JEE 1st Sep 2020 S2

Application No.	
Candidate Name	
Roll No.	
Test Date	
Test Time	
Subject	

Section : **Mathematics**

Q.1

Let f be a differentiable function satisfying $f(x+y) = f(x) + f(y) - xy$ for all $x, y \in \mathbf{R}$. If $\lim\limits_{h \to 0} \dfrac{f(h)}{h} = 3$, then $\sum\limits_{n=1}^{10} f(n)$ is equal to :

Options

1. $\dfrac{225}{4}$

2. $\dfrac{275}{2}$

3. $-\dfrac{55}{4}$

4. $-\dfrac{55}{2}$

Question Type : **MCQ**
Question ID : **4050369312**
Option 1 ID : **40503633837**
Option 2 ID : **40503633835**
Option 3 ID : **40503633836**
Option 4 ID : **40503633834**
Status : **Not Answered**
Chosen Option : --

Q.2 For non-zero real numbers a, b, if

$$y(x) = \dfrac{a + b\,x^{3/2}}{x^{5/4}},\ x > 0 \text{ and } y''(5) = 0, \text{ then}$$

the ratio a : b is :

Options

1. $3 : 1$

2. $\sqrt{5} : \sqrt{3}$

3. $\sqrt{5} : 3$

4. $3 : \sqrt{5}$

Question Type : **MCQ**
Question ID : **4050369313**
Option 1 ID : **40503633841**
Option 2 ID : **40503633840**
Option 3 ID : **40503633838**
Option 4 ID : **40503633839**
Status : **Marked For Review**
Chosen Option : **3**

Q.3 Let A, B and C be three events such that the probability of occurrence of exactly one of A and B is $\frac{1}{2}$, the probability of occurrence of exactly one of B and C is $\frac{3}{4}$ and the probability of occurrence of exactly one of C and A is $\frac{1}{4}$. If the probability of occurrence of all the three events simultaneously is $\frac{1}{16}$, then the probability that at least one of the three events will occur is :

Options

1. $\frac{13}{16}$

2. $\frac{7}{16}$

3. $\frac{7}{8}$

4. $\frac{15}{16}$

Question Type : **MCQ**
Question ID : **4050369323**
Option 1 ID : **40503633879**
Option 2 ID : **40503633878**
Option 3 ID : **40503633880**
Option 4 ID : **40503633881**
Status : **Answered**
Chosen Option : **2**

Q.4 All the words (with or without meaning) formed using all the five letters of the word GOING are arranged as in dictionary. Then the word OGGIN occurs at the place which is :

Options

1. $(51)^{th}$

2. $(48)^{th}$

3. $(50)^{th}$

4. $(49)^{th}$

Question Type : **MCQ**
Question ID : **4050369309**
Option 1 ID : **40503633825**
Option 2 ID : **40503633822**
Option 3 ID : **40503633824**
Option 4 ID : **40503633823**
Status : **Answered**
Chosen Option : **2**

Q.5 If both the roots of the equation, $x^2 - 2ax + a^2 - 1 = 0$ $(a \in \mathbf{R})$ lie in the interval $(-2, 2)$, then the equation, $x^2 - (a^2 + 1)x - (a^2 + 2) = 0$ has

Options

1. one root in $(-3, -2)$ and another root in $(0, 2]$

2. one root in $(0, 2)$ and another root in $(-2, 0)$

3. one root in $[2, 3)$ and another root in $(-2, 0)$

4. both roots in $(-3, 0)$

Question Type : **MCQ**
Question ID : **4050369307**
Option 1 ID : **40503633817**
Option 2 ID : **40503633815**
Option 3 ID : **40503633816**
Option 4 ID : **40503633814**
Status : **Not Attempted and Marked For Review**
Chosen Option : --

Q.6   Let $A = \{1, 2, 3\}$. Define a relation R on A

as :

$aRb \Leftrightarrow |a^2 - b^2| \leq 5$.

Then which of the following is **not** true ?

Options 1. R is reflexive and symmetric.

2. $R^{-1} = R$, where R^{-1} is the inverse
of R.

3. Range of R is A.

4. R is symmetric and transitive.

> Question Type : **MCQ**
> Question ID : **4050369305**
> Option 1 ID : **40503633808**
> Option 2 ID : **40503633806**
> Option 3 ID : **40503633807**
> Option 4 ID : **40503633809**
> Status : **Marked For Review**
> Chosen Option : **4**

Q.7   If the system of equations

$$2x + y + pz = -1$$
$$3x - 2y + z = q$$
$$5x - 8y + 9z = 5$$

has more than one solution, then $q - p$ is

equal to :

Options 1. -4

2. 2

3. 4

4. -2

> Question Type : **MCQ**
> Question ID : **4050369308**
> Option 1 ID : **40503633821**
> Option 2 ID : **40503633818**
> Option 3 ID : **40503633820**
> Option 4 ID : **40503633819**
> Status : **Answered**
> Chosen Option : **2**

Q.8 If (x_i, y_i), $i = 1, 2, 3$ are the vertices of an equilateral triangle such that

$(x_1 + 3)^2 + (y_1 - 4)^2 = (x_2 + 3)^2 + (y_2 - 4)^2 = (x_3 + 3)^2 + (y_3 - 4)^2$, then the value of

$\dfrac{y_1 + y_2 + y_3}{x_1 + x_2 + x_3}$ is :

Options

1. $\dfrac{4}{3}$

2. $-\dfrac{4}{3}$

3. $\dfrac{3}{4}$

4. $-\dfrac{3}{4}$

Question Type : **MCQ**

Question ID : **4050369318**

Option 1 ID : **40503633858**

Option 2 ID : **40503633859**

Option 3 ID : **40503633860**

Option 4 ID : **40503633861**

Status : **Answered**

Chosen Option : **3**

Q.9 Let $y = y(x)$ be the solution of the differential

equation $x \log_e x \dfrac{dy}{dx} + 2y = 2x$ $(x > 1)$. If

$\lim\limits_{x \to 1+} y(x) = 1$, then $y(e^2)$ is equal to :

Options

1. $\dfrac{e^2 + 1}{2}$

2. $e^2 - 1$

3. $\dfrac{e^2 - 1}{2}$

4. $e^2 + 1$

Question Type : **MCQ**

Question ID : **4050369317**

Option 1 ID : **40503633855**

Option 2 ID : **40503633856**

Option 3 ID : **40503633854**

Option 4 ID : **40503633857**

Status : **Answered**

Chosen Option : **1**

Q.10

The integral $\int \dfrac{\cos^5\theta}{\sin\theta(4 - 3\sin^2 2\theta)}\,d\theta$ is

equal to :

(where C is a constant of integration)

Options

1. $\dfrac{1}{24} \log_e \left(\dfrac{\sin^6\theta}{\sin^6\theta + \cos^6\theta} \right) + C$

2. $\dfrac{1}{5} \log_e \left| \dfrac{\cos^5\theta}{\sin^5\theta + \cos^5\theta} \right| + C$

3. $\dfrac{1}{20} \log_e \left| \dfrac{\sin^5\theta}{\sin^5\theta + \cos^5\theta} \right| + C$

4. $\dfrac{1}{6} \log_e \left(\dfrac{\cos^6\theta}{\sin^6\theta + \cos^6\theta} \right) + C$

Question Type : **MCQ**
Question ID : **4050369315**
Option 1 ID : **40503633847**
Option 2 ID : **40503633846**
Option 3 ID : **40503633848**
Option 4 ID : **40503633849**
Status : **Answered**
Chosen Option : **1**

Q.11

The area (in sq. units) of the region bounded by the parabola $x = 2y^2$ and the line $x + y = 1$ is :

Options

1. $\dfrac{9}{8}$

2. $\dfrac{11}{12}$

3. $\dfrac{13}{24}$

4. $\dfrac{5}{4}$

Question Type : **MCQ**
Question ID : **4050369316**
Option 1 ID : **40503633852**
Option 2 ID : **40503633850**
Option 3 ID : **40503633851**
Option 4 ID : **40503633853**
Status : **Marked For Review**
Chosen Option : **1**

Q.12

Let

p : I have passed JEE (Main),

q : My JEE (Main) rank is 100, and

r : I will appear in JEE (Advanced)

be three statements with truth values T, F and T respectively. Then which one of the following has the truth value, F ?

Options

1. $(\sim p \wedge q) \vee r$

2. $(p \wedge \sim q) \vee (\sim r)$

3. $(\sim p \vee \sim q) \wedge r$

4. $(\sim p \vee q) \wedge (\sim r)$

Question Type : **MCQ**
Question ID : **4050369324**
Option 1 ID : **40503633885**
Option 2 ID : **40503633883**
Option 3 ID : **40503633882**
Option 4 ID : **40503633884**
Status : **Answered**
Chosen Option : **3**

Q.13

The locus of the point

$z = x + iy \ (x, y \in \mathbf{R}, i = \sqrt{-1})$ satisfying

$\arg\left(\dfrac{z-3}{z+3}\right) = \dfrac{\pi}{3}$, is :

Options

1. an ellipse with length of its minor axis $= 3$

2. a circle with radius $= 2\sqrt{3}$

3. a circle with centre at $\left(\sqrt{3}, 0\right)$

4. a circle with centre at $\left(0, 2\sqrt{3}\right)$ and radius 3

Question Type : **MCQ**
Question ID : **4050369306**
Option 1 ID : **40503633813**
Option 2 ID : **40503633810**
Option 3 ID : **40503633811**
Option 4 ID : **40503633812**
Status : **Not Answered**
Chosen Option : **--**

Q.14 If the plane P : $2x - y + 3z + 5 = 0$ is rotated through $90°$ about its line of intersection with the plane $5x - 4y - 2z + 1 = 0$, then the equation of the plane P in the new position is :

Options

1. $27x - 24y - 26z + 13 = 0$

2. $31x - 25y + 29z + 13 = 0$

3. $27x - 24y - 26z - 13 = 0$

4. $31x + 2y - 20z - 13 = 0$

Question Type : **MCQ**

Question ID : **4050369321**

Option 1 ID : **40503633870**

Option 2 ID : **40503633873**

Option 3 ID : **40503633871**

Option 4 ID : **40503633872**

Status : **Not Answered**

Chosen Option : --

Q.15 If tangent at $\left(\dfrac{1}{\sqrt{2}}, \dfrac{1}{\sqrt{2}} \right)$ to the circle $x^2 + y^2 = 1$ is also a tangent to the circle $(x - a)^2 + (y - b)^2 = 1$, then the ordered pair (a, b) can be :

Options

1. $\left(-\sqrt{2}, \sqrt{2} \right)$

2. $\left(2, -2\sqrt{2} \right)$

3. $\left(-\sqrt{2}, 2\sqrt{2} \right)$

4. $\left(-2, \sqrt{2} \right)$

Question Type : **MCQ**

Question ID : **4050369319**

Option 1 ID : **40503633865**

Option 2 ID : **40503633864**

Option 3 ID : **40503633863**

Option 4 ID : **40503633862**

Status : **Answered**

Chosen Option : **2**

Q.16 The sum

$$-\frac{2}{3} + \frac{2}{9^2} + \frac{10}{9^3} + \frac{18}{9^4} + \frac{26}{9^5} + \ldots\ldots \text{upto}$$

infinity, is equal to :

Options

1. $\dfrac{17}{24}$

2. $\dfrac{5}{8}$

3. $-\dfrac{5}{8}$

4. $-\dfrac{11}{24}$

Question Type : **MCQ**
Question ID : **4050369310**
Option 1 ID : **40503633827**
Option 2 ID : **40503633829**
Option 3 ID : **40503633826**
Option 4 ID : **40503633828**
Status : **Answered**
Chosen Option : **2**

Q.17 The foci of a hyperbola coincide with the foci of the ellipse, $\dfrac{x^2}{16} + \dfrac{y^2}{9} = 1$. If the eccentricity of the hyperbola is 4, then its equation is :

Options

1. $\dfrac{x^2}{7} - \dfrac{y^2}{105} = \dfrac{1}{16}$

2. $\dfrac{x^2}{20} - \dfrac{y^2}{75} = \dfrac{1}{16}$

3. $\dfrac{x^2}{7} - \dfrac{4y^2}{105} = \dfrac{1}{4}$

4. $\dfrac{x^2}{5} - \dfrac{y^2}{75} = \dfrac{1}{16}$

Question Type : **MCQ**
Question ID : **4050369320**
Option 1 ID : **40503633867**
Option 2 ID : **40503633868**
Option 3 ID : **40503633866**
Option 4 ID : **40503633869**
Status : **Not Attempted and Marked For Review**
Chosen Option : --

Q.18 The function $f(x) = \sin 2x + 2\cos x,$ $x \in \left(-\dfrac{3\pi}{4}, \dfrac{3\pi}{4}\right)$ has :

Options

1. a point of local maxima and a point of inflection.

2. a point of local minima and a point of inflection.

3. no critical point.

4. a point of local maxima and a point of local minima.

Question Type : **MCQ**
Question ID : **4050369314**
Option 1 ID : **40503633844**
Option 2 ID : **40503633845**
Option 3 ID : **40503633842**
Option 4 ID : **40503633843**
Status : **Answered**
Chosen Option : **2**

Q.19 Let r and s be respectively the remainders when $(12)^{23}$ and $(23)^{12}$ are divided by 5, then $r + s$ is equal to :

Options 1. 3

2. 2

3. 4

4. 5

Question Type : **MCQ**
Question ID : **4050369311**
Option 1 ID : **40503633832**
Option 2 ID : **40503633833**
Option 3 ID : **40503633831**
Option 4 ID : **40503633830**
Status : **Not Attempted and Marked For Review**
Chosen Option : --

Q.20 The top of two poles, standing 4 m apart on a horizontal plane, are connected by a cable. If the angles of depression from the top of one pole to the bottom of another pole are 30° and 45°, then the minimum length (in m) of the cable is :

Options

1. $\sqrt{\dfrac{32\sqrt{3} - 16}{3}}$

2. $\sqrt{\dfrac{112 - 32\sqrt{3}}{3}}$

3. $\sqrt{\dfrac{122 - 32\sqrt{3}}{3}}$

4. $\sqrt{\dfrac{128 - 32\sqrt{3}}{3}}$

Question Type : **MCQ**
Question ID : **4050369322**
Option 1 ID : **40503633874**
Option 2 ID : **40503633877**
Option 3 ID : **40503633876**
Option 4 ID : **40503633875**
Status : **Not Answered**
Chosen Option : --

Q.21 If $S = \{x \in [0, 4\pi]: \sin 2x - \cos x = 0\}$ and the sum of the elements of S is $k\pi$, then k is equal to _____.

Given --
Answer :

Question Type : **SA**
Question ID : **4050369327**
Status : **Not Answered**

Q.22 If the mean of the numbers
$-7, -5, -2, x, 5$ is -1, then the variance of the numbers $x - 3, 4x, x + 3$ is _____.

Given **14**
Answer :

Question Type : **SA**
Question ID : **4050369328**
Status : **Answered**

Q.23 If the equation of a plane P passing through the point $\hat{i} + \hat{j} + \hat{k}$ is

$\vec{r} \cdot \left(2\hat{i} - \hat{j} + a\hat{k} \right) = 3$, then the length of

the perpendicular from the point

$4\hat{i} - \hat{j} + 3\hat{k}$ on the plane P is _____.

Given --
Answer :

Question Type : **SA**
Question ID : **4050369329**
Status : **Not Answered**

Q.24 For $b \in \mathbf{N}$, if the limit of the function

$$f(x) = \begin{cases} [5x - 4], & x < 4 \\ \dfrac{[x + b]}{2}, & x > 4 \end{cases}$$

when $x \to 4$, exists and $[t]$ denotes the greatest integer $\leq t$, then b is equal to _____.

Given --
Answer :

> Question Type : **SA**
> Question ID : **4050369326**
> Status : **Not Answered**

Q.25 Let $B = \begin{bmatrix} 22 & -26 \\ -6 & 10 \end{bmatrix}$ be the matrix obtained

by applying the elementary row operations $R_2 \to R_2 - R_1$, $\quad R_1 \to 2R_1 \quad$ and $R_1 \to R_1 - 2R_2$ (in this order only) on a matrix A. Then the sum of all entries of A is _____.

Given --
Answer :

> Question Type : **SA**
> Question ID : **4050369325**
> Status : **Not Answered**

Section : **Aptitude Test**

Q.1 Which one of the following color suggests love and romance ?

Options 1. Pink

2. Blue

3. Green

4. Brown

> Question Type : **MCQ**
> Question ID : **4050369374**
> Option 1 ID : **40503634069**
> Option 2 ID : **40503634067**
> Option 3 ID : **40503634068**
> Option 4 ID : **40503634070**
> Status : **Answered**
> Chosen Option : **1**

Q.2 The 3 - D figure shows the view of an object. Identify the correct top view from amongst the answer figures.

Options

1.

2.

3.

4.
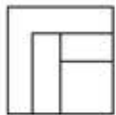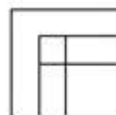
Question Type : **MCQ**
Question ID : **4050369332**
Option 1 ID : **40503633900**
Option 2 ID : **40503633899**
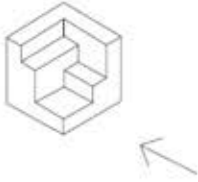Option 3 ID : **40503633901**
Option 4 ID : **40503633902**
Status : **Answered**
Chosen Option : **1**

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

Options

1.

2.

3.

4.
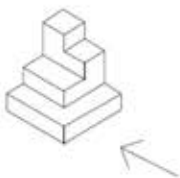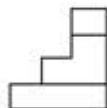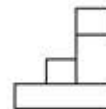
Question Type : **MCQ**
Question ID : **4050369359**
Option 1 ID : **40503634010**
Option 2 ID : **40503634009**
Option 3 ID : **40503634007**
Option 4 ID : **40503634008**
Status : **Answered**
Chosen Option : **1**

Q.4 Which one of the answer figures is the correct mirror image of the problem figure with respect to X – X ?

Options

1.

2.

3.

4.

Question Type : **MCQ**

Question ID : **4050369336**

Option 1 ID : **40503633918**

Option 2 ID : **40503633915**

Option 3 ID : **40503633917**

Option 4 ID : **40503633916**

Status : **Answered**

Chosen Option : **2**

Q.5 Find the odd figure out of the problem figures given below.

Options

1.

2.

3.

4.
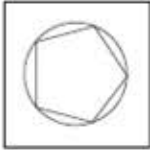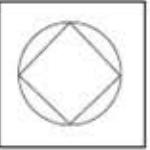
Question Type : **MCQ**

Question ID : **4050369344**

Option 1 ID : **40503633949**

Option 2 ID : **40503633948**
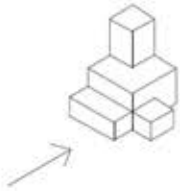
Option 3 ID : **40503633947**

Option 4 ID : **40503633950**

Status : **Answered**

Chosen Option : **3**

Q.6 Which one of the following is fixed to drain water from a sloping roof ?

Options 1. Ridge

2. Eave

3. Gutter

4. J. Bolt

Question Type : **MCQ**

Question ID : **4050369376**

Option 1 ID : **40503634075**

Option 2 ID : **40503634076**

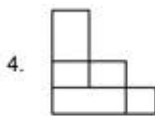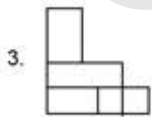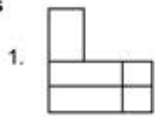Option 3 ID : **40503634078**

Option 4 ID : **40503634077**

Status : **Answered**

Chosen Option : **3**

Q.7 The 3 – D figure shows the view of an object. Identify the correct view in the direction of the arrow, from amongst the answer figures.

Options

1.

2.

3.

4.
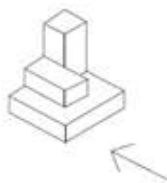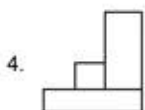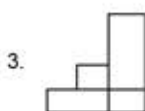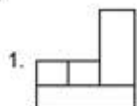
Question Type :	**MCQ**
Question ID :	**4050369356**
Option 1 ID :	**40503633995**
Option 2 ID :	**40503633996**
Option 3 ID :	**40503633998**
Option 4 ID :	**40503633997**
Status :	**Answered**
Chosen Option :	**4**

Q.8 The problem figure shows the top view of objects. Looking in the direction of the arrow, identify the correct elevation, from amongst the answer figures.

Options

1.

2.

3.

4.
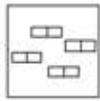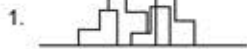
Question Type :	**MCQ**
Question ID :	**4050369364**
Option 1 ID :	**40503634030**
Option 2 ID :	**40503634029**
Option 3 ID :	**40503634027**
Option 4 ID :	**40503634028**
Status :	**Answered**
Chosen Option :	**3**

Q.9 The 3 – D figure shows the view of an object. Identify the correct view in the direction of the arrow, from amongst the answer figures.

Options

1.

2.

3.

4.

Question Type : **MCQ**
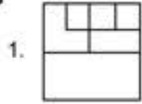Question ID : **4050369357**
Option 1 ID : **40503634002**
Option 2 ID : **40503634001**
Option 3 ID : **40503634000**
Option 4 ID : **40503633999**
Status : **Answered**
Chosen Option : **4**

Q.10 Which one of the following suggests the texture of the skin of the elderly persons ?

Options
1. Smooth

2. Glossy

3. Wrinkled

4. Soft

Question Type : **MCQ**
Question ID : **4050369375**
Option 1 ID : **40503634073**
Option 2 ID : **40503634071**
Option 3 ID : **40503634072**
Option 4 ID : **40503634074**
Status : **Answered**
Chosen Option : **3**

Q.11 Which one of the answer figure will complete the sequence of the three problem figures ?

?

Options

1.

2.

3.

4.
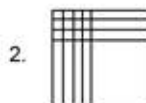
Question Type : **MCQ**
Question ID : **4050369351**
Option 1 ID : **40503633978**
Option 2 ID : **40503633976**
Option 3 ID : **40503633977**
Option 4 ID : **40503633975**
Status : **Answered**
Chosen Option : **3**

Q.12 The 3 – D figure shows the view of an object. Identify the correct front view in the direction of the arrow, from amongst the answer figures.

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369348**
Option 1 ID : **40503633966**
Option 2 ID : **40503633963**
Option 3 ID : **40503633964**
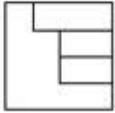Option 4 ID : **40503633965**
Status : **Answered**
Chosen Option : **2**

Q.13 The 3 – D figure shows the view of an object. Identify the correct view in the direction of the arrow, from amongst the answer figures.

Options

1.

2.

3.

4.
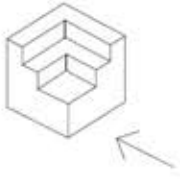
Question Type : **MCQ**
Question ID : **4050369355**
Option 1 ID : **40503633992**
Option 2 ID : **40503633993**
Option 3 ID : **40503633991**
Option 4 ID : **40503633994**
Status : **Answered**
Chosen Option : **4**

Q.14 The 3 - D figure shows the view of an object. Identify the correct top view from amongst the answer figures.

Options

1.

2.

3.

4.
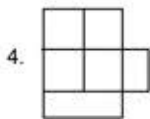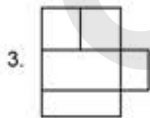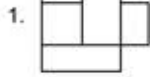
Question Type : **MCQ**
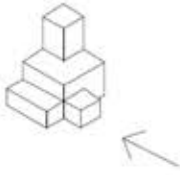Question ID : **4050369333**
Option 1 ID : **40503633903**
Option 2 ID : **40503633904**
Option 3 ID : **40503633905**
Option 4 ID : **40503633906**
Status : **Answered**
Chosen Option : **2**

Q.15 What amongst the following is the name of the famous museum in Hyderabad ?

Options 1. Salarjung

2. Gandhi

3. Nizam

4. Falaknuma

Question Type : **MCQ**
Question ID : **4050369372**
Option 1 ID : **40503634060**
Option 2 ID : **40503634061**
Option 3 ID : **40503634062**
Option 4 ID : **40503634059**
Status : **Marked For Review**
Chosen Option : **1**

Q.16 The 3 – D figure shows the view of an object. Identify the correct front view in the direction of the arrow, from amongst the answer figures.

Options

1.

2.

3.

4.
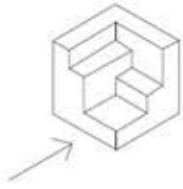
Question Type :	**MCQ**
Question ID :	**4050369347**
Option 1 ID :	**40503633959**
Option 2 ID :	**40503633960**
Option 3 ID :	**40503633962**
Option 4 ID :	**40503633961**
Status :	**Answered**
Chosen Option :	**2**

Q.17 The 3 – D figure shows the view of an object. Identify the correct view in the direction of the arrow, from amongst the answer figures.

Options

1.

2.

3.

4.
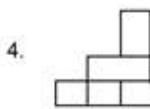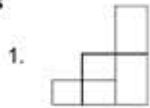
Question Type : **MCQ**
Question ID : **4050369358**
Option 1 ID : **40503634005**
Option 2 ID : **40503634004**
Option 3 ID : **40503634006**
Option 4 ID : **40503634003**
Status : **Answered**
Chosen Option : **2**

Q.18 Which one of the garden of the following is a terraced garden in Srinagar ?

Options 1. Nehru

2. Vrindaban

3. Nishat

4. Buddha

Question Type : **MCQ**
Question ID : **4050369371**
Option 1 ID : **40503634058**
Option 2 ID : **40503634056**
Option 3 ID : **40503634055**
Option 4 ID : **40503634057**
Status : **Marked For Review**
Chosen Option : **3**

Q.19 Which one of the answer figure will complete the sequence of the three problem figures ?
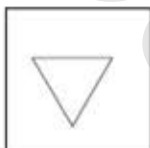

Options

1.

2.

3.

4.
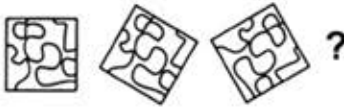
Question Type : **MCQ**
Question ID : **4050369353**
Option 1 ID : **40503633986**
Option 2 ID : **40503633983**
Option 3 ID : **40503633985**
Option 4 ID : **40503633984**
Status : **Answered**
Chosen Option : **3**

Q.20 Who among the following is the architect of the Punjab Haryana High Court Building ?

Options
1. Maxwell Fry

2. Louis Kahn

3. Le Corbusier

4. Geoffrey Bawa

Question Type : **MCQ**
Question ID : **4050369378**
Option 1 ID : **40503634083**
Option 2 ID : **40503634085**
Option 3 ID : **40503634084**
Option 4 ID : **40503634086**
Status : **Marked For Review**
Chosen Option : **3**

Q.21 Find the odd figure out of the problem figures given below.

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369342**
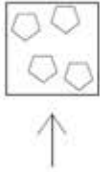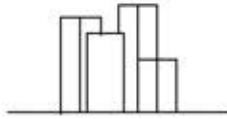Option 1 ID : **40503633940**
Option 2 ID : **40503633941**
Option 3 ID : **40503633942**
Option 4 ID : **40503633939**
Status : **Answered**
Chosen Option : **3**

Q.22 Find the odd figure out of the problem figures given below.

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369340**
Option 1 ID : **40503633932**
Option 2 ID : **40503633931**
Option 3 ID : **40503633934**
Option 4 ID : **40503633933**
Status : **Answered**
Chosen Option : **1**

Q.23 The problem figure shows the top view of objects. Looking in the direction of the arrow, identify the correct elevation, from amongst the answer figures.
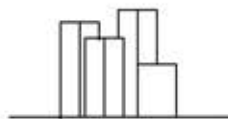
Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369362**
Option 1 ID : **40503634020**
Option 2 ID : **40503634022**
Option 3 ID : **40503634019**
Option 4 ID : **40503634021**
Status : **Answered**
Chosen Option : **3**

Q.24 Which one of the answer figure will complete the sequence of the three problem figures ?

Options

1.

2.

3.

4.
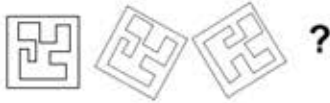
Question Type : **MCQ**

Question ID : **4050369350**

Option 1 ID : **40503633973**

Option 2 ID : **40503633971**

Option 3 ID : **40503633974**

Option 4 ID : **40503633972**

Status : **Answered**

Chosen Option : **2**

Q.25 What is the thickness of a one and a half brick thick wall ?

Options 1. 13.5″

2. 9″

3. 18″

4. 12″

Question Type : **MCQ**

Question ID : **4050369368**

Option 1 ID : **40503634046**

Option 2 ID : **40503634043**

Option 3 ID : **40503634045**

Option 4 ID : **40503634044**

Status : **Answered**

Chosen Option : **2**

Q.26 Which one of the answer figures is the correct mirror image of the problem figure with respect to X – X ?

Options

1.

2.

3.

4.
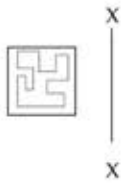
Question Type : **MCQ**
Question ID : **4050369339**
Option 1 ID : **40503633930**
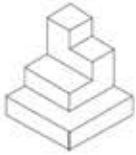Option 2 ID : **40503633929**
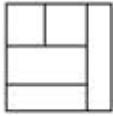Option 3 ID : **40503633928**
Option 4 ID : **40503633927**
Status : **Answered**
Chosen Option : **1**

Q.27 The 3 - D figure shows the view of an object. Identify the correct top view from amongst the answer figures.
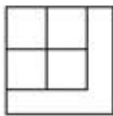

Options

1.

2.

3.

4.

Question Type : **MCQ**

Question ID : **4050369334**

Option 1 ID : **40503633909**

Option 2 ID : **40503633910**

Option 3 ID : **40503633908**

Option 4 ID : **40503633907**

Status : **Answered**

Chosen Option : **3**

Q.28 In the Northern Hemisphere the summer sun rises from which one of the following directions ?

Options 1. North West

2. North East

3. South East

4. South West

Question Type : **MCQ**

Question ID : **4050369366**

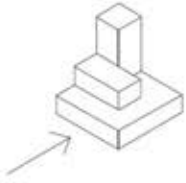Option 1 ID : **40503634036**

Option 2 ID : **40503634035**

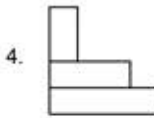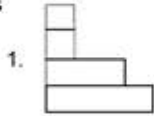Option 3 ID : **40503634037**

Option 4 ID : **40503634038**

Status : **Answered**

Chosen Option : **3**

Q.29 The 3 – D figure shows the view of an object. Identify the correct front view in the direction of the arrow, from amongst the answer figures.

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369346**
Option 1 ID : **40503633958**
Option 2 ID : **40503633955**
Option 3 ID : **40503633957**
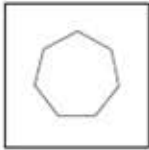Option 4 ID : **40503633956**
Status : **Answered**
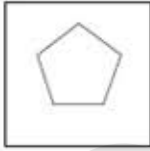Chosen Option : **4**

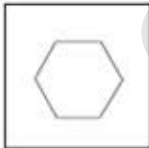**Q.30** Find the odd figure out of the problem figures given below.

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369341**
Option 1 ID : **40503633938**
Option 2 ID : **40503633937**
Option 3 ID : **40503633935**
Option 4 ID : **40503633936**
Status : **Answered**
Chosen Option : **3**

Q.31 Which one among the following is used for water conservation ?

Options
1. Water drainage
2. Water harvesting
3. Water flowing
4. Water evaporation

Question Type : **MCQ**
Question ID : **4050369379**
Option 1 ID : **40503634087**
Option 2 ID : **40503634089**
Option 3 ID : **40503634090**
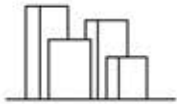Option 4 ID : **40503634088**
Status : **Answered**
Chosen Option : **2**

Q.32 The problem figure shows the top view of objects. Looking in the direction of the arrow, identify the correct elevation, from amongst the answer figures.
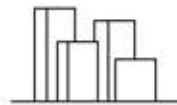

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369360**
Option 1 ID : **40503634014**
Option 2 ID : **40503634012**
Option 3 ID : **40503634013**
Option 4 ID : **40503634011**
Status : **Answered**
Chosen Option : **3**

Q.33 Which one of the answer figures is the correct mirror image of the problem figure with respect to X – X ?

X
—

X

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369335**
Option 1 ID : **40503633913**
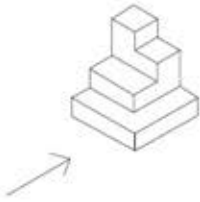Option 2 ID : **40503633914**
Option 3 ID : **40503633911**
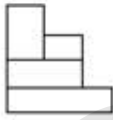Option 4 ID : **40503633912**
Status : **Answered**
Chosen Option : **1**

Q.34 The 3 – D figure shows the view of an object. Identify the correct front view in the direction of the arrow, from amongst the answer figures.
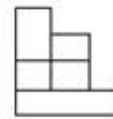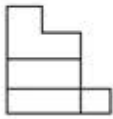
Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369349**
Option 1 ID : **40503633967**
Option 2 ID : **40503633968**
Option 3 ID : **40503633970**
Option 4 ID : **40503633969**
Status : **Answered**
Chosen Option : **2**

Q.35 The White House is which one of the following ?

Options
1. Residence of Prime Minister of Spain

2. Residence of President of USA

3. Residence of Prime Minister of Germany

4. Residence of Prime Minister of France

Question Type : **MCQ**
Question ID : **4050369365**
Option 1 ID : **40503634033**
Option 2 ID : **40503634034**
Option 3 ID : **40503634031**
Option 4 ID : **40503634032**
Status : **Answered**
Chosen Option : **2**

Q.36 The problem figure shows the top view of objects. Looking in the direction of the arrow, identify the correct elevation, from amongst the answer figures.

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369361**
Option 1 ID : **40503634016**
Option 2 ID : **40503634018**
Option 3 ID : **40503634015**
Option 4 ID : **40503634017**
Status : **Answered**
Chosen Option : **1**

Q.37 Which one of the following is ideal flooring for a cinema hall ?

Options
1. Granite
2. Brick
3. Carpet
4. Marble

Question Type : **MCQ**
Question ID : **4050369377**
Option 1 ID : **40503634079**
Option 2 ID : **40503634080**
Option 3 ID : **40503634082**
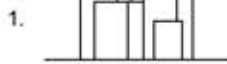Option 4 ID : **40503634081**
Status : **Answered**
Chosen Option : **3**

Q.38 Which one of the answer figures is the correct mirror image of the problem figure with respect to X – X ?

Options

Question Type : **MCQ**
Question ID : **4050369337**
Option 1 ID : **40503633920**
Option 2 ID : **40503633921**
Option 3 ID : **40503633919**
Option 4 ID : **40503633922**
Status : **Answered**
Chosen Option : **4**

Q.39 The 3 - D figure shows the view of an object. Identify the correct top view from amongst the answer figures.
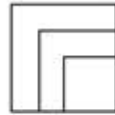

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369330**
Option 1 ID : **40503633892**
Option 2 ID : **40503633893**
Option 3 ID : **40503633891**
Option 4 ID : **40503633894**
Status : **Answered**
Chosen Option : **4**

Q.40 The Leaning Tower in Italy is located in which one of the following cities ?

Options
1. Venice
2. Pisa
3. Florence
4. Rome

Question Type : **MCQ**
Question ID : **4050369370**
Option 1 ID : **40503634052**
Option 2 ID : **40503634053**
Option 3 ID : **40503634051**
Option 4 ID : **40503634054**
Status : **Answered**
Chosen Option : **2**

Q.41 Which one amongst the following supports the masonry above doors and windows ?

Options
1. Lintel

2. Slab

3. Foundation

4. Wooden frame

Question Type : **MCQ**
Question ID : **4050369369**
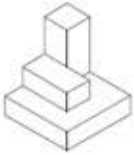Option 1 ID : **40503634048**
Option 2 ID : **40503634049**
Option 3 ID : **40503634047**
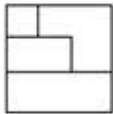Option 4 ID : **40503634050**
Status : **Answered**
Chosen Option : **1**

Q.42 The 3 - D figure shows the view of an object. Identify the correct top view from amongst the answer figures.

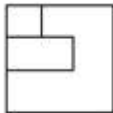Options

1.

2.

3.

4.
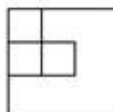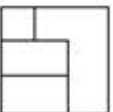
Question Type : **MCQ**
Question ID : **4050369331**
Option 1 ID : **40503633896**
Option 2 ID : **40503633897**
Option 3 ID : **40503633895**
Option 4 ID : **40503633898**
Status : **Answered**
Chosen Option : **2**

Q.43 Find the odd figure out of the problem figures given below.

Options

1.

2.

3.

4.
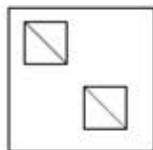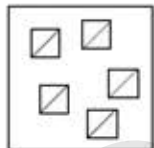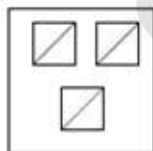
Question Type : **MCQ**
Question ID : **4050369343**
Option 1 ID : **40503633945**
Option 2 ID : **40503633946**
Option 3 ID : **40503633943**
Option 4 ID : **40503633944**
Status : **Answered**
Chosen Option : **1**

Q.44 Which one of the answer figure will complete the sequence of the three problem figures ?

Options

1.

2.

3.

4.
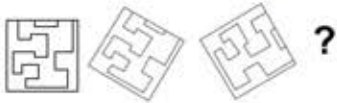
Question Type : **MCQ**
Question ID : **4050369352**
Option 1 ID : **40503633982**
Option 2 ID : **40503633980**
Option 3 ID : **40503633981**
Option 4 ID : **40503633979**
Status : **Answered**
Chosen Option : **3**

Q.45 Which one of the answer figures is the correct mirror image of the problem figure with respect to X – X ?

X

X

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369338**
Option 1 ID : **40503633923**
Option 2 ID : **40503633924**
Option 3 ID : **40503633925**
Option 4 ID : **40503633926**
Status : **Answered**
Chosen Option : **2**

Q.46 In which of the following States is the Golden Temple located ?

Options 1. Nagaland

2. Punjab

3. Haryana

4. Assam

Question Type : **MCQ**
Question ID : **4050369367**
Option 1 ID : **40503634042**
Option 2 ID : **40503634040**
Option 3 ID : **40503634039**
Option 4 ID : **40503634041**
Status : **Answered**
Chosen Option : **2**

Q.47 The problem figure shows the top view of objects. Looking in the direction of the arrow, identify the correct elevation, from amongst the answer figures.

Options

1.

2.

3.

4.
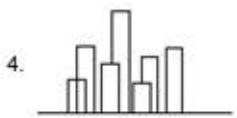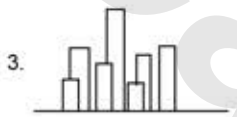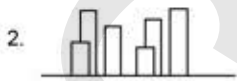
Question Type : **MCQ**
Question ID : **4050369363**
Option 1 ID : **40503634025**
Option 2 ID : **40503634023**
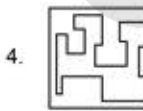Option 3 ID : **40503634024**
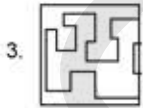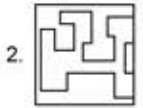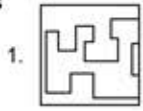Option 4 ID : **40503634026**
Status : **Answered**
Chosen Option : **3**

Q.48   Which one of the answer figure will complete the sequence of the three problem figures ?

Options

1.

2.

3.

4.

Question Type : **MCQ**
Question ID : **4050369354**
Option 1 ID : **40503633989**
Option 2 ID : **40503633987**
Option 3 ID : **40503633988**
Option 4 ID : **40503633990**
Status : **Answered**
Chosen Option : **4**

Q.49 The 3 – D figure shows the view of an object. Identify the correct front view in the direction of the arrow, from amongst the answer figures.

Options

1.

2.

3.

4.
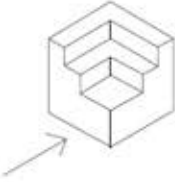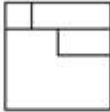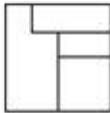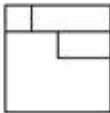
Question Type : **MCQ**
Question ID : **4050369345**
Option 1 ID : **40503633952**
Option 2 ID : **40503633954**
Option 3 ID : **40503633951**
Option 4 ID : **40503633953**
Status : **Answered**
Chosen Option : **2**

Q.50 Which one of the color is made when blue and yellow are mixed ?

Options 1. Green

2. Orange

3. White

4. Violet

Question Type : **MCQ**
Question ID : **4050369373**
Option 1 ID : **40503634065**
Option 2 ID : **40503634064**
Option 3 ID : **40503634066**
Option 4 ID : **40503634063**
Status : **Answered**
Chosen Option : **1**

Section : **Planning**

Q.1 The ratio that shows a relationship between the distance on a map and the actual distance on ground is known as :

Options 1. Key map

2. Isotherm

3. Scale

4. Direction

Question Type : **MCQ**
Question ID : **4050369393**
Option 1 ID : **40503634144**
Option 2 ID : **40503634146**
Option 3 ID : **40503634145**
Option 4 ID : **40503634143**
Status : **Answered**
Chosen Option : **4**

Q.2 The first Sub-urban Railway line in India started its operation in :

Options 1. 1857

2. 1984

3. 1837

4. 1901

Question Type : **MCQ**
Question ID : **4050369389**
Option 1 ID : **40503634127**
Option 2 ID : **40503634128**
Option 3 ID : **40503634130**
Option 4 ID : **40503634129**
Status : **Answered**
Chosen Option : **1**

Q.3 Following table gives the number of families according to family size. What is the average family size ? (Rounded off to one decimal)

S.No.	Family size (persons)	No. of families
1.	3	300
2.	4	200
3.	5	400
4.	6	400

Options
1. 4.7
2. 5.0
3. 4.5
4. 4.9

Question Type : **MCQ**
Question ID : **4050369399**
Option 1 ID : **40503634168**
Option 2 ID : **40503634170**
Option 3 ID : **40503634167**
Option 4 ID : **40503634169**
Status : **Answered**
Chosen Option : **3**

Q.4
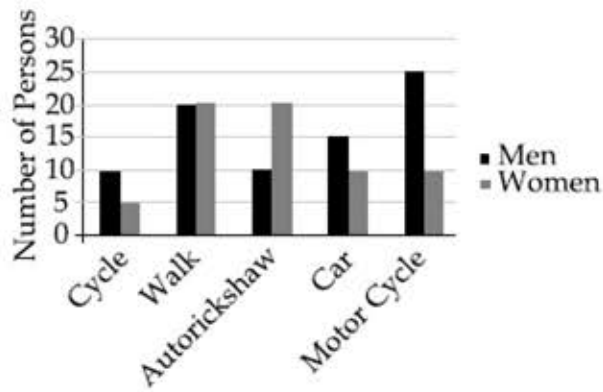
The diagram above shows the number of men and women using different modes of transport to commute to their work place.

Which of these statements is the **correct** answer?

Options

1. The highest share of persons walk to their work place

2. 50% of all those who cycle to their work places are women

3. More women compared to men cycle to their work place

4. More men compared to women use auto-rickshaw for commuting to work place

Question Type : **MCQ**
Question ID : **4050369396**
Option 1 ID : **40503634158**
Option 2 ID : **40503634155**
Option 3 ID : **40503634157**
Option 4 ID : **40503634156**
Status : **Answered**
Chosen Option : **2**

Q.5 Who amongst the following was involved in design of New Delhi ?

Options
1. Le Corbusier
2. Otto Konigsberger
3. Sir Edwin Lutyens
4. Patrick Geddes

Question Type : **MCQ**
Question ID : **4050369383**
Option 1 ID : **40503634104**
Option 2 ID : **40503634105**
Option 3 ID : **40503634103**
Option 4 ID : **40503634106**
Status : **Marked For Review**
Chosen Option : **4**

Q.6 Read the given passage and answer the question.

The United Nations (UN) has warned that the global consumption of natural resources could triple to 140 billion tons a year by 2050 unless consumer nations take drastic steps. The UN environment panel called on governments to 'decouple' economic growth from the rapid rate of natural resource consumption. It said the world is already running out of some essential materials including oil, copper and gold, which in turn, will need rising volumes of fuel and water. Decoupling involves transition to a low-carbon, resource efficient green economy that stimulates growth in a way to keep humanity's footprint within planetary.

Identify the **correct** statement :

Options
1. The UN has asked governments to reduce their economic growth

2. Green economy refers to an economy that produces at lower carbon footprint and is resource efficient

3. 140 billion tons of natural resources will be consumed till the end of 2050

4. Green economy refers to an economy that is based on forest resources

Question Type : **MCQ**
Question ID : **4050369401**
Option 1 ID : **40503634178**
Option 2 ID : **40503634177**
Option 3 ID : **40503634175**
Option 4 ID : **40503634176**
Status : **Not Attempted and Marked For Review**
Chosen Option : --

Q.7 One site is divided into 10×10 units as shown in the figure. It has following classification of land area.

(A)   Waste land

(B)   Forest land

(C)   Agriculture land

(D)   Unused land
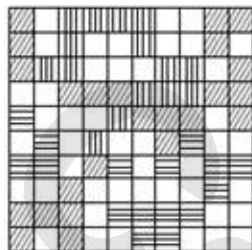
Which of the following classification has the highest amount of land ?

Options 1. Forest land

     2. Agriculture land

     3. Unused land

     4. Waste land

Question Type : **MCQ**
Question ID : **4050369397**
Option 1 ID : **40503634160**
Option 2 ID : **40503634161**
Option 3 ID : **40503634162**
Option 4 ID : **40503634159**
Status : **Answered**
Chosen Option : **3**

Q.8   **Statement :** The citizens of Narbhada city are facing water shortage.

Given are the two courses of action available to the Municipal corporation.

(I)   The Municipal Corporation of Narbhada should immediately take action to prevent all water leakages and theft.

(II)   The Municipal Corporation of Narbhada should cut the water supply to its residents by half.

Which of the following options is most appropriate ?

Options 1. both (I) and (II)

2. only (I)

3. neither (I) nor (II)

4. only (II)

Question Type : **MCQ**
Question ID : **4050369402**
Option 1 ID : **40503634181**
Option 2 ID : **40503634179**
Option 3 ID : **40503634182**
Option 4 ID : **40503634180**
Status : **Answered**
Chosen Option : **2**

Q.9   The largest source of water pollution in India is due to :

Options 1. Agricultural Run-off

2. Large Scale Industries

3. Small Scale Industries

4. Untreated Sewage

Question Type : **MCQ**
Question ID : **4050369391**
Option 1 ID : **40503634136**
Option 2 ID : **40503634138**
Option 3 ID : **40503634135**
Option 4 ID : **40503634137**
Status : **Answered**
Chosen Option : **2**

Q.10 Which of the following does **not** involve community participation ?

Options 1. Demarcation of dense forests

2. Joint Forest Management

3. Urban Basic Services for the poor

4. Beej Bachao Andolan

Question Type : **MCQ**
Question ID : **4050369385**
Option 1 ID : **40503634111**
Option 2 ID : **40503634113**
Option 3 ID : **40503634112**
Option 4 ID : **40503634114**
Status : **Answered**
Chosen Option : **1**

Q.11 Read the given passage and answer the question.

The United Nations (UN) has warned that the global consumption of natural resources could triple to 140 billion tons a year by 2050 unless consumer nations take drastic steps. The UN environment panel called on governments to 'decouple' economic growth from the rapid rate of natural resource consumption. It said the world is already running out of some essential materials including oil, copper and gold, which in turn, will need rising volumes of fuel and water. Decoupling involves transition to a low-carbon, resource efficient green economy that stimulates growth in a way to keep humanity's footprint within planetary.

The term 'decoupling' here would entail :

Options 1. Talk less and work more

2. Promoting growth that stresses on reducing the rate of consumption of natural resources

3. Birth control measures to reduce resource consumption

4. Production of cheap materials

Question Type : **MCQ**
Question ID : **4050369400**
Option 1 ID : **40503634173**
Option 2 ID : **40503634174**
Option 3 ID : **40503634171**
Option 4 ID : **40503634172**
Status : **Answered**
Chosen Option : **2**

Q.12

Select the indicative graph that best fits the
Statement : "Car prices rose steadily,
dropped a little and are now holding
steady".

(A)

(B)

(C)

(D)
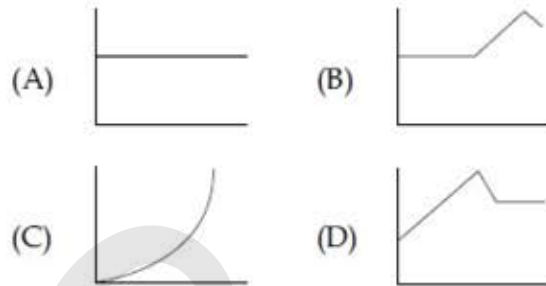
Options 1. (D)

2. Both (C) and (D)

3. (A)

4. (B)

Question Type : **MCQ**
Question ID : **4050369395**
Option 1 ID : **40503634153**
Option 2 ID : **40503634154**
Option 3 ID : **40503634151**
Option 4 ID : **40503634152**
Status : **Answered**
Chosen Option : **1**

Q.13 In a survey taken for household income in an area, mean annual income of the households came to be Rs 10.0 lakh and the median income was Rs 4.0 lakh per annum. Which of the following statement will explain the difference between mean and median income of the households ?

Options

1. more than 50% of the households have income much higher than 10.0 lakh

2. more than 50% of the households have income around 10.0 lakh

3. most of the households have income between 4.0 lakh to 10.0 lakh

4. few households have income much higher than 10.0 lakh

Question Type : **MCQ**
Question ID : **4050369403**
Option 1 ID : **40503634184**
Option 2 ID : **40503634183**
Option 3 ID : **40503634186**
Option 4 ID : **40503634185**
Status : **Answered**
Chosen Option : **3**

Q.14 Out of Mohenjo-daro, Harappa, Lothal and Dholavira, which of the following cities were laid out on grid pattern ?

Options 1. Harappa and Lothal

2. Mohenjo-daro, Harappa and Dholavira

3. Mohenjo-daro, Harappa, Dholavira and Lothal

4. Mohenjo-daro and Harappa

Question Type : **MCQ**
Question ID : **4050369386**
Option 1 ID : **40503634117**
Option 2 ID : **40503634116**
Option 3 ID : **40503634118**
Option 4 ID : **40503634115**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.15

Find the correct match :

(P)	Dhanbad	(I)	Textile
(Q)	Kandla	(II)	Mining
(R)	Bokaro	(III)	Port
(S)	Surat	(IV)	Steel Industry

Options

1. (P)-(II), (Q)-(III), (R)-(IV), (S)-(I)

2. (P)-(II), (Q)-(I), (R)-(III), (S)-(IV)

3. (P)-(III), (Q)-(II), (R)-(IV), (S)-(I)

4. (P)-(I), (Q)-(III), (R)-(II), (S)-(IV)

Question Type : **MCQ**
Question ID : **4050369394**
Option 1 ID : **40503634150**
Option 2 ID : **40503634147**
Option 3 ID : **40503634149**
Option 4 ID : **40503634148**
Status : **Answered**
Chosen Option : **1**

Q.16

What is indicated by a contour line on a topographical map ?

Options

1. Water Body

2. Height

3. Vegetation

4. Administrative Boundary

Question Type : **MCQ**
Question ID : **4050369392**
Option 1 ID : **40503634142**
Option 2 ID : **40503634139**
Option 3 ID : **40503634141**
Option 4 ID : **40503634140**
Status : **Answered**
Chosen Option : **3**

Q.17 Which of the following criteria is **not** the basis of classification of natural resources ?

Options
1. Ownership
2. Climate
3. Origin
4. Exhaustibility

Question Type : **MCQ**
Question ID : **4050369382**
Option 1 ID : **40503634100**
Option 2 ID : **40503634102**
Option 3 ID : **40503634101**
Option 4 ID : **40503634099**
Status : **Answered**
Chosen Option : **1**

Q.18 **Statement I :**

Sustainable development means development that takes place without causing damage to the environment.

Statement II :

Sustainable development means development that meets the needs of the present without compromising the needs of the future generation.
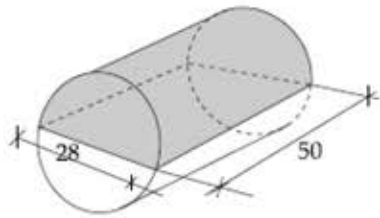
Which of these is **correct** ?

Options
1. Neither statement (I) nor (II)
2. Both statements (I) and (II)
3. Statement (II) only
4. Statement (I) only

Question Type : **MCQ**
Question ID : **4050369404**
Option 1 ID : **40503634190**
Option 2 ID : **40503634189**
Option 3 ID : **40503634188**
Option 4 ID : **40503634187**
Status : **Answered**
Chosen Option : **2**

Q.19 In the given figure the volume of the shaded portion is :

Options
1. 7,700
2. 15,400
3. 30,800
4. 46,200

Question Type : **MCQ**
Question ID : **4050369398**
Option 1 ID : **40503634166**
Option 2 ID : **40503634165**
Option 3 ID : **40503634164**
Option 4 ID : **40503634163**
Status : **Answered**
Chosen Option : **1**

Q.20 Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched in :

Options
1. 1970
2. 2005
3. 1975
4. 2010

Question Type : **MCQ**
Question ID : **4050369384**
Option 1 ID : **40503634107**
Option 2 ID : **40503634109**
Option 3 ID : **40503634108**
Option 4 ID : **40503634110**
Status : **Marked For Review**
Chosen Option : **3**

Q.21 The Second United Nations Conference on 'Human Settlements Habitat II' was held in :

Options
1. Istanbul
2. Vancouver
3. Kyoto
4. Quito

Question Type : **MCQ**
Question ID : **4050369388**
Option 1 ID : **40503634125**
Option 2 ID : **40503634123**
Option 3 ID : **40503634124**
Option 4 ID : **40503634126**
Status : **Marked For Review**
Chosen Option : **3**

Q.22 Allocation of powers and functions between Union and State governments is given in which schedule of the Constitution of India ?

Options
1. Seventh Schedule
2. Fifth Schedule
3. Third Schedule
4. First Schedule

Question Type : **MCQ**
Question ID : **4050369381**
Option 1 ID : **40503634098**
Option 2 ID : **40503634097**
Option 3 ID : **40503634096**
Option 4 ID : **40503634095**
Status : **Not Attempted and Marked For Review**
Chosen Option : **--**

Q.23   What is the full form of IOT ?

Options 1. Internet of Tweets

    2. International Organisation for Trade

    3. Internet of Things

    4. Interest on Transactions

> Question Type : **MCQ**
> Question ID : **4050369387**
> Option 1 ID : **40503634120**
> Option 2 ID : **40503634119**
> Option 3 ID : **40503634122**
> Option 4 ID : **40503634121**
> Status : **Answered**
> Chosen Option : **2**

Q.24   Which of the following cities is not planned on a grid pattern ?

Options 1. Washington DC

    2. Barcelona

    3. Amsterdam

    4. New York

> Question Type : **MCQ**
> Question ID : **4050369390**
> Option 1 ID : **40503634131**
> Option 2 ID : **40503634133**
> Option 3 ID : **40503634132**
> Option 4 ID : **40503634134**
> Status : **Answered**
> Chosen Option : **2**

Q.25   Secondary sector of economic activity is associated with :

Options 1. Agriculture

    2. Manufacturing

    3. Service

    4. Mining

> Question Type : **MCQ**
> Question ID : **4050369380**
> Option 1 ID : **40503634091**
> Option 2 ID : **40503634092**
> Option 3 ID : **40503634093**
> Option 4 ID : **40503634094**
> Status : **Answered**
> Chosen Option : **2**