

**Notations :**

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

<b>Question Paper Name:</b>	NPAT and Design 11th May 2019 S1
<b>Subject Name:</b>	NPAT and Design
<b>Creation Date:</b>	2019-05-11 14:37:52
<b>Duration:</b>	190
<b>Total Marks:</b>	180
<b>Display Marks:</b>	Yes
<b>Calculator:</b>	None
<b>Magnifying Glass Required?:</b>	No
<b>Ruler Required?:</b>	No
<b>Eraser Required?:</b>	No
<b>Scratch Pad Required?:</b>	No
<b>Rough Sketch/Notepad Required?:</b>	No
<b>Protractor Required?:</b>	No
<b>Show Watermark on Console?:</b>	Yes
<b>Highlighter:</b>	No
<b>Auto Save on Console?:</b>	No

## NPAT 2019

<b>Group Number :</b>	1
<b>Group Id :</b>	39321119
<b>Group Maximum Duration :</b>	100
<b>Group Minimum Duration :</b>	100
<b>Revisit allowed for view? :</b>	No
<b>Revisit allowed for edit? :</b>	No
<b>Break time:</b>	10
<b>Mandatory Break time:</b>	Yes
<b>Group Marks:</b>	120

## Quantitative and Numerical Ability

<b>Section Id :</b>	39321167
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional:</b>	Mandatory
<b>Number of Questions:</b>	40
<b>Number of Questions to be attempted:</b>	40
<b>Section Marks:</b>	40
<b>Display Number Panel:</b>	Yes
<b>Group All Questions:</b>	No

Question Number : 1 Question Id : 3932112017 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Let  $A = \{x | x \text{ is a prime factor of } 120\}$  and  $B = \{y | y \text{ is the sum of any two prime factors of } 120\}$ , then  
 $n[(A \cup B) \cap (A - B)] = ?$

Options :

1. ✖ 1

2. ✔ 2

3. ✖ 3

4. ✖ 4

Question Number : 2 Question Id : 3932112018 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Let  $x$  be the universal set for sets  $A$  and  $B$ . If  $n(A) = 208$ ,  $n(B) = 292$  and  $n(A \cap B) = 105$ , then  
 $n(A' \cap B') = 308$ , provided  $n(x) = ?$

Options :

1. ✖ 618

2. ✖ 683

3. ✖ 700

4. ✔ 703

Question Number : 3 Question Id : 3932112019 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Let  $U = \{x | x \in \mathbb{N}, x \leq 9\}$ ,  $A = \{x | x \in \mathbb{N}, x \leq 4\}$ ,  $B = \{2x | x \in \mathbb{N}, x \leq 4\}$  and  $C = \{3, 4, 5, 6\}$ . Then  
 $(B - C)' - (A \cup B)'$  is the set:

Options :

1. ✖  $\{1, 2, 3, 4\}$

2. ✖  $\{1, 3, 5, 6\}$

3. ✔  $\{1, 3, 4, 6\}$

4. ✖  $\{3, 4, 6, 9\}$

Question Number : 4 Question Id : 3932112020 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The range of the function  $f(x) = \frac{x}{1+x^2}, x \in R$ , is:

Options :

1. ✖  $\left[0, \frac{1}{2}\right]$

2. ✔  $\left[-\frac{1}{2}, \frac{1}{2}\right]$

3. ✖  $\left[-\frac{1}{2}, 0\right]$

4. ✖  $\left[\frac{1}{2}, 1\right]$

Question Number : 5 Question Id : 3932112021 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If a function  $f$  satisfies  $f(x) + 4f(3-x) = 5x$  for all real numbers  $x$ , then  $f(3) =$

Options :

1. ✖  $-3$

2. ✔  $-1$

3. ✖  $1$

4. ✖  $3$

Question Number : 6 Question Id : 3932112022 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A function  $f$  is defined by  $f(x) = x + \frac{1}{x}$ . Which of the following is true?

Options :

1. ✖  $[f(x)]^2 = f(x^2)$

2. ✖  $[f(x)]^2 = f(x^2) + 1$

3. ✔  $f(x^3) + 3f(x) = [f(x)]^3$

4. ✖  $3f(x^3) + f(x) = [f(x)]^3$

Question Number : 7 Question Id : 3932112023 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In a survey of 68 students, it was found that 23 like tea but not coffee and 42 like tea. How many students like coffee but NOT tea?

Options :

1. ✖ 23

2. ✖ 24

3. ✔ 26

4. ✖ 27

Question Number : 8 Question Id : 3932112024 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The value of  $\left(\frac{1}{8} \div \frac{2}{3} \text{ of } \frac{4}{5}\right) \div \left(\frac{1}{8} \text{ of } \frac{2}{3} \div \frac{4}{5}\right) - \left(\frac{2}{3} \div \frac{3}{4} \text{ of } \frac{5}{6}\right) \div \left(\frac{2}{3} \times \frac{3}{4} \div \frac{5}{6}\right)$  is:

Options :

1. ✖  $\frac{4}{9}$

2. ✖  $\frac{9}{16}$

3. ✖  $\frac{15}{16}$

4. ✔  $\frac{17}{36}$

Question Number : 9 Question Id : 3932112025 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The highest score in an inning was  $\frac{4}{11}$  of the total and the next highest was  $\frac{4}{11}$  of the remaining. If these scores differ by 32, then  $\frac{3}{22}$  of the total score is:

Options :

1. ✖ 22

2. ✓ 33

3. ✗ 44

4. ✗ 66

Question Number : 10 Question Id : 3932112026 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Three fractions are written in ascending order. When the smallest of the three is divided by the greatest, the result is  $\frac{10}{21}$ , which is greater than the middle fraction by  $\frac{2}{63}$ . When the middle fraction is divided by the greatest, then  $\frac{20}{27}$  is obtained. The greatest fraction is:

Options :

1. ✗  $\frac{4}{5}$

2. ✓  $\frac{3}{5}$

3. ✗  $\frac{3}{4}$

4. ✗  $\frac{5}{6}$

Question Number : 11 Question Id : 3932112027 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The value of  $0.\bar{4} + 0.\bar{7} - \sqrt[3]{0.\overline{037}}$  is:

Options :

1. ✓  $0.\bar{8}$

2. ✗  $0.\bar{9}$

3. ✗  $0.\bar{3}$

4. ✗  $0.\bar{5}$

Question Number : 12 Question Id : 3932112028 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The value of  $\frac{(4.4)^4 + (1.6)^4 + (7.04)^2}{(4.4)^2 + (1.6)^2 - 7.04}$  is:

Options :

1. ✖ 12.76
2. ✖ 14.88
3. ✖ 25.52
4. ✔ 28.96

Question Number : 13 Question Id : 3932112029 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The value of  $\frac{5}{36} + \frac{7}{144} + \frac{9}{400} + \dots + \frac{17}{5184} + \frac{19}{8100}$  lies between:

Options :

1. ✖ 0.1 and 0.2
2. ✔ 0.2 and 0.3
3. ✖ 0.3 and 0.4
4. ✖ 0.4 and 0.5

Question Number : 14 Question Id : 3932112030 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If  $\sqrt{37 - 20\sqrt{3}} + (5 + 2\sqrt{3}) \div (7 + 4\sqrt{3}) = a + b\sqrt{3}$ , then the value of  $(a + b)$  is:

Options :

1. ✖ 1
2. ✖ 4
3. ✔ 8
4. ✖ 16

Question Number : 15 Question Id : 3932112031 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The income of A is equal to 60% that of B and the expenditure of A is equal to 50% of B's expenditure. If A's income is equal to B's expenditure, then by what percent is B's saving more than A's saving?

Options :

1. ✖ 20

2. ✖ 25

3. ✖  $30\frac{2}{3}$

4. ✔  $33\frac{1}{3}$

Question Number : 16 Question Id : 3932112032 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Anu sold an article at 14.2% loss. Had he sold it for ₹ 264 more, he would have gained 18.8%. To gain 16%, he should have sold it for:

Options :

1. ✖ ₹ 870

2. ✔ ₹ 928

3. ✖ ₹ 974

4. ✖ ₹ 986

Question Number : 17 Question Id : 3932112033 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A dealer gains 19% on the cost of an article when he allows 15% discount on its marked price. If the cost price of the article increases by 12%, how much discount percent should he allow on the same marked price so as to earn the same percentage of profit?

Options :

1. ✔ 4.8

2. ✖ 5.2

3. ✖ 5.6

4. ✖ 6.4

Question Number : 18 Question Id : 3932112034 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A certain sum is divided among A, B, C and D in such a way that the ratio of shares of A and B is 3 : 5, that of B and C is 2 : 3 and that of C and D is 5 : 4. If the difference between the shares of A and C is ₹ 990, then the share of D is:

Options :



1. ✖ ₹ 990
2. ✖ ₹ 1210
3. ✔ ₹ 1320
4. ✖ ₹ 1430

Question Number : 19 Question Id : 3932112035 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A loan has to be returned in two equal annual installments. If the rate of interest is 16% per annum compounded annually and each installment is ₹ 5887, then the total interest paid is:

Options :

1. ✔ ₹ 2,324
2. ✖ ₹ 2,342
3. ✖ ₹ 2,432
4. ✖ ₹ 2,423

Question Number : 20 Question Id : 3932112036 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A boat goes 75 km downstream and 40 km upstream in 13 hours. It can go 9 km downstream and 4.5 km upstream in 1.5 hours. What is the speed (in km/h) of the boat when going downstream?

Options :

1. ✔ 15
2. ✖ 12
3. ✖ 9
4. ✖ 10

Question Number : 21 Question Id : 3932112037 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A solid metallic cube of edge 22 cm is melted and recast into spherical bullets each of 1 cm radius. What is the ratio of the total surface area of the cube to the total surface area of all the bullets?

(Take  $\pi = \frac{22}{7}$ )

Options :



1. ✖ 7 : 22

2. ✔ 1 : 11

3. ✖ 3 : 11

4. ✖ 4 : 13

Question Number : 22 Question Id : 3932112038 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If  $x + y + z = 2$ ,  $xy + yz + zx = -5$ , then the value of  $x^3 + y^3 + z^3 - 3xyz$  is:

Options :

1. ✖ 35

2. ✔ 38

3. ✖ 40

4. ✖ 43

Question Number : 23 Question Id : 3932112039 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A two-digit number is equal to 7 times the sum of its digits. The number obtained by interchanging the digits is 9 less than the original number. The original number satisfies the equation:

Options :

1. ✖  $x^2 - 20x = 22$

2. ✖  $x^2 - 22x = 20$

3. ✖  $\sqrt{x+10} = 5$

4. ✔  $\sqrt{x+4} = 5$

Question Number : 24 Question Id : 3932112040 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If  $-5$  is a root of the equation  $2x^2 + px - 15 = 0$ , and the equation  $p(x^2 + x) + (k + 1) = 0$  has equal roots, then the value of  $k$  is:

Options :

1. ✖  $\frac{1}{3}$

2. ✖  $\frac{2}{3}$

3. ✔  $\frac{3}{4}$

4. ✖  $\frac{3}{2}$

Question Number : 25 Question Id : 3932112041 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the sum of squares of the roots of the equation  $x^2 - (p + 2)x + (p + 1) = 0$  (p is a real number) is 1, then the value of p is:

Options :

1. ✔ -1

2. ✖ 0

3. ✖ 1

4. ✖ 2

Question Number : 26 Question Id : 3932112042 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the number of common terms in the two arithmetic progressions:

13, 15, 17 ..... and 14, 17, 20, ....., if each progression has 100 terms?

Options :

1. ✖ 30

2. ✖ 32

3. ✔ 33

4. ✖ 34

Question Number : 27 Question Id : 3932112043 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the sum of the first n terms of an arithmetic progression is  $3n^2 + 2n$ , then the 100<sup>th</sup> term of the progression is:

Options :

1. ✖ 603

2. ✖ 601

3. ✖ 598

4. ✔ 599

Question Number : 28 Question Id : 3932112044 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The sum of an infinite geometric progression (GP) is 4 and the sum of cubes of terms of the same GP is 192. What is the sum of the first three terms of the GP?

Options :

1. ✖  $3\frac{1}{2}$

2. ✔  $4\frac{1}{2}$

3. ✖ 3

4. ✖ 4

Question Number : 29 Question Id : 3932112045 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

When 50 is subtracted from each of n numbers  $x_1, x_2, \dots, x_n$ , then the sum of the resulting numbers is  $-10$ . When 46 is subtracted from each of  $x_1, x_2, \dots, x_n$ , then the sum of the resulting numbers is 70. What is the mean of  $x_1, x_2, \dots, x_n$ ?

Options :

1. ✖ 48

2. ✖ 49

3. ✔ 49.5

4. ✖ 50.5

Question Number : 30 Question Id : 3932112046 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Classes	0-10	10-20	20-30	30-40	40-50
Frequency	12	$x$	6	7	9

If the mean of the data is 22, then the value of  $x$  is:

Options :

1. ✖ 6
2. ✔ 16
3. ✖ 15
4. ✖ 26

Question Number : 31 Question Id : 3932112047 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Let  $x$  be the median of the following data:

26, 35, 32, 24, 23, 27, 36, 29, 21, 33.

If 32 is replaced by 23 and 35 is replaced by 28, then the median of the data is  $y$ .

What is the value of  $|x - y|$ ?

Options :

1. ✖ 2
2. ✖ 2.5
3. ✖ 1
4. ✔ 1.5

Question Number : 32 Question Id : 3932112048 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the standard deviation of  $x_1, x_2, \dots, x_n$  is 2.5, then what is the standard deviation of  $-3x_1 + 2, -3x_2 + 2, -3x_3 + 2, \dots, -3x_n + 2$ ?

Options :

1. ✖ 7
2. ✖ 8
3. ✔ 7.5
4. ✖ 9.5

Question Number : 33 Question Id : 3932112049 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the variance of  $2x_1 - 7, 2x_2 - 7, 2x_3 - 7, \dots, 2x_n - 7$  is 36, then the variance of  $3x_1, 3x_2, \dots, 3x_n$  is:

Options :

1. ✖ 63

2. ✖ 80

3. ✖ 64

4. ✔ 81

Question Number : 34 Question Id : 3932112050 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The mean deviation of the numbers 12, 24, 16, 20, 15, 26, 13 about the median is:

Options :

1. ✖  $\frac{20}{7}$

2. ✖  $\frac{22}{7}$

3. ✔  $\frac{30}{7}$

4. ✖  $\frac{31}{7}$

Question Number : 35 Question Id : 3932112051 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Let A and B be two events such that  $P(A \cup B) = 0.8$  and  $P(A \cap B) = 0.3$ . Then  $P(A') + P(B') = x$ , where A' and B' are complements of A and B, respectively. The value of x is:

Options :

1. ✔ 0.9

2. ✖ 0.8

3. ✖ 0.7

4. ✖ 0.6

Question Number : 36 Question Id : 3932112052 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The expression  $\frac{\cot \theta}{1 - \tan \theta} + \frac{\tan \theta}{1 - \cot \theta}$  is equal to:

Options :

1. ✖  $1 - \sec \theta \operatorname{cosec} \theta$

2. ✔  $1 + \sec \theta \operatorname{cosec} \theta$

3. ✖  $1 - \sin \theta \cos \theta$

4. ✖  $1 + \sin \theta \cos \theta$

Question Number : 37 Question Id : 3932112053 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If  $12 \cot^2 \theta - 31 \operatorname{cosec} \theta + 32 = 0$ , then one of the values of  $\tan \theta$  is:

Options :

1. ✖  $\frac{4}{5}$

2. ✖  $\frac{3}{5}$

3. ✔  $\frac{3\sqrt{7}}{7}$

4. ✖  $\frac{\sqrt{7}}{4}$

Question Number : 38 Question Id : 3932112054 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Solve the following:  $\frac{(\sec \theta - \cos \theta)(\operatorname{cosec} \theta - \sin \theta)(\tan \theta + \cot \theta)}{\sin \theta(1 + \tan \theta) + \cos \theta(1 + \cot \theta)}$  is equal to:

Options :

1. ✖  $\sec \theta - \operatorname{cosec} \theta$

2. ✖  $\sec \theta + \operatorname{cosec} \theta$

3. ✖  $\frac{\sin \theta}{1 + \cot \theta}$

4. ✓  $\frac{\cos \theta}{1 + \cot \theta}$

Question Number : 39 Question Id : 3932112055 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

A person standing on the deck of a ship, which is  $x$  m above the water level, observes the angle of elevation of the top of a hill as  $60^\circ$  and the angle of depression of the base of the hill as  $30^\circ$ . If the height of the hill is  $y$  m, then  $x : y = ?$

Options :

1. ✗  $1 : 2$

2. ✗  $1 : 2\sqrt{3}$

3. ✗  $1 : 3\sqrt{3}$

4. ✓  $1 : 4$

Question Number : 40 Question Id : 3932112056 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

If  $\operatorname{cosec} \theta - \cot \theta = \frac{1}{2}$ ,  $0^\circ < \theta < 90^\circ$ , then what is the value of  $3 \sec \theta + 4 \sin \theta$ ?

Options :

1. ✓  $8\frac{1}{5}$

2. ✗  $9\frac{1}{5}$

3. ✗  $10$

4. ✗  $9$

## Reasoning and General Intelligence

Section Id :	39321168
Section Number :	2
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	27
Number of Questions to be attempted:	27
Section Marks:	40
Display Number Panel:	Yes
Group All Questions:	No



Question Id : 3932112057 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (41 to 45)

Question Label : Comprehension

The criteria for selecting a student for admission into a medical course are given as follows.

The candidate:

1. must have passed Class 12 Science examination with at least 65% marks.
2. must have secured more than 55% marks in the written test.
3. must not be less than 18 years and more than 24 years of age as on 1 January 2019.
4. must have secured at least 60% marks in the Biology paper in Class 12 Science examination.

However, if a candidate fulfils all the above criteria EXCEPT:

- a. (2) and (3), but belongs to the SC community and has secured more than 65% marks in the Biology paper in Class 12 Science examination, his/her case is to be referred to the Principal of the college.
- b. (3) and (4), but is a girl with more than 60% marks in the written test, his/her case is to be referred to the Chairman of the Admissions Committee.

Based on the criteria given and without assuming any additional information, you have to take a decision for the candidates whose profiles have been given in the below questions. Mark your answer by choosing the appropriate alternative in each case.



Sub questions

Question Number : 41 Question Id : 3932112058 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Nitin was born in 2000 and passed his Class 12 Science with 65% marks in the aggregate and 62% marks in Biology. He scored 58% marks in the written test. What decision would be taken in his case?

Options :

1.  He is to be admitted.
2.  He is not to be admitted.

3. ✖ His case is to be referred to the Principal of the college.

4. ✖ His case is to be referred to the Chairman of the Admissions Committee.

Question Number : 42 Question Id : 3932112059 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Priya passed her Class 12 Science examination with 65% marks in the year 2017 at the age of 19 years, scored 65% marks in the Biology paper and 55% in the written test. What decision would be taken in case of Priya?

Options :

1. ✖ She is to be admitted.

2. ✔ She is not to be admitted.

3. ✖ Her case is to be referred to the Principal of the college.

4. ✖ Her case is to be referred to the Chairman of the Admissions Committee.

Question Number : 43 Question Id : 3932112060 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Vikash, an SC candidate, passed his Class 12 Science examination at the age of 18 years in the year 2017, with 65% marks in the aggregate as well as in the Biology paper. He scored 56% marks in the written test. What decision would be taken in case of Vikash?

Options :

1. ✔ He is to be admitted.

2. ✖ He is not to be admitted.

3. ✖ His case is to be referred to the Principal of the college.

His case is to be referred to the Chairman of the

4. ✖ Admissions Committee.

Question Number : 44 Question Id : 3932112061 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Ankita, an SC girl, passed her Class 12 science examination at the age of 20 in the year 2016 with 65% marks. She scored 67% in the Biology paper and 55% marks in the written test. What decision would be taken for Ankita?

Options :

1. ✖ She is to be admitted.  
2. ✖ She is not to be admitted.

3. ✔ Her case is to be referred to the Principal of the college.

4. ✖ Her case is to be referred to the Chairman of the Admissions Committee.

Question Number : 45 Question Id : 3932112062 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Harshita was born in an SC family in a rural area in 1994. She passed her Class 12 Science examination in 2017 securing 65% marks in the aggregate as well as in the Biology paper. She scored 62% marks in the written test. What decision would be taken in her case?

Options :

1. ✖ She is to be admitted.  
2. ✖ She is not to be admitted.

3. ✖ Her case is to be referred to the Principal of the college.

4. ✔ Her case is to be referred to the Chairman of the Admissions Committee.



Sub-Section Number: 2  
Sub-Section Id: 393211185  
Question Shuffling Allowed : Yes

Question Id : 3932112063 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (46 to 47)

Question Label : Comprehension

A team of five is to be selected from among five boys, A, B, C, D and E, and four girls, P, Q, R and S, such that there are at least two boys in the team and it meets the following criteria:

- i. B and R have to be put together.
- ii. D and Q cannot go together.
- iii. C cannot be put with E.
- iv. E and S have to be put together.

Sub questions

Question Number : 46 Question Id : 3932112064 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following teams can be formed?

Options :

1. ✖ ABPCS

2. ✖ BCPEQ

3. ✔ BEDSR

4. ✖ BQCDR

Question Number : 47 Question Id : 3932112065 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following teams CANNOT be formed?

Options :

1. ✖ ABERS

2. ✖ BCDRP

3. ✖ ABDRP

4. ✔ CDESQ

Sub-Section Number: 3  
Sub-Section Id: 393211186

Question Number : 48 Question Id : 3932112066 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Three girls, A, B and C, and three boys, E, F and G, are sitting around a round table facing the centre and at equal distance from each other. No two girls are sitting next to each other. A is opposite D and C is between F and D. B is to the left of E. Who is sitting between A and B?

Options :

1. ☒ E

2. ☐ F

3. ☐ D

4. ☐ C

Question Number : 49 Question Id : 3932112067 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Among five objects, D is twice as heavy as A. E is one and a half times as heavy as B. B is one and a half times as heavy as A. C is half as heavy as E. Which object is the lightest of them all?

Options :

1. ☐ A

2. ☐ B

3. ☒ C

4. ☐ D

Question Number : 50 Question Id : 3932112068 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

B is the grandson of A, who has two sons and a daughter. G is the sister of D, whose brother is C. H is the daughter of G, and E is the sister of B. F is married to A and is the mother of C. How is A related to H?

Options :

1. ☐ Maternal grandmother

2. ☐ Grand-daughter

3. ☒ Maternal grandfather

4. ☐ Uncle

Question Number : 51 Question Id : 3932112069 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Two statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the given statements.

**Statements:**

1. No flower is a fruit.
2. No fruit is an orange.

**Conclusions:**

- I. No flower is an orange.
- II. Some oranges are fruits.

**Options :**

1. ✖ Only conclusion I follows.
2. ✖ Only conclusion II follows.
3. ✖ Both conclusions I and II follow.
4. ✔ Neither conclusion I nor II follows.

Question Number : 52 Question Id : 3932112070 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Two statements are given, followed by four conclusions numbered I to IV. Assuming the statements to be true even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the given statements.

**Statements:**

1. Some trucks are vehicles.
2. All vehicles are motors.

**Conclusions:**

- I. Some trucks are motors.
- II. All motors are vehicles.
- III. Some motors are trucks.
- IV. Some vehicles are motors.

**Options :**

1. ✖ Only conclusions I and II follow.
2. ✖ Only conclusions II, III and IV follow.

3. ✓ Only conclusions I, III and IV follow.

4. ✗ All the conclusions follow.

Question Number : 53 Question Id : 3932112071 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Three statements are given, followed by four conclusions numbered I to IV. Assuming the statements to be true even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the given statements.

**Statements:**

All mangoes are fruits.

Some mangoes are apples.

Some apples are sweets

**Conclusions:**

I. Some sweets are mangoes.

II. Some apples are fruits.

III. No sweet is a mango.

IV. No apple is a fruit.

**Options :**

1. ✗ Only conclusions I and III follow.

2. ✗ Either conclusion I or III follows.

3. ✓ Only conclusion II and either I or III follow.

4. ✗ Either conclusion II or IV and either I or III follow.

Question Number : 54 Question Id : 3932112072 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A question is given, followed by two arguments numbered I and II. Decide which of the arguments is strong with respect to the question.

**Question:**

Should the examination pattern in the terminal class of high school be changed?

**Arguments:**

I. No. The examination pattern is in vogue for years and is acceptable to the students.

II. Yes. The present examination pattern is heavily oriented to measure memory skills of students.

**Options :**



1. ✖ Only argument I is strong.
2. ✔ Only argument II is strong.
3. ✖ Both arguments I and II are strong.
4. ✖ Neither argument I nor II is strong.

Question Number : 55 Question Id : 3932112073 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A statement is given, followed by two assumptions numbered I and II. Decide which of the assumptions is implicit in the statement.

**Statement:**

Internet addiction is currently labelled as a mental disorder, as the members of the e-society are often socially isolated.

**Assumptions:**

- I. Internet communication is devoid of emotional interaction among human beings.
- II. Persons working on the Internet are often found to be emotionally imbalanced.

Options :

1. ✔ Only assumption I is implicit.
2. ✖ Only assumption II is implicit.
3. ✖ Both assumptions I and II are implicit.
4. ✖ Neither assumption I nor II is implicit.

Question Number : 56 Question Id : 3932112074 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A question is given, followed by two statements labelled I and II, each containing some information. Decide which of the statements is/are sufficient/necessary to answer the question.

**Question:**

How is D related to A?

**Statements**

- I. D is the son of A's father's brother.
- II. D is the father of A's mother's sister.

Options :

1. ✖ Statement I alone is sufficient.
2. ✖ Statement II alone is sufficient.
3. ✔ Either statement I alone or statement II alone is sufficient.
4. ✖ Both statements I and II together are necessary.

Question Number : 57 Question Id : 3932112075 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A question is given, followed by two statements labelled I and II, each containing some information. Decide which of the statements is/are sufficient/necessary to answer the question.

**Question:**

A, B, C, D, E and F are sitting around a round table facing the centre and at equal distance from each other such that E is opposite C. B, who is to the immediate left of C, is opposite F. Who is to the immediate left of E?

**Statements**

- I. D is between C and F.
- II. A is second to the left of C.

**Options :**

1. ✖ Statement I alone is sufficient.
2. ✖ Statement II alone is sufficient.
3. ✔ Either statement I alone or statement II alone is sufficient.
4. ✖ Both statements I and II together are necessary.

Question Number : 58 Question Id : 3932112076 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A question is given, followed by two statements labelled I and II, each containing some information. Decide which of the statements is/are sufficient/necessary to answer the question.

**Question:**

Among five objects, P, Q, R, S and T, R is half as heavy as T. T is one and a half times as heavy as Q. Q is heavier than P. Which object is the heaviest of all?

**Statements:**

- I. S is twice as heavy as P.
- II. Both P and S together are twice as heavy as Q.

**Options :**

1. ✖ Statement I alone is sufficient.
2. ✖ Statement II alone is sufficient.
3. ✖ Either statement I alone or statement II alone is sufficient.
4. ✔ Both statements I and II together are necessary.

Question Number : 59 Question Id : 3932112077 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A question is given, followed by two statements labelled I and II, each containing some information. Decide which of the statements is/are sufficient/necessary to answer the question.

**Question:**

In a row, Q is exactly in the middle of P and R. What exactly is the position of Q from the left?

**Statements:**

- I. P is 13<sup>th</sup> from the left and 17<sup>th</sup> from the right.
- II. There are seven persons between P and R.

**Options :**

1. ✖ Statement I alone is sufficient.
2. ✖ Statement II alone is sufficient.
3. ✖ Either statement I alone or statement II alone is sufficient.
4. ✔ Both the statements I and II are necessary.

Question Number : 60 Question Id : 3932112078 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A question is given, followed by two statements labelled I and II, each containing some information. Decide which of the statements is/are sufficient/necessary to answer the question.

**Question:**

The ratio of the prices of two different bikes, A and B is 5:3. What would be the price of bike A if discounts of 12% and 18% are given on bike A and bike B, respectively?

**Statements:**

- I. A discount of ₹ 8,640 is given on bike B.
- II. The difference between the discounts on the two bikes is ₹ 960.

**Options :**

1. ✖ Statement I alone is sufficient.

2. ✖ Statement II alone is sufficient.
3. ✔ Either statement I alone or statement II alone is sufficient.
4. ✖ Both statements I and II together are necessary.

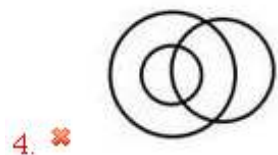
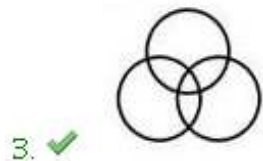
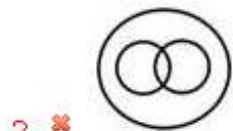
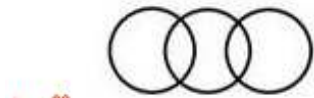
Question Number : 61 Question Id : 3932112079 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following Venn diagrams best illustrates the relationship among the following classes?

Teachers, Authors, Males

Options :



Sub-Section Number: 4  
Sub-Section Id: 393211187  
Question Shuffling Allowed : Yes

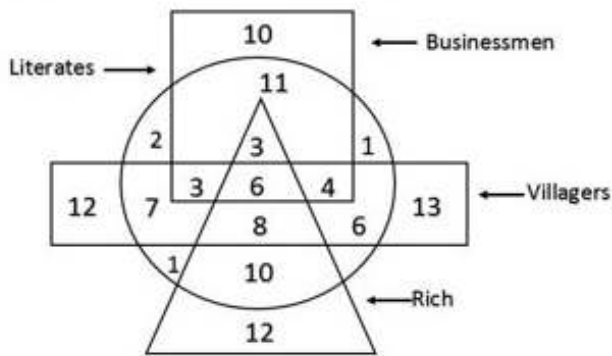
Question Id : 3932112080 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension  
Questions : No

Question Numbers : (62 to 63)

Question Label : Comprehension



In the diagram given, the triangle stands for 'rich', the rectangle stands for 'villagers', the circle stands for 'literate' and the square stands for 'businessmen'. The numbers in different segments represent the number of persons in each segment.



Sub questions

Question Number : 62 Question Id : 3932112081 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many literate businessmen are villagers?

Options :

1. ✖ 9

2. ✖ 10

3. ✔ 13

4. ✖ 14

Question Number : 63 Question Id : 3932112082 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many literate villagers are businessmen but NOT rich?

Options :

1. ✔ 7

2. ✖ 9

3. ✖ 10

4. ✖ 13

Question Number : 64 Question Id : 3932112083 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which two signs should be interchanged in the following equation to make it correct?

$$24 \div 12 + 6 - 3 \times 4 = 14$$

Options :

1. ✖  $\times$  and  $+$
2. ✖  $-$  and  $\div$
3. ✔  $+$  and  $\div$
4. ✖  $-$  and  $\times$

Question Number : 65 Question Id : 3932112084 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Three statements are given, followed by three conclusions. The symbols used in them have meanings as follows:

A @ B means A is not smaller than B.

A # B means A is not greater than B.

A & B means A is neither smaller than nor equal to B.

A % B means A is neither greater than nor equal to B.

A \$ B means A is neither smaller than nor greater than B.

Now read the following statements and decide which of the conclusions is/are true.

**Statements:**

W # Z

K & M

Z \$ K

**Conclusions:**

I. M % Z

II. W # M

III. M & W

Options :

1. ✔ Only conclusion I is true.
2. ✖ Only conclusion II is true.
3. ✖ Only conclusion III is true.

4. ✖ Only conclusions I and III are true.

Question Number : 66 Question Id : 3932112085 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Four statements are given, followed by three conclusions. The symbols used in them have meanings as follows:

A @ B means A is not smaller than B.

A # B means A is not greater than B.

A & B means A is neither smaller than nor equal to B.

A % B means A is neither greater than nor equal to B.

A \$ B means A is neither smaller than nor greater than B.

Now read the following statements and decide which of the conclusions is/are true.

**Statements:**

P @ R

Q # T

S \$ R

Q & S

**Conclusions:**

I. T & R

II. P & S

III. R % Q

**Options :**

1. ✖ Only conclusion I is true.

2. ✖ Only conclusion II is true.

3. ✔ Only conclusions I and III are true.

4. ✖ All the conclusions are true.

Question Number : 67 Question Id : 3932112086 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Select the figure from the options that would come next in the given series.



**Options :**

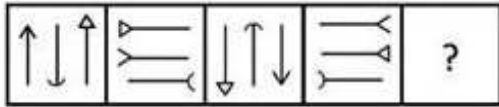




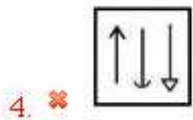
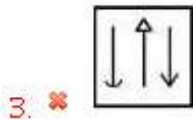
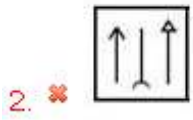
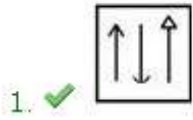
Question Number : 68 Question Id : 3932112087 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Select the figure from the options that would come next in the given series.



Options :



Question Number : 69 Question Id : 3932112088 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Three of the following four figures are similar in a certain way and one is different. Find the odd one out.

Options :

1. ✖



2. ✔



3. ✖



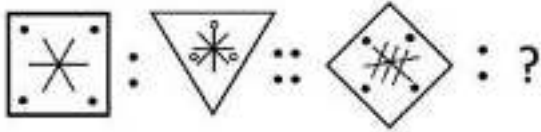
4. ✖



Question Number : 70 Question Id : 3932112089 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Select the option that is related to the third figure in the same way as the second figure is related to the first figure.



Options :

1. ✖



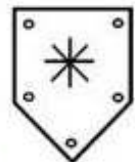
2. ✖



3. ✖



4. ✔



Sub-Section Number: 6  
Sub-Section Id: 393211189  
Question Shuffling Allowed : Yes

Question Id : 3932112090 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (71 to 74)

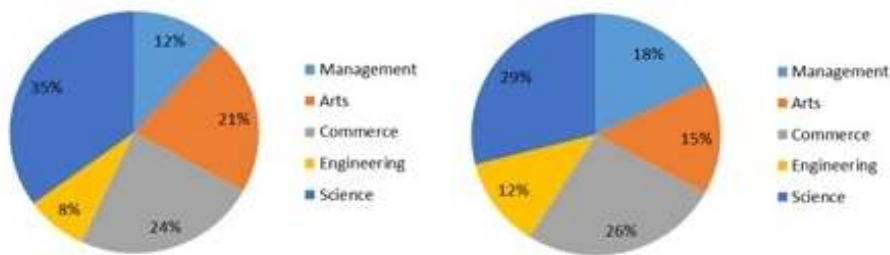
Question Label : Comprehension

**Study the pie charts given below and answer the questions that follow.**

**Percentage break-up of students in different disciplines in a college**

**Total number of students - 3600**

**Total number of girls - 2200**



Sub questions

Question Number : 71 Question Id : 3932112091 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The total number of girls who took up Arts and Management exceeds the total number of boys who took up Science by:

Options :

1. ✖ 98
2. ✔ 104
3. ✖ 106
4. ✖ 109

Question Number : 72 Question Id : 3932112092 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the ratio of the number of boys who took up Arts and Engineering to the total number of girls who took up Engineering and Management?

Options :

1. ✖ 5 : 7

2. ✖ 9 : 13

3. ✔ 15 : 22

4. ✖ 23 : 33

Question Number : 73 Question Id : 3932112093 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The total number of boys who opted for Science,  
Commerce and Arts is approximately how much percent  
more than the total number of students who opted for  
Engineering and Management?

Options :

1. ✔ 86

2. ✖ 82

3. ✖ 78

4. ✖ 75

Question Number : 74 Question Id : 3932112094 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The total number of girls who opted for Engineering and  
Commerce is approximately how much percent of the  
total number of boys who opted for Science and Arts?

Options :

1. ✖ 59.6

2. ✖ 68.4

3. ✖ 69.9

4. ✔ 79.8

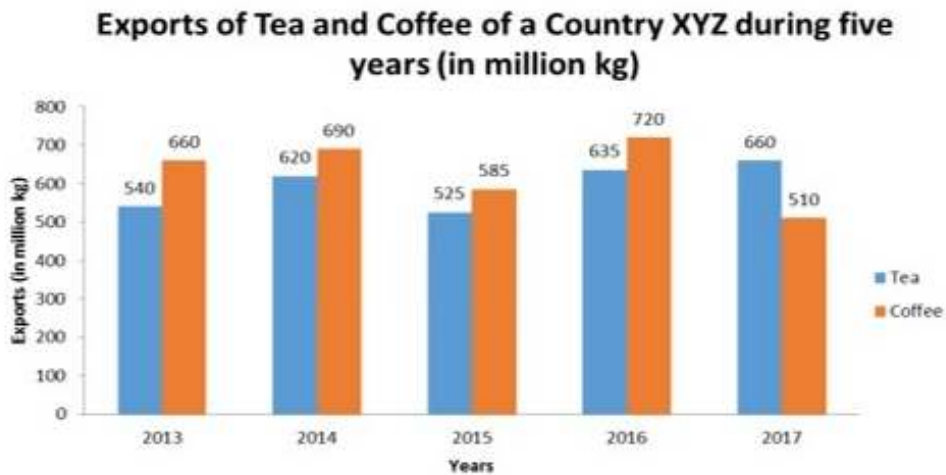
Sub-Section Number:	7
Sub-Section Id:	393211190
Question Shuffling Allowed :	Yes

Question Id : 3932112095 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension  
Questions : No

Question Numbers : (75 to 78)

Question Label : Comprehension

Study the following graph and answer the questions that follow.



Sub questions

Question Number : 75 Question Id : 3932112096 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The number of years in which the export of coffee was more than the average export of tea over the years, is:

Options :

1. ✖ 1

2. ✖ 2

3. ✔ 3

4. ✖ 4

Question Number : 76 Question Id : 3932112097 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The ratio of the export of coffee in 2014 and 2017 together to that of tea in 2015 and 2016 together is:

Options :

1. ✖ 40 : 39

2. ✖ 35 : 29

3. ✖ 24 : 23

4. ✔ 30 : 29

Question Number : 77 Question Id : 3932112098 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The total exports of tea in 2013 and 2017 were approximately how much percent more than the exports of coffee in 2016?

Options :

1. ✖ 64.8

2. ✖ 65.2

3. ✔ 66.7

4. ✖ 68.4

Question Number : 78 Question Id : 3932112099 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The total exports of coffee in 2013 and 2015 were how much percent of the total exports of tea over all the five years?

Options :

1. ✖ 40.4

2. ✔ 41.8

3. ✖ 42.2

4. ✖ 43.6

Sub-Section Number:	8
Sub-Section Id:	393211191
Question Shuffling Allowed :	Yes

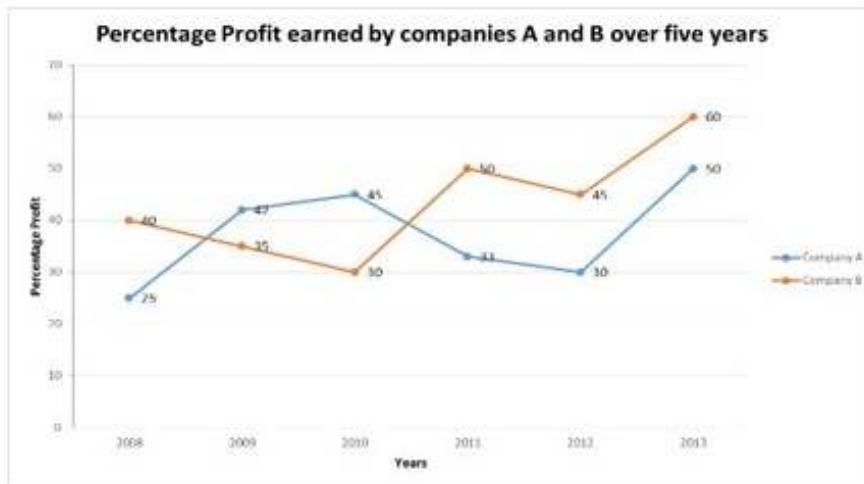
Question Id : 3932112100 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (79 to 80)

Question Label : Comprehension



Study the following graph and answer the questions that follow.



$$\text{Percentage profit} = \frac{\text{Income} - \text{Expenditure}}{\text{Expenditure}} \times 100$$

Sub questions

Question Number : 79 Question Id : 3932112101 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the income of company A in 2012 was ₹ 39 crores,  
then what was its expenditure (in ₹ crores) in that year?

Options :

1. ✖ 28
2. ✖ 28.5
3. ✖ 29.5
4. ✔ 30

Question Number : 80 Question Id : 3932112102 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the expenditure of company A in 2008 and 2010 was  
₹ 12 crores and ₹ 20 crores, respectively, then what was  
the total income (in ₹ crores) of the company in these  
years?

Options :

1. ✖ 42.8
2. ✔ 44
3. ✖ 44.5



## Proficiency in English Language

Section Id :	39321169
Section Number :	3
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	28
Number of Questions to be attempted:	28
Section Marks:	40
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	393211192
Question Shuffling Allowed :	Yes

Question Number : 81 Question Id : 3932112103 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the sentence given below four words/phrases have been underlined and the underlined words/phrases are given as options. Identify and select the option *that contains an error*:

Trade winds that constantly blow across South Pacific are responsible for the violent tropical storms called willy-willies.

Options :

1. ✖ that constantly blow

2. ✔ across South Pacific

3. ✖ are responsible

4. ✖ for the violent tropical storms

Question Number : 82 Question Id : 3932112104 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the sentence given below four words/phrases have been underlined and the underlined words/phrases are given as options. Identify and select the option *that contains an error*:

Tourism has been slow in developing in the Pacific due to long travel distances and shortage of modern hotels.

Options :

1. ✖ has been slow

2. ✔ in developing

3. ✖ in the Pacific

4. ✖ due to

Question Number : 83 Question Id : 3932112105 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the sentence given below four words/phrases have been underlined and the underlined words/phrases are given as options. Identify and select the option *that contains an error*:

Banks use codes and ciphers to keep financial deals private while spies or criminals use them to avoid capture.

Options :

1. ✖ Banks use codes

2. ✖ to keep

3. ✔ while spies or criminals

4. ✖ to avoid capture

Question Number : 84 Question Id : 3932112106 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the sentence given below four words/phrases have been underlined and the underlined words/phrases are given as options. Identify and select the option *that contains an error*:

Ecologists consider all the organisms that lives in one area as an inter-dependent community.

Options :

1. ✖ Ecologists consider

2. ✖ all the organisms

3. ✔ that lives

4. ✖ in one area

Question Number : 85 Question Id : 3932112107 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the sentence given below four words/phrases have been underlined and the underlined words/phrases are given as options. Identify and select the option *that contains an error*:

Anime is an art form having distinctive production methods and techniques that have been adapted over time.

Options :

1. ✖ is an art form
2. ✖ having distinctive production methods
3. ✔ that have been
4. ✖ adapted over time

Question Number : 86 Question Id : 3932112108 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the most appropriate option.

Prior to the digital era, anime was produced \_\_\_\_\_ traditional animation methods.

Options :

1. ✖ from
2. ✖ by
3. ✔ with
4. ✖ of

Question Number : 87 Question Id : 3932112109 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the most appropriate option.

Tornadoes are violently \_\_\_\_\_ columns of air that extend from a thunderstorm to the ground.

Options :

1. ✔ rotating
2. ✖ rotated
3. ✖ rotate
4. ✖ rotates

Question Number : 88 Question Id : 3932112110 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the most appropriate option.

\_\_\_\_\_ Sana is beautiful, everybody dislikes her.

Options :

1. ✖ In spite of
2. ✔ Although
3. ✖ Despite
4. ✖ Even if

Question Number : 89 Question Id : 3932112111 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the most appropriate option.

My vegetable patch looks terrible this summer. There are \_\_\_\_\_ weeds.

Options :

1. ✖ little
2. ✖ much
3. ✖ most
4. ✔ many

Question Number : 90 Question Id : 3932112112 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the most appropriate option.

My parents got angry \_\_\_\_\_ me when I asked them for an iPhone last week.

Options :

1. ✖ at
2. ✖ on
3. ✔ with
4. ✖ in

Question Number : 91 Question Id : 3932112113 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the most appropriate option.

I \_\_\_\_\_ my lessons when my mother walked into the room.

Options :

1. ✗ would revise
2. ✗ revised
3. ✓ was revising
4. ✗ am revising

Question Number : 92 Question Id : 3932112114 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the most appropriate option.

Nitesh ran fast \_\_\_\_\_ his legs were hurting.

Options :

1. ✓ even though
2. ✗ because
3. ✗ even if
4. ✗ in spite of

Question Number : 93 Question Id : 3932112115 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fill in the blank with the most appropriate option.

Do you think the diamond merchant who made off with \_\_\_\_\_ money will get caught?

Options :

1. ✗ some
2. ✓ the
3. ✗ a little
4. ✗ No article

Question Number : 94 Question Id : 3932112116 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical



Correct Marks : 1 Wrong Marks : 0

Identify and select the option that best gives the meaning of the underlined word:

Succulents are plants that have some parts which are thicker and fleshier than normal.

Options :

1. ✖ natural
2. ✖ rare
3. ✖ habitual
4. ✔ usual

Question Number : 95 Question Id : 3932112117 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Identify and select the option that best gives the meaning of the underlined word:

Succulents have low water needs and can thrive on limited sources like mist and dew.

Options :

1. ✖ succeed
2. ✔ flourish
3. ✖ bloom
4. ✖ deteriorate

Question Number : 96 Question Id : 3932112118 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Identify and select the option that best gives the meaning of the underlined phrase:

Succulents on the whole have care needs that are very similar.

Options :

1. ✔ in general
2. ✖ primarily
3. ✖ globally
4. ✖ in particular

Question Number : 97 Question Id : 3932112119 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Identify and select the option that best gives the meaning of the underlined phrase:

Kevin was already angry. By teasing him his friends added fuel to the fire.

Options :

1. ✖ poured kerosene on a fire
2. ✖ improved a bad situation
3. ✖ turned a happy moment into a sad one
4. ✔ made a bad situation worse

Question Number : 98 Question Id : 3932112120 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Identify and select the word that best completes the sentence:

Young learners need a firm \_\_\_\_\_ in oracy skills before they can become proficient readers and writers of any language.

Options :

1. ✖ ground
2. ✖ examination
3. ✔ foundation
4. ✖ basement

Question Number : 99 Question Id : 3932112121 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Identify and select the word that best completes the sentence:

Stitches and staples due to surgery are unsightly and \_\_\_\_\_ to infection.

Options :

1. ✔ prone
2. ✖ stretched out
3. ✖ inclined

4. ✖ likely

Question Number : 100 Question Id : 3932112122 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Identify and select the word that best completes the sentence:

There is a crisis in the education sector – for example, many countries are experiencing an \_\_\_\_\_ shortage of primary school teachers.

Options :

1. ✖ obsolete

2. ✔ acute

3. ✖ utter

4. ✖ extra

Question Number : 101 Question Id : 3932112123 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Identify and select the word that best completes the sentence:

Providing children quiet, \_\_\_\_\_ time is just as important as purposeful activity for a child.

Options :

1. ✖ retreat

2. ✖ relaxed

3. ✔ reflective

4. ✖ reflexive

Question Number : 102 Question Id : 3932112124 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Given below are five sentences, labelled A, B, C, D and E They are not in a meaningful order. Choose from the options given below the order which will make them into a meaningful paragraph:

A. Throughout history, people have created colour using natural dyes and pigments.

B. Dyes and paints are substances that are used to stain or give colour to a large range of objects.

C. Pigments, which form the colour in paints, are held in place by a varnish-like substance which binds the pigment to the surface being painted.

D. The substances that give colour to dyes are called dyestuffs.

E. These when dissolved in water penetrate the fibres of fabrics by means of a chemical reaction.

Options :

1. ✖ B, A, E, C, D
2. ✖ B, C, D, E, A
3. ✔ A, B, D, E, C
4. ✖ A, B, C, D, E

Question Number : 103 Question Id : 3932112125 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Given below are five sentences, labelled A, B, C, D and E. They are not in a meaningful order. Choose from the options given below the order which will make them into a meaningful paragraph:

- A. Penguins rely on their waterproof feathers for warmth; therefore, losing his feathers made Pierre unwilling to jump in the penguin tank.
- B. This is because Pierre is losing his feathers; he is going bald, especially around his bottom.
- C. However, Pierre, the jackass penguin, who lives at the California Academy of Sciences, dislikes the wet stuff.
- D. It is a fact that penguins swim in the water and generally enjoy themselves in wet conditions.
- E. He stands shivering beside the penguin tank.

Options :

1. ✔ D, C, E, B, A
2. ✖ D, C, B, A, E
3. ✖ A, B, E, C, D
4. ✖ A, B, D, E, C

Question Number : 104 Question Id : 3932112126 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Given below are five sentences, labelled A, B, C, D and E. They are not in a meaningful order. Choose from the options given below the order which will make them into a meaningful paragraph:

- A. That's because, as rain falls it gathers up any pollution that is in the air.
- B. Rain seems to make things cleaner, doesn't it, besides helping plants grow?
- C. But rain can make things dirty.
- D. That's why it leaves cars looking streaky and windows looking spotty.
- E. It helps flowers bloom, makes roads look shiny and leaves a fresh smell in the air.

Options :



1. ✖ B, E, C, D, A

2. ✖ B, C, A, D, E

3. ✔ B, E, C, A, D

4. ✖ B, C, D, E, A

Question Number : 105 Question Id : 3932112127 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Given below are five sentences, labelled A, B, C, D and E. They are not in a meaningful order. Choose from the options given below the order which will make them into a meaningful paragraph:

A. On the contrary, they can also have fallen deeply in love with that thing.

B. I believe a nation too is born to excel in some things.

C. Some things come naturally, as if we're born to do them.

D. As a people, they're not merely gifted in something that is quite opposed to their past experience.

E. Some people are born mathematicians, others musicians, dancers or philosophers.

Options :

1. ✖ E, C, B, A, D

2. ✖ B, A, C, E, D

3. ✔ C, E, B, D, A

4. ✖ D, A, B, C, E

Sub-Section Number:	2
Sub-Section Id:	393211193
Question Shuffling Allowed :	Yes

Question Id : 3932112128 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (106 to 110)

Question Label : Comprehension



## Hydrogen Cars

It may feel like the electric car has been crowned the future of transportation. Auto companies have plans to make more electric car models, and sales — still only a tiny fraction of the overall market — are expected to get a boost as more countries pass regulations to reduce carbon emissions. But Japan isn't sure that the battery electric car is the only future, and it's betting big on something it says makes more sense in big cities: hydrogen fuel cell vehicles.

A hydrogen fuel cell doesn't burn anything. It uses a chemical reaction between the hydrogen and the oxygen from the air to produce electricity. Hydrogen fuel cell cars are quiet, like battery electric ones, and they emit only water. Only about 11,000 fuel cell vehicles are on the road worldwide. Nearly half of them are in California, which has stringent vehicle emission regulations and tax credits that incentivise electric and fuel cell vehicles.

Japan has embraced the technology and aims to create the first "hydrogen society," which also includes the use of hydrogen for power generation. The energy ministry has ambitious targets in the lead-up to the 2020 Olympics. The city of Tokyo plans to deploy 100 hydrogen fuel cell buses during the games, and it wants to have 40,000 fuel cell electric vehicles on the road, with a longer-term goal of 200,000 such vehicles in the next six years.

Today there are far more battery electric vehicles on the road than hydrogen cars. But, in countries like Japan, where much of the population lives in dense urban areas, many people live in apartment buildings without a place to easily charge a car. It's here where companies like Toyota are banking on the convenience of hydrogen fuel cells. Meanwhile, Japan is investing heavily to create the infrastructure needed to promote hydrogen vehicles. It is tough to sell a hydrogen car without a lot of places to fill it up. But without more cars on the road, such fueling stations are not a smart investment for private companies.

So the Japanese government has stepped in with subsidies. The country, along with private companies like Toyota, has helped build and operate 100 hydrogen fueling stations so far. Japan has a target of 900 by 2030. By then, Toyota hopes there will be enough hydrogen vehicles to make the stations profitable.

Another advantage of hydrogen could be reducing Japan's heavy reliance on Middle East oil. Hydrogen is abundant, and the fuel could be produced anywhere. But producing hydrogen fuel is itself energy intensive, and — just as with battery electric vehicles — it might be produced using natural gas or coal.

## Sub questions

Question Number : 106 Question Id : 3932112129 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The main aim of the passage is to:

Options :

- 1. ✖ extol Japan's measures to promote hydrogen-fueled cars
- 2. ✖ weigh the pros and cons of battery-operated and hydrogen-fueled cars
- 3. ✔ highlight the advantages of moving to hydrogen-fueled cars from battery-operated ones
- 4. ✖ promote the use of hydrogen power cars over electric cars

Question Number : 107 Question Id : 3932112130 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is NOT a reason for hydrogen cars to be promoted?

Options :

- 1. ✖ they have no toxic emissions
- 2. ✖ they run noiselessly
- 3. ✖ hydrogen is abundant and can be produced anywhere
- 4. ✔ they run on hydrogen from power stations

Question Number : 108 Question Id : 3932112131 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The writer notes that both, hydrogen cars and electric cars:

Options :

- 1. ✖ need to be supported by fueling or charging stations
- 2. ✖ are equally in demand by car owners

3. ✓ are non-polluting as they emit only water

4. ✗ are used by people who live in apartment buildings

Question Number : 109 Question Id : 3932112132 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A DISADVANTAGE of hydrogen cars implied by the writer is that:

Options :

1. ✓ global demand for hydrogen exceeds its production

2. ✗ hydrogen can be produced only by burning fuel

3. ✗ private companies have resisted producing them in Japan

4. ✗ hydrogen fueling stations are polluting the atmosphere

Question Number : 110 Question Id : 3932112133 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Japan has taken all of the following measures to promote the use of hydrogen EXCEPT:

Options :

1. ✗ use hydrogen-fuelled buses for the Tokyo Olympics

2. ✗ promote use of hydrogen in power generation

3. ✗ build supporting infrastructure for hydrogen-based vehicles

4. ✓ increase taxes on non-hydrogen and electric cars

Sub-Section Number:	3
Sub-Section Id:	393211194
Question Shuffling Allowed :	Yes

Question Id : 3932112134 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (111 to 115)



## Cities Are Growing Out Rather than Up

While cities growing vertically through taller buildings are located predominantly in wealthier cities in North America, Europe and East Asia, cities in sub-Saharan Africa and South Asia are growing mainly outward. These cities have the fewest financial resources to manage their growth but are expected to hold more than 2 billion additional people by 2050.

Failure to properly manage expanding land area not only exacerbates urban inequality, it also contributes to greater economic and environmental risk for the city. From Mumbai to Mexico City, it is all-too-common to see crowded slums grow larger and denser next to unaffordable, often vacant, high-rise developments. As municipal service networks fail to keep pace with urban growth, resource-constrained cities tend to react to development trends instead of having land development agencies proactively plan for growth.

Some of the implications of this unmanaged growth include:

**Greater Inequality:** Like Lagos, many cities are already struggling with existing inequalities, inadequate service provision and stretched municipal capacities. Unmanaged land expansion exacerbates these struggles. Lower-income families typically move to a city's periphery in search of affordable housing. Yet the further they get from the city center, the more difficult their lives can become. ..

**Economic Stresses for the City as a Whole:** Research shows that as cities expand outward and population densities decline, the municipal costs of providing public services increase. In Indian and African cities, services like paved roads, drainage and piped water drop off sharply just 5 kilometers (3 miles) from the city.

**Environmental Problems:** Globally, the rate of urban land growth far outpaces population growth. This often comes at a cost to prime agricultural land, ecosystem services and biodiversity, which all contribute to food production and climate resilience. Already, we are seeing some of the fastest-growing urban areas in low-elevation coastal zones, flood plains, biodiversity hotspots and water-stressed areas.

These impacts are compounded by the fact that most outward growth currently underway in Africa and South Asia is unplanned and informal, or in locations where existing urban land use regulations do not apply. Some of this expansion is outside of cities' control, considering natural population increases and people migrating from rural to urban areas in search of economic opportunities. But other challenges are things cities can more proactively manage.

Though a daunting challenge, some cities are already using innovative approaches to prioritize accessibility and manage urban expansion. Cities in Mexico, Brazil and South Africa are directing new development to already well-serviced and connected areas, instead of spreading outwards. Cities in Colombia, South Korea and India have been incrementally adding new land in well-connected and serviced locations by partnering with public utilities and private companies to help with financing. Many cities are also working with communities in informal settlements to create affordable density with more flexible planning standards and upgrading efforts.



## Sub questions

Question Number : 111 Question Id : 3932112135 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The central idea in the passage is that urban expansion needs to:

Options :

- ☐ be properly planned and supported to ensure easier
- 1. ☒ accessibility
- 2. ☐ conform to the pattern set by Europe and the US
- 3. ☐ ensure slums and expensive housing co-exist
- 4. ☐ follow traditional indigenous development patterns

Question Number : 112 Question Id : 3932112136 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The growth of cities in Africa and South Asia is NOT characterised by:

Options :

- ☐ the growth of densely populated slums adjacent to
- 1. ☐ expensive housing
- ☐ a physical expansion city areas rather than upward
- 2. ☐ growth
- ☐ unplanned or informal growth in areas which have no
- 3. ☐ land regulation
- ☐ an expansion in municipal services to serve the
- 4. ☒ growing urban population

Question Number : 113 Question Id : 3932112137 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the second paragraph the writer recommends that governments must:

Options :

- 1. ☐ restrict the inflow of poor migrants into cities

- limit the growth of slums in the vicinity of expensive  
2. ✖ urban property
- plan ahead on providing services to future urban  
3. ✔ populations
- provide more low-cost housing in place of the  
4. ✖ expanding slums

Question Number : 114 Question Id : 3932112138 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

According to the writer, the spread of city areas has  
increased environmental risks by:

Options :

1. ✖ raising air pollution levels above desirable limits
2. ✖ placing stress on ecologically sensitive areas
- increasing traffic congestion in the central business  
3. ✖ areas
- outpacing population growth in most developing  
4. ✔ countries

Question Number : 115 Question Id : 3932112139 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

Some cities are tackling their haphazard urban expansion  
by:

Options :

- developing suburbs to absorb the overflow of  
1. ✖ population
- promoting areas with good accessibility and civic  
2. ✔ services
- incentivizing private companies to build more high-  
3. ✖ rises

financing public transport and services to  
4. ✖ overcrowded locations

**Sub-Section Number:** 4  
**Sub-Section Id:** 393211195  
**Question Shuffling Allowed :** Yes

**Question Id : 3932112140 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No**  
**Question Numbers : (116 to 120)**  
**Question Label : Comprehension**

## Zero

The invention of the zero was a hugely significant mathematical development, one that is fundamental to calculus, which made physics, engineering and much of modern technology possible. But what was it about Indian culture that gave rise to this creation that's so important to modern India – and the modern world?

Indians, unlike people from many other cultures, were already philosophically open to the concept of nothingness. Systems such as yoga were developed to encourage meditation and the emptying of the mind, while both the Buddhist and Hindu religions embrace the concept of nothingness as part of their teachings.

In addition, the nation has long had a fascination with sophisticated mathematics. Early Indian mathematicians were obsessed with giant numbers, counting well into the trillions when the Ancient Greeks stopped at about 10,000. They even had different types of infinity.

Hindu astronomers and mathematicians Aryabhata, born in 476, and Brahmagupta, born in 598, are both popularly believed to have been the first to formally describe the modern decimal place value system and present rules governing the use of the zero symbol. Although Gwalior has long been thought to be the site of the first occurrence of the zero written as a circle, an ancient Indian scroll called the Bhakshali manuscript, which shows a placeholder dot symbol, was recently carbon dated to the 3rd or 4th centuries. It is now considered the earliest recorded occurrence of zero.

Marcus du Sautoy, professor of mathematics at the University of Oxford, is quoted on the university's website as saying, "[T]he creation of zero as a number in its own right, which evolved from the placeholder dot symbol found in the Bhakshali manuscript, was one of the greatest breakthroughs in the history of mathematics. We now know that it was as early as the 3rd Century that mathematicians in India planted the seed of the idea that would later become so fundamental to the modern world. The findings show how vibrant mathematics have been in the Indian sub-continent for centuries."

But equally interesting are the reasons as to why the zero wasn't developed elsewhere. Although the Mayans and Babylonians (and many other civilizations) may have had a concept of zero as a placeholder, the idea is not known to have developed as a number to be used in mathematics anywhere else. One theory is that some cultures had a negative view of the concept of nothingness. For example, there was a time in the early days of Christianity in Europe when religious leaders banned the use of zero because they felt that, since God is in everything, a symbol that represented nothing must be satanic.

So maybe there is something to these connected ideas, to the spiritual wisdom of India that gave rise to meditation and the invention of zero. There's another connected idea, too, which has had a profound effect on the modern world. The concept of zero is essential to a system that's at the basis of modern computing: binary numbers.

Source: (<http://www.bbc.com/travel/story/20180807-how-india-gave-us-the-zero>)



## Sub questions

Question Number : 116 Question Id : 3932112141 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following was NOT benefitted by the invention of the zero?

Options :

1. ✖ the modern decimal system
2. ✖ modern computing
3. ✖ engineering and modern technology
4. ✔ the history of mathematics

Question Number : 117 Question Id : 3932112142 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The main point of the passage is to:

Options :

1. ✔ expound why it was the Indians who first used the zero in mathematics
2. ✖ praise the Indians for the invention of the zero
3. ✖ critique the role of religion in the progress of mathematics
4. ✖ enumerate the importance of the zero to modern mathematics

Question Number : 118 Question Id : 3932112143 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following does the writer NOT attribute to India's invention of the zero?

Options :

1. ✖ Christianity's negative attitude towards the use of the zero
2. ✖ religious restrictions in ancient cultures like the Babylonians



3. ✓ the advanced state of mathematics study in India

the importance of the concept of 'nothingness' in

4. ✗ Indian religions and practices

Question Number : 119 Question Id : 3932112144 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

We can conclude from the passage that the

Options :

zero was developed by the Mayans, but not applied

1. ✗ in mathematics

Babylonians were not as advanced as the Hindus and

2. ✗ Buddhists

ancient Indian mathematicians were most advanced

3. ✓ for their time

Indians were responsible for the invention of modern

4. ✗ computing

Question Number : 120 Question Id : 3932112145 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The importance of the Bhakshali manuscript is that

it

Options :

described how early mathematicians worked with

1. ✗ giant numbers

demonstrated how the zero was the biggest

2. ✗ breakthrough in mathematics

showed how the zero was fundamental to the study

3. ✗ of mathematics

accurately dated the first use of the zero in India as

4. ✓ the third century

## Design

Group Number :	2
Group Id :	39321120
Group Maximum Duration :	90
Group Minimum Duration :	90
Revisit allowed for view? :	No
Revisit allowed for edit? :	No
Break time:	0
Group Marks:	60

## Spatial Ability and Visualization Skills

Section Id :	39321170
Section Number :	1
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	20
Number of Questions to be attempted:	20
Section Marks:	20
Display Number Panel:	Yes
Group All Questions:	No





Sub-Section Number:	1
Sub-Section Id:	393211196
Question Shuffling Allowed :	Yes

Question Number : 121 Question Id : 3932112146 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The Gestalt law of proximity states that \_\_\_\_\_.

Options :


1.  things that are near each other seem to be grouped together
2.  when things appear to be similar to each other we group them together
3.  things are grouped together if they seem to complete some entity
4.  elements that are arranged on a line or curve are perceived to be more related than elements not on the line or curve

Question Number : 122 Question Id : 3932112147 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following types of models fits the explanation 'The more you know, the more you see'?

Options :

1.  Condensed model

2. ☒ Huxley-Lester model

3. ☐ Displaced model

4. ☐ Iconic model

Question Number : 123 Question Id : 3932112148 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

The term 'mnemonic' is related to:

Options :

1. ☐ alternative communication

2. ☐ human project

3. ☒ memory

4. ☐ personal understanding of information

Question Number : 124 Question Id : 3932112149 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

What is another name for 'formal balance'?

Options :

1. ☒ Symmetrical balance

2. ☐ Radial balance

3. ☐ Geometric balance

4. ☐ Informal balance

Question Number : 125 Question Id : 3932112150 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

What is movement?

Options :

1. ☒ The path along which the viewer's eyes move usually to an area of emphasis or focus.

2. ☐ The relationship between objects with respect to size.

3. ☐ The repeated use of similar elements and visual effects.

4. ✖ The combination of different elements of design.

Question Number : 126 Question Id : 3932112151 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The term 'semiotics' is related to:

Options :

1. ✔ sign, symbol and signification
2. ✖ album, photo and print
3. ✖ texture, design and value
4. ✖ software, system and semester

Question Number : 127 Question Id : 3932112152 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Graphic design is a process of:

Options :

1. ✖ typing and editing on a keyboard
2. ✖ writing
3. ✖ using Photoshop and layouts
4. ✔ visual communication

Question Number : 128 Question Id : 3932112153 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following lights have the shortest wavelength?

Options :

1. ✖ Red and blue
2. ✖ Violet and red
3. ✔ Blue and violet
4. ✖ Yellow and orange

Question Number : 129 Question Id : 3932112154 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The negative and positive spaces work with or against each other to produce:

Options :

1. ✖ planning and strategy of gaming
2. ✔ harmony or dynamic tension
3. ✖ nature of brush
4. ✖ price and importance of art work

Question Number : 130 Question Id : 3932112155 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is NOT a theory of visual communication?

Options :

1. ✖ Constructivism
2. ✖ Gestalt theory
3. ✔ Urbane Phillips theory
4. ✖ Ecological theory

Question Number : 131 Question Id : 3932112156 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ theory helps to understand exactly how certain visual cues are noticed and how others are not noticed.

Options :

1. ✔ Constructivism
2. ✖ Ecological
3. ✖ Semiotics
4. ✖ Omniphassism

Question Number : 132 Question Id : 3932112157 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is an orthographic view?

Options :



1. ✖ Symmetry view
2. ✔ Plan view
3. ✖ Perspective view
4. ✖ Linear view

Question Number : 133 Question Id : 3932112158 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The term 'having equal measurement' is related to:

Options :

1. ✖ Orthographic view
2. ✔ Isometric view
3. ✖ Linear view
4. ✖ Presentation of object view

Question Number : 134 Question Id : 3932112159 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The term 'Vanishing point' is related to:

Options :

1. ✖ drawing
2. ✖ design
3. ✔ perspective
4. ✖ photography

Question Number : 135 Question Id : 3932112160 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Select the word that is related to the third word in the same way that the second word relates to the first word.

Photoshop : Raster :: Illustrator : ?

Options :

1. ✔ Vector

2. ✖ Rashtra

3. ✖ Pixel

4. ✖ Bit

Question Number : 136 Question Id : 3932112161 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the size of an A4 paper?

Options :

1. ✖  $200 \times 300$  mm

2. ✔  $210 \times 297$  mm

3. ✖  $300 \times 200$  mm

4. ✖  $400 \times 120$  mm

Question Number : 137 Question Id : 3932112162 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the SI unit of force?

Options :

1. ✖ Kilogram

2. ✔ Newton

3. ✖ Jepson

4. ✖ Millimeter

Question Number : 138 Question Id : 3932112163 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the correct full form of CGS?

Options :

1. ✔ Centimetre gram second

2. ✖ Centre of gravity services

3. ✖ Common guard supply

4. ✖ Concept of gram solution

Question Number : 139 Question Id : 3932112164 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is a session tracking method?

Options :

1. ✖ Bending

2. ✖ History

3. ✔ Cookies

4. ✖ Word

Question Number : 140 Question Id : 3932112165 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The Data Patterns tab in the BMC software allows you to \_\_\_\_\_ data patterns.

Options :

1. ✖ restore

2. ✔ configure

3. ✖ jump

4. ✖ code

Observation and Problem Solving

Section Id :	39321171
Section Number :	2
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	20
Number of Questions to be attempted:	20
Section Marks:	20
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	393211197
Question Shuffling Allowed :	Yes

Question Number : 141 Question Id : 3932112166 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the below software has a built-in face recognition system?

Options :

1. ✖ Low pro photo organizer
2. ✖ Alpha photo's organizer
3. ✖ Partial reflection camera
4. ✔ Google's Picasa digital image organizer

Question Number : 142 Question Id : 3932112167 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following Windows systems provides good support for Adobe 64-bit?

Options :

1. ✖ 32 bit
2. ✖ 64 bit CALCA
3. ✔ 64 bit
4. ✖ 32 bit OCTA

Question Number : 143 Question Id : 3932112168 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the correct full form of VoLTE?

Options :

1. ✔ Voice over Long Term Evolution
2. ✖ Verity only Life Term Evolution
3. ✖ Vesco oscar Tissue of Energy
4. ✖ Viscosity of Temporary Energy

Question Number : 144 Question Id : 3932112169 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is the world's first cellular system to specify digital modulation and network-level architecture?

Options :

1. ✖ MADCA

2. ✖ AMDP

3. ✖ CDMA

4. ✔ GSM

Question Number : 145 Question Id : 3932112170 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A maquette is:

Options :

1. ✖ 2D

2. ✔ 3D

3. ✖ Depth of photography

4. ✖ Bold line of light

Question Number : 146 Question Id : 3932112171 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the images in the options will be formed with the below images?



Options :



1. ✖

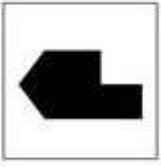


2. ✔



3. ✖





4. ✖

Question Number : 147 Question Id : 3932112172 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In creative process, the preparation stage is where we prepare our \_\_\_\_\_ to begin the journey towards the creation of a new thing.

Options :

1. ✖ typography

2. ✖ sample

3. ✖ design

4. ✔ brain

Question Number : 148 Question Id : 3932112173 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Who wrote the book 'The Art of Thought'?

Options :

1. ✔ Graham Wallas

2. ✖ Gomes Philipppines

3. ✖ George Liken

4. ✖ David Ogilvy

Question Number : 149 Question Id : 3932112174 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Who among the following came up with the concept of the four stages of creativity?

Options :

1. ✖ Albert Redo

2. ✖ Graham Fernandez

3. ✖ Gomes Philipppines

4. ✓ Graham Wallas

Question Number : 150 Question Id : 3932112175 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is the correct order of the stages of creativity?

Options :

1. ✓ Preparation, Incubation, Illumination and Verification
2. ✗ Incubation, Illumination, Verification and Preparation
3. ✗ Curation, Illustration and Formation
4. ✗ Illumination, Verification and Verification

Question Number : 151 Question Id : 3932112176 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following approaches is opposite to the 'top - down' approach?

Options :

1. ✗ Bottom - centre
2. ✓ Bottom - top
3. ✗ Bottom - right
4. ✗ Bottom - left

Question Number : 152 Question Id : 3932112177 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The 'top - down' approach in design is related to:

Options :

1. ✗ jumbled words for design
2. ✗ negative design in architecture
3. ✓ product design
4. ✗ typography design

Question Number : 153 Question Id : 3932112178 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If there is too much text or large text in the design, then it is said to be:

Options :

1. ✖ Image and text
2. ✔ Text dominated
3. ✖ Text alignment
4. ✖ Text column

Question Number : 154 Question Id : 3932112179 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following shots is the best example of rule of thirds?

Options :



Question Number : 155 Question Id : 3932112180 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is hue?

Options :

1. ☒ The actual colour
2. ☐ The actual intensity of design
3. ☐ The rational level of tone
4. ☐ The process of colour

Question Number : 156 Question Id : 3932112181 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If 1 inch = 72 points, then 1 point = ?

Options :

1. ☒ 0.353 mm
2. ☐ 1.09 mm
3. ☐ 0.300 mm
4. ☐ 1.19 mm

Question Number : 157 Question Id : 3932112182 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Serif fonts are known for their \_\_\_\_\_.

Options :

1. ☐ attraction
2. ☐ cursiveness
3. ☐ style
4. ☒ readability

Question Number : 158 Question Id : 3932112183 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following design types is present on the feathers of a peacock?

Options :

1. ☒ Patterned

2. ✖ Linguistic
3. ✖ Kerning
4. ✖ Movement

Question Number : 159 Question Id : 3932112184 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

In design language, the word 'problem' indicates:

Options :

1. ✖ the layout process
2. ✖ tension of the designer
3. ✔ the requirement of a client
4. ✖ the technical error in design

Question Number : 160 Question Id : 3932112185 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0

Which of the following systems divides the page into vertical and horizontal sections of equal size?

Options :

1. ✖ Design system
2. ✔ Grid system
3. ✖ Printing space
4. ✖ Typography system

#### General Awareness and Design Sensibility

Section Id :	39321172
Section Number :	3
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	20
Number of Questions to be attempted:	20
Section Marks:	20
Display Number Panel:	Yes
Group All Questions:	No



Sub-Section Number: 1  
Sub-Section Id: 393211198  
Question Shuffling Allowed : Yes

Question Number : 161 Question Id : 3932112186 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

'Bagasse' is the residual pulp from \_\_\_\_\_. It is used in the manufacture of particle boards as low-cost construction material and for the furniture industry.

Options :

1. ☒ sugarcane
2. ☐ pineapple
3. ☐ bamboo
4. ☐ wheat

Question Number : 162 Question Id : 3932112187 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ design meets the needs of the present without compromising the ability of future generations to meet their own needs.

Options :

1. ☐ Containable
2. ☒ Sustainable
3. ☐ Changeable
4. ☐ Amenable

Question Number : 163 Question Id : 3932112188 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following activities would make your product design more environment friendly?

Options :

1. ☐ Increase the amount of material needed through part design
2. ☐ Use virgin material wherever possible
3. ☒ Source more material locally

4. ✖ Make complex packaging from outsourced material

Question Number : 164 Question Id : 3932112189 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Identify the stage within the five-stage design thinking process where the designer conducts research to develop a deeper understanding of users.

Options :

1. ✖ Prototype

2. ✖ Define

3. ✖ Ideate

4. ✔ Empathise

Question Number : 165 Question Id : 3932112190 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ are based heavily on user or user group behaviour patterns and are defined by studying patterns of action during an experience.

Options :

1. ✔ Archetypes

2. ✖ Apotheosis

3. ✖ Assimilations

4. ✖ Amalgamations

Question Number : 166 Question Id : 3932112191 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What type of user interface design provides the best accessibility for the visually impaired?

Options :

1. ✖ Graphic User Interface

2. ✔ Voice User Interface

3. ✖ Command Line Interface

4. ✖ Menu Driven Interface

Question Number : 167 Question Id : 3932112192 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

When user is able to understand and use a design without consciously thinking about how to do it, regardless of the user's experience and knowledge, it is called \_\_\_\_\_.

Options :

1. ✖ Reasonable
2. ✖ Perceptive
3. ✔ Intuitive
4. ✖ Equitable

Question Number : 168 Question Id : 3932112193 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In which of the following kinds of design are products, services and environments designed keeping in mind the needs of the widest number of consumers?

Options :

1. ✖ Independent Design
2. ✖ Interchange Design
3. ✖ Realistic Design
4. ✔ Inclusive Design

Question Number : 169 Question Id : 3932112194 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A spoon called S'up designed to reduce spillage, promote social interaction and make a wider range of food accessible for those with cerebral palsy is an example of:

Options :

1. ✔ Inclusive Design
2. ✖ Equitable Design
3. ✖ Intuitive Design
4. ✖ Informative Design

Question Number : 170 Question Id : 3932112195 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A user interface is said to have good design when it provides good \_\_\_\_\_ outdoors, which enhances readability and lessens the impact of bright sunshine on the device.

Options :

1. ✖ similarity
2. ✔ contrast
3. ✖ correlation
4. ✖ unification

Question Number : 171 Question Id : 3932112196 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

To achieve width responsiveness when the browser is between 0 px and 640 px wide, which of the following CSS rules should be applied?

Options :

1. ✖ variable-640px.css
2. ✖ min-640px.css
3. ✔ max-640px.css
4. ✖ critical-640px.css

Question Number : 172 Question Id : 3932112197 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A device or program that is designed to be used for multiple purposes follows which principle?

Options :

1. ✖ Responsive
2. ✖ Comparable
3. ✖ Irrevocable
4. ✔ Flexible

Question Number : 173 Question Id : 3932112198 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

When a product designer offers more than one solution to help balance everyone's needs and recognises that one solution may not work for all, he is demonstrating \_\_\_\_\_ principle.

Options :

1. ☒ realistic
2. ☐ convenient
3. ☐ welcoming
4. ☐ suitable

Question Number : 174 Question Id : 3932112199 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

When an image is presented as a work of art, the way people look at it is affected mainly by \_\_\_\_\_.

Options :

1. ☐ reversible proportions
2. ☒ learnt assumptions
3. ☐ sustainable values
4. ☐ neutral schemes

Question Number : 175 Question Id : 3932112200 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In visual culture, \_\_\_\_\_ refers to ideas, ideals, beliefs and values.

Options :

1. ☐ Intertextuality
2. ☐ Multimodality
3. ☒ Ideology
4. ☐ Representation

Question Number : 176 Question Id : 3932112201 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In visual culture, how we look at imagery and the circumstances under which we look at an image is technically known as \_\_\_\_\_.

Options :

1. ☐ Gawping



2. ✖ Gawking

3. ✖ Gaping

4. ✔ Gazing

Question Number : 177 Question Id : 3932112202 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

\_\_\_\_\_ is one of the most important art movements of the 20th century developed by Pablo Picasso and Georges Braque in the early 1900s.

Options :

1. ✔ Cubism

2. ✖ Impressionism

3. ✖ Realism

4. ✖ Surrealism

Question Number : 178 Question Id : 3932112203 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Jackson Pollock was a leader of which of the following art movements?

Options :

1. ✖ Installation

2. ✔ Abstract Expressionism

3. ✖ Kinetic Art

4. ✖ Photorealism

Question Number : 179 Question Id : 3932112204 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Who painted the famous 'Mona Lisa'?

Options :

1. ✖ Michelangelo

2. ✖ Albrecht Dürer

3. ✓ Leonardo da Vinci

4. ✗ Rembrandt

Question Number : 180 Question Id : 3932112205 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes  
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The painting by Michelangelo of the \_\_\_\_\_ is one of the most famous frescoes in the world.

Options :

1. ✗ Hare

2. ✗ Water Lily

3. ✗ Garden at Giverny

4. ✓ Sistine Chapel ceiling