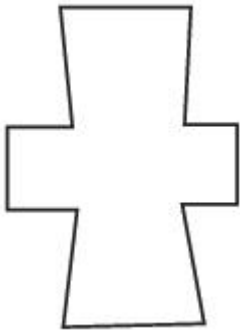
86435174628.



86435174629.



86435174630.

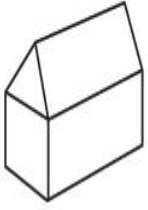


Question Number : 61 Question Id : 86435122504 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

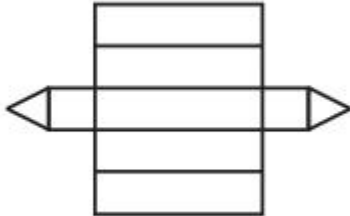
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct view when figure opened up amongst the answer figures.

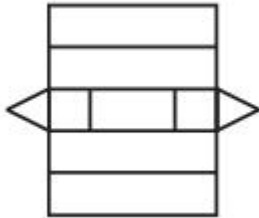


Options :

86435174631.



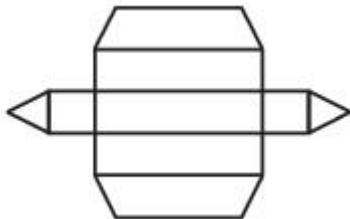
86435174632.



86435174633.



86435174634.



Question Number : 62 Question Id : 86435122505 Question Type : MCQ Option Shuffling : Yes

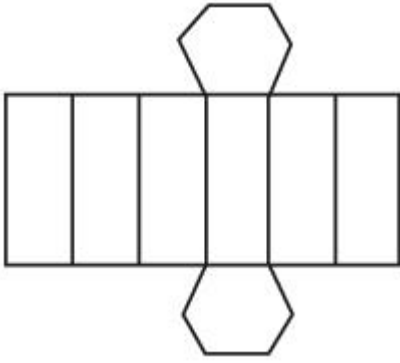
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

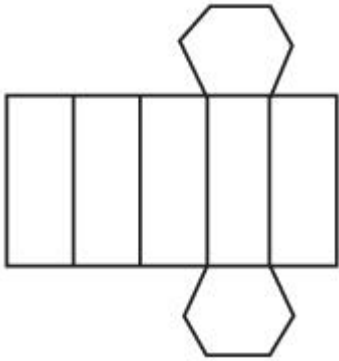
The 3D figure shows the view of an object. Identify the correct view when the figure opened up from amongst the answer figures.



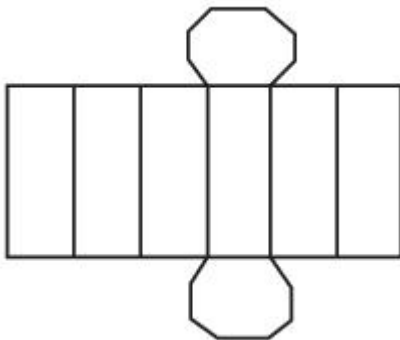
Options :



86435174635.



86435174636.



86435174637.



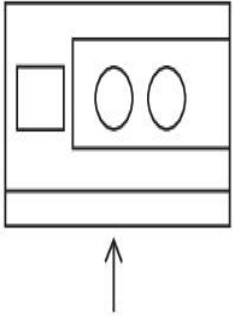
86435174638.

Question Number : 63 Question Id : 86435122506 Question Type : MCQ Option Shuffling : Yes

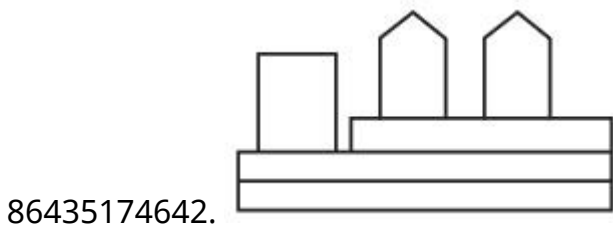
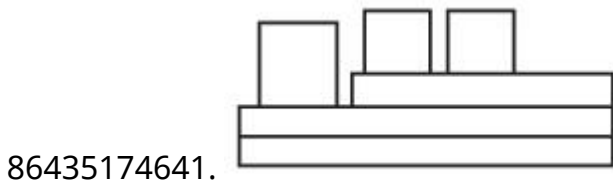
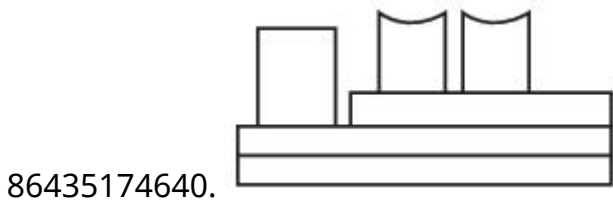
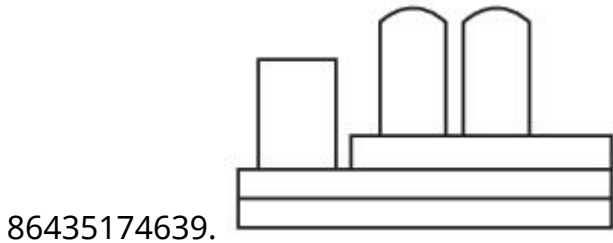
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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



Options :

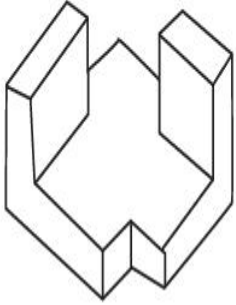


Question Number : 64 Question Id : 86435122507 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

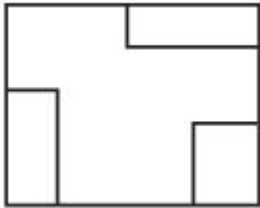
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct top view, from amongst the answer figure.

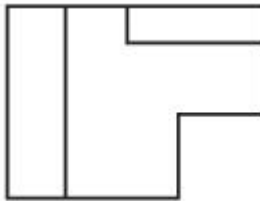


Options :

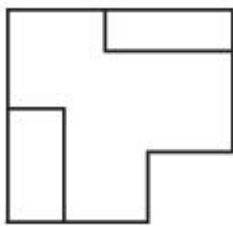
86435174643.



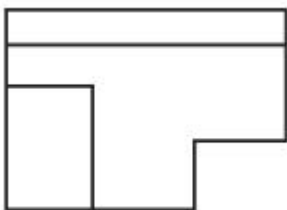
86435174644.



86435174645.



86435174646.

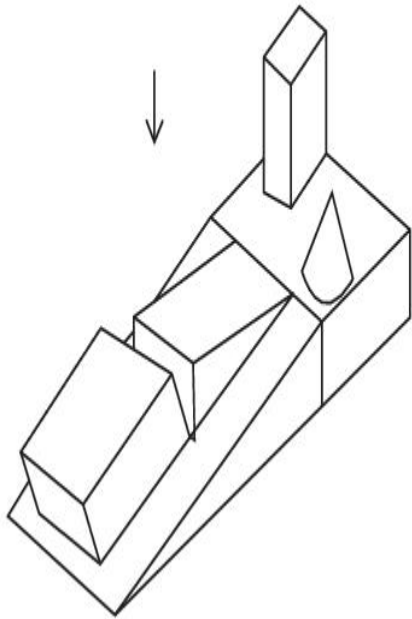


Question Number : 65 Question Id : 86435122508 Question Type : MCQ Option S

Is Question Mandatory : No

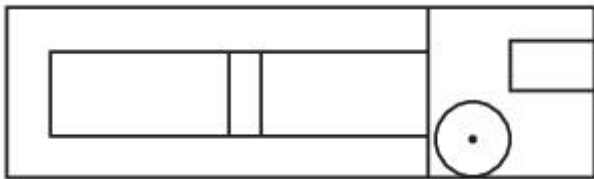
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct view in the direction of the arrow, from the answer figure's.

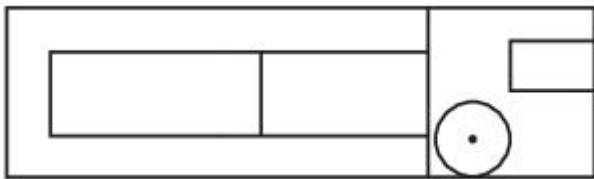


Options :

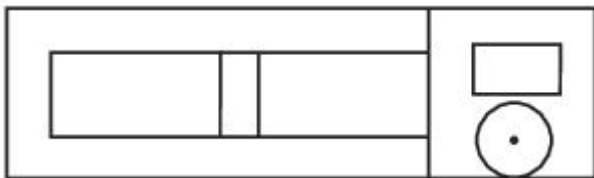
86435174647.



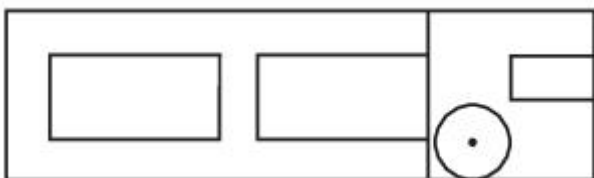
86435174648.



86435174649.



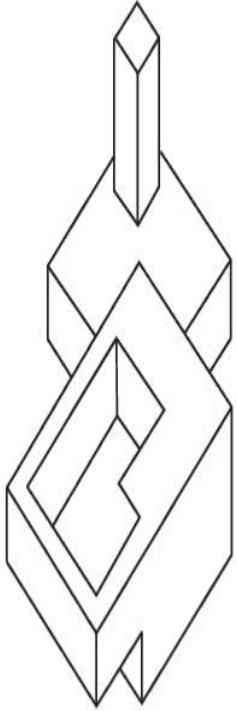
86435174650.



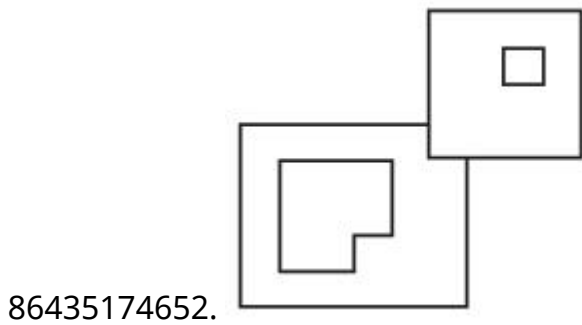
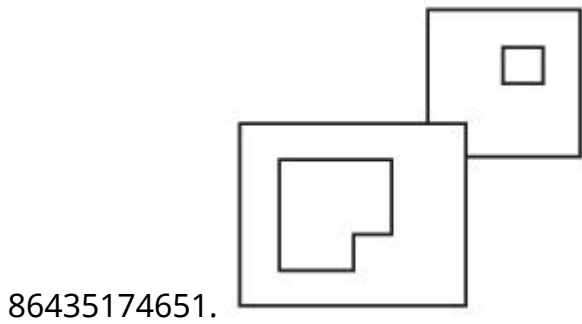
Question Number : 66 Question Id : 86435122509 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

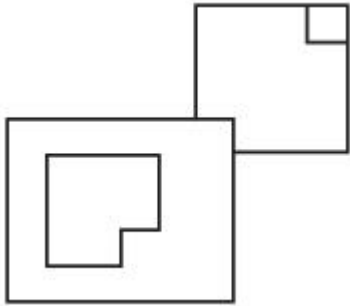
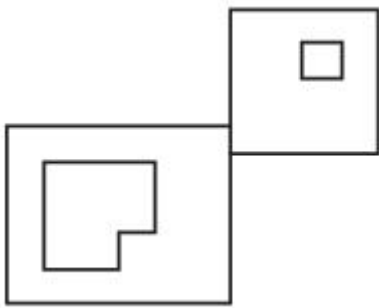
The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figures.



Options :



86435174653.



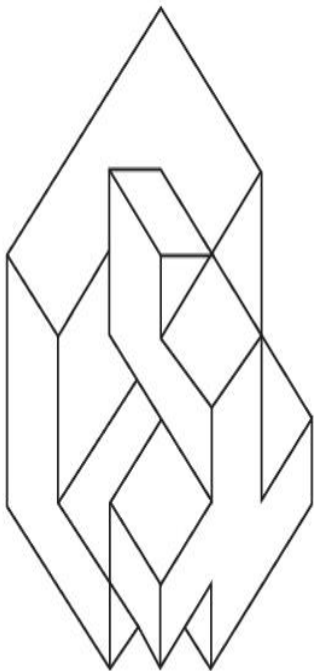
86435174654.

Question Number : 67 Question Id : 86435122510 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

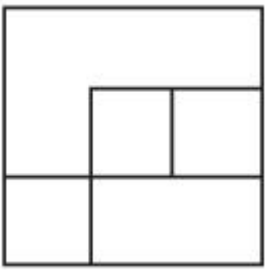
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figure's.

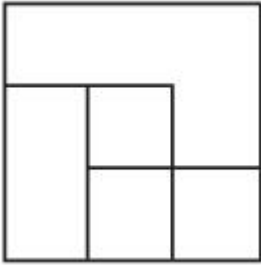


Options :

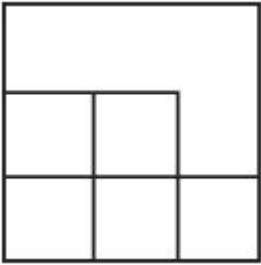
86435174655.



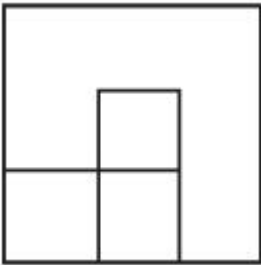
86435174656.



86435174657.



86435174658.

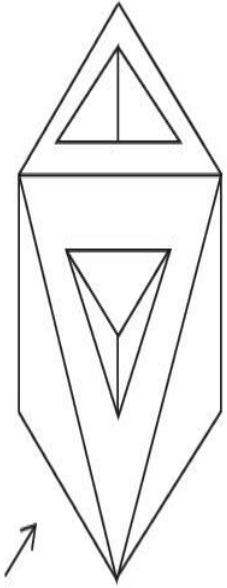


Question Number : 68 Question Id : 86435122511 Question Type : MCQ Option Shuffling : Yes

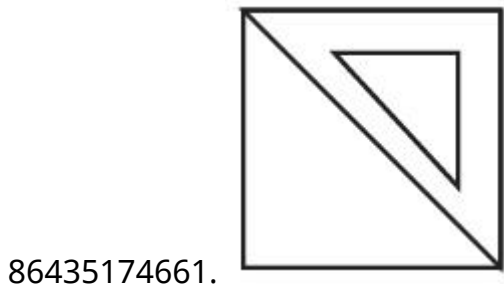
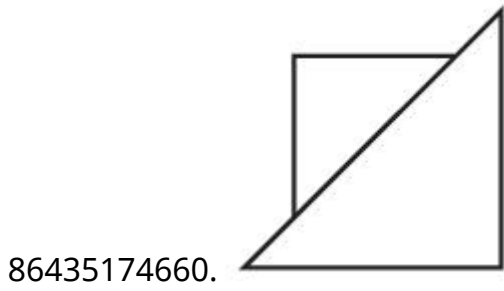
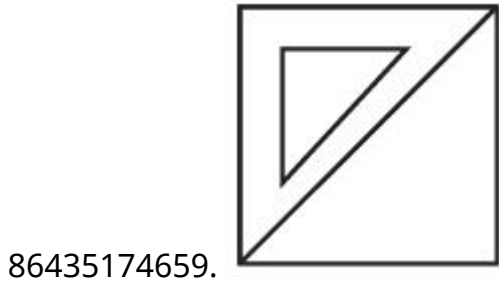
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

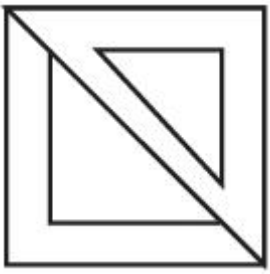
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from answer figure's.



Options :



86435174662.

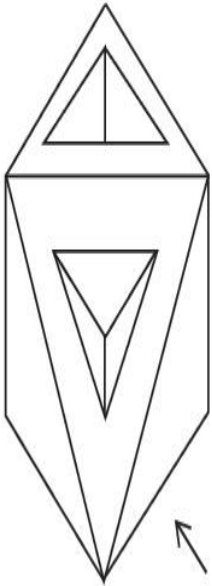


Question Number : 69 Question Id : 86435122512 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

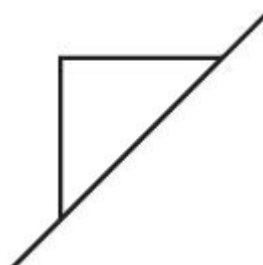
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from given answer figures.



Options :



86435174663.



86435174664.

86435174665.



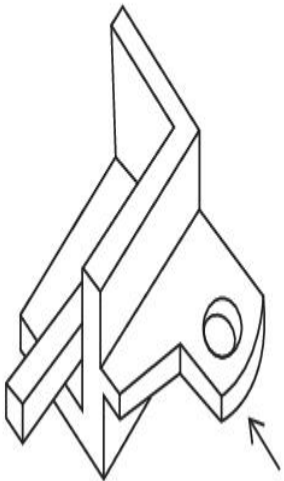
86435174666.



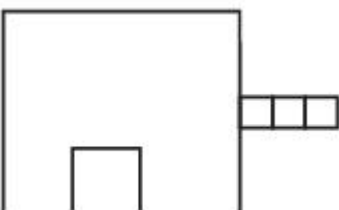
Question Number : 70 Question Id : 86435122513 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow amongst the answer figures.

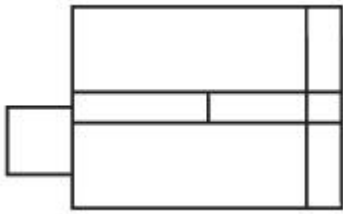


Options :

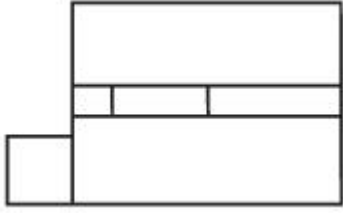


86435174667.

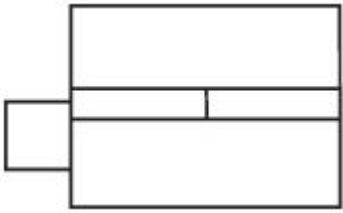
86435174668.



86435174669.



86435174670.

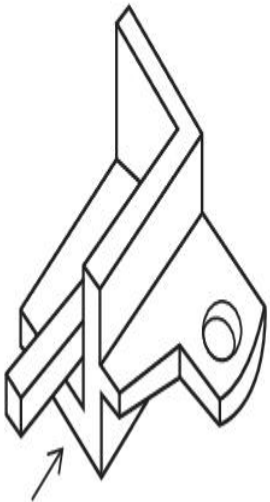


Question Number : 71 Question Id : 86435122514 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

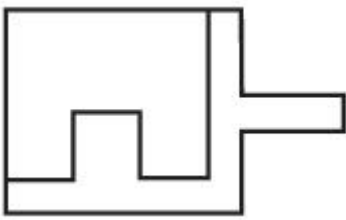
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from answer figure's.

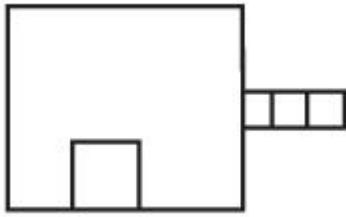


Options :

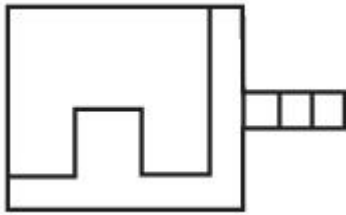
86435174671.



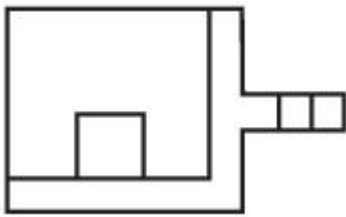
86435174672.



86435174673.



86435174674.

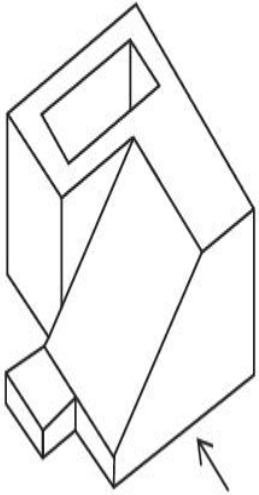


Question Number : 72 Question Id : 86435122515 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

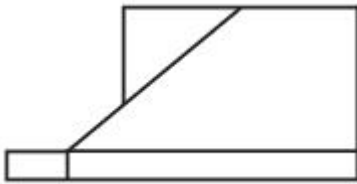
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows view of an object. Identify the correct view looking in the direction of arrow, from the answer figure's.

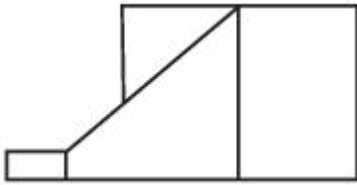


Options :

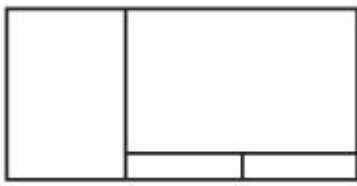
86435174675.



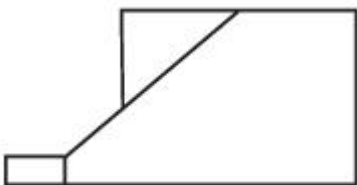
86435174676.



86435174677.



86435174678.

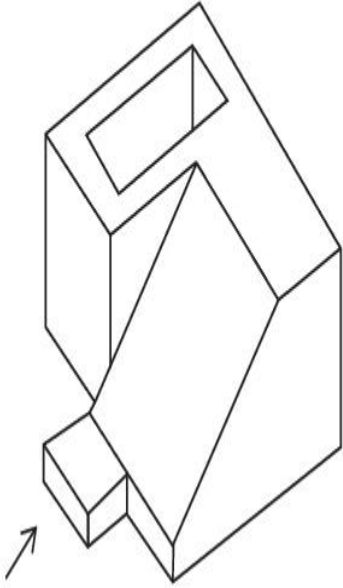


Question Number : 73 Question Id : 86435122516 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

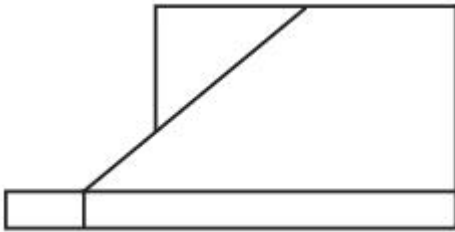
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows view of an object, looking in the direction of arrow, identify the correct elevation from the answer figures.

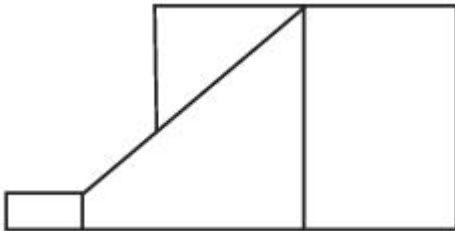


Options :

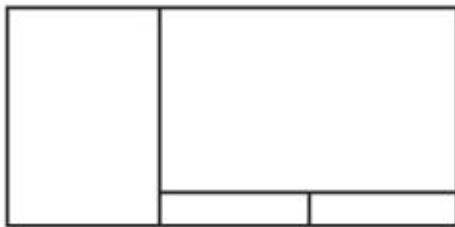
86435174679.



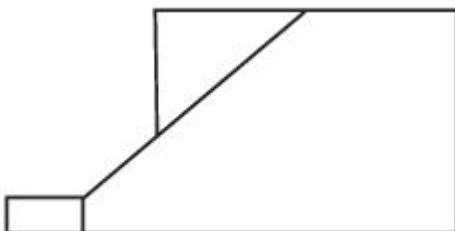
86435174680.



86435174681.



86435174682.

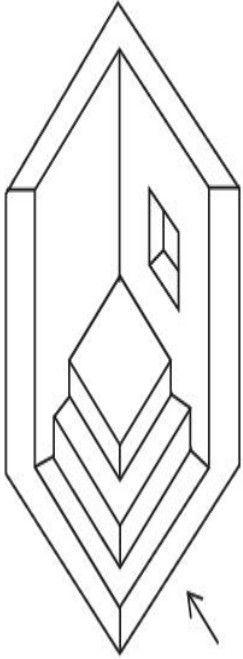


Question Number : 74 Question Id : 86435122517 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

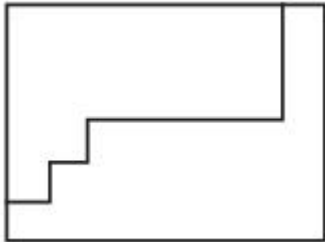
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from the answer figure's.

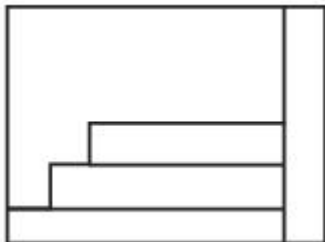


Options :

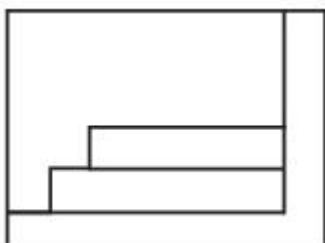
86435174683.



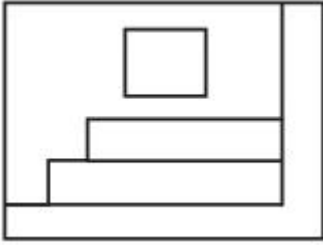
86435174684.



86435174685.



86435174686.

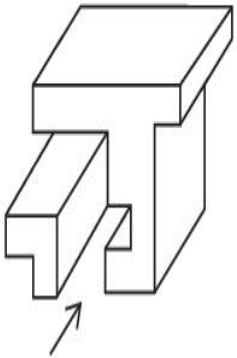


Question Number : 75 Question Id : 86435122518 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

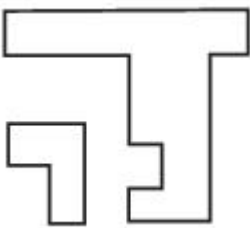
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from the given answer figures.

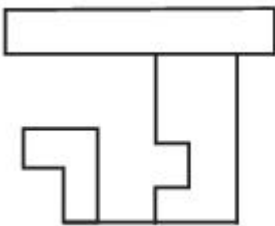


Options :

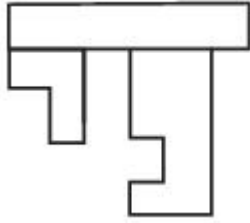
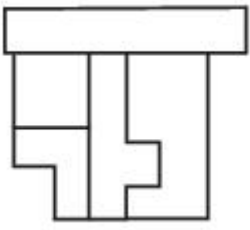
86435174687.



86435174688.



86435174689.



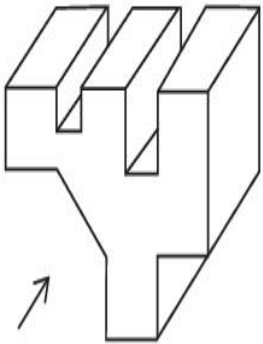
86435174690.

Question Number : 76 Question Id : 86435122519 Question Type : MCQ Option Shuffling : Yes

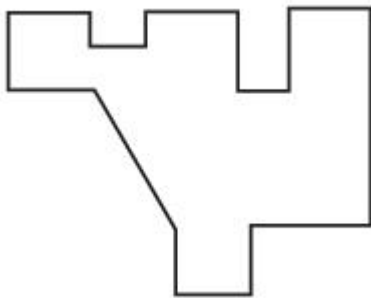
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from the given answer figure's.

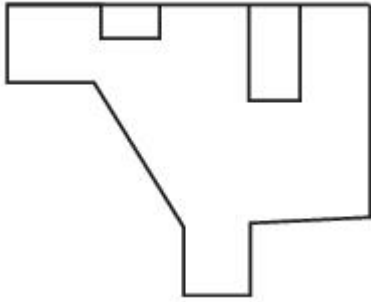
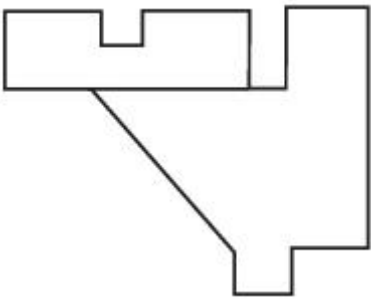


Options :

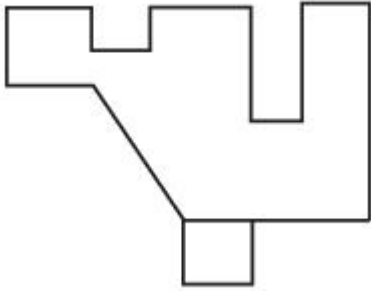


86435174691.

86435174692.



86435174693.

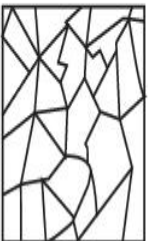


86435174694.

Question Number : 77 Question Id : 86435122520 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1


One of the following answer figure is hidden in the problem figure in same size and direction. Select to correct one.





Options :



86435174695.

86435174696. 

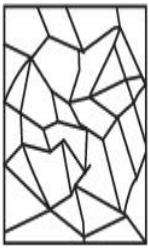
86435174697. 

86435174698. 


**Question Number : 78 Question Id : 86435122521 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No**


Correct Marks : 4 Wrong Marks : 1


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




Options :

86435174699. 

86435174700. 

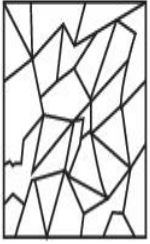
86435174701. 

86435174702. 

**Question Number : 79 Question Id : 86435122522 Question Type : MCQ Option Shuffling : Yes
Is Question Mandatory : No**

Correct Marks : 4 Wrong Marks : 1

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



Options :

86435174703.

86435174704.

86435174705.

86435174706.

Question Number : 80 Question Id : 86435122523 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Monsoon first reach to which state of India ?

Options :

86435174707. Gujarat

86435174708. Maharashtra

86435174709. Kerala

Drawing

Section Id :	8643511051
Section Number :	4
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	2
Number of Questions to be attempted :	2
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	8643511278
Question Shuffling Allowed :	No

Question Number : 81 Question Id : 86435122524 Question Type : SUBJECTIVE

Correct Marks : 50

Draw a proportionate sketch of given reference image with black and white rendering techniques of your choice. Picture should fit in given space for this answer.



OR

Create a wall magic for a metro station using triangles of any size and overall panel size of your choice. The theme of magic is 'Environment' use colours to make the mozaic attractive and meaningful.

Question Number : 82 Question Id : 86435122525 Question Type : SUBJECTIVE

Correct Marks : 50

Consider yourself a fish in the aquarium that is in a room and a girl is standing near the aquarium and playing with the fish. Create the view of the room according the eye of fish.

OR

Create picture with fish/fishes, a girl, boat, farmers, tractor, trees and plants.