Section : Analytical & Logical Reasoning

DIRECTIONS for the question: Solve the following question and mark the most appropriate option.

Question No. : 1

Which of the following should be placed in the blank spaces respectively (in the same order from left to right) in order to complete the given expression in such a manner that both 'S > P' as well as 'A£ E' definitely hold true?

S_H_A_P_E

 $\checkmark A) \geq_{i} >_{i} =_{i} \leq B) \geq_{i} \geq_{i} =_{i} \leq C) >_{i} \geq_{i} <_{i} \leq D) >_{i} >_{i} \geq_{i} = E) \geq_{i} \geq_{i} \leq_{i} <_{i} <_{$

Explanation: If we put \geq , >, =, \leq in the blank spaces, then we get $S \geq H > A = P \leq E$. So here $S > P \otimes A \leq E$.

DIRECTIONS for the question: In the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer.

Question No. : 2

Statement I: The government has made the rules for the disposal of waste and other chemicals from the industries more stringent to keep a check on pollution level in the atmosphere.

Statement II: Complex reactions of chemicals such as sulphur dioxide and nitrogen oxide emitted from power plants, industries and automobiles escalate the level of particulate matter in the atmosphere.

A) Both statements I and II are effects of independent causes
B) Statement I is the cause and statement II is its effect
C) Both statements I and II are independent causes.
D) Both statements I and II are effects of their common cause.
✓E) Statement II is the cause and statement I is its effect.

Explanation:- Statement II is the effect of statement I as the government must have been forced to make the rules because of the escalation of particulate matter.

L's sibling is married to J's daughter. K is the wife of J. Q is the brother of J's only son-in-law. P is the only brother of Q. A is the mother of L. M is the only sibling of A's daughter-in-law. Both Q and M are unmarried. V is the nephew of M. A has only three children. L's spouse has no siblings.

If R is the sister-in-law of L, then how is R related to P?

A) Aunt B) Daughter \sqrt{C}) Wife D) Cousin E) Sister-in-law

Explanation:- From the given information we can make the following family tree



If R is the sister-in-law of L, then she will be the wife of P.

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 4

L's sibling is married to J's daughter. K is the wife of J. Q is the brother of J's only son-in-law. P is the only brother of Q. A is the mother of L. M is the only sibling of A's daughter-in-law. Both Q and M are unmarried. V is the nephew of M. A has only three children. L's spouse has no siblings.

How is V related to A?

(A) Grandson B) Husband C) Cannot be determined D) Son-in-law E) Brother-in-law

Explanation:- From the given information we can make the following family tree



DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 5

L's sibling is married to J's daughter. K is the wife of J. Q is the brother of J's only son-in-law. P is the only brother of Q. A is the mother of L. M is the only sibling of A's daughter-in-law. Both Q and M are unmarried. V is the nephew of M. A has only three children. L's spouse has no siblings.

If S is the son of L, then how is S related to Q?

A) Father B) Brother-in-law C) Uncle D) Cousin VE) Nephew

Explanation:- From the given information we can make the following family tree



If S is the son of L, then S will be the nephew of Q

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 6

L's sibling is married to J's daughter. K is the wife of J. Q is the brother of J's only son-in-law. P is the only brother of Q. A is the mother of L. M is the only sibling of A's daughter-in-law. Both Q and M are unmarried. V is the nephew of M. A has only three children. L's spouse has no siblings.

How is K related to M?

A) Sister B) Mother-in-law C) Daughter \sqrt{D} Mother E) Aunt

Explanation:- From the given information we can make the following family tree



Eight boxes namely, A, B, C, D, E, F, G and H are placed from top to bottom not in the same order. They contain different chocolates, such as silk, temptation, fruit and nut, dairy milk, bubbly, milky bar, kit-kat and 5 star-boxes are packed with different colour paper, such as Yellow, Pink, Blue and Green. Exactly two boxes are packed with same colour paper. Consider the top position as 1st position.

1. There is one box between box B and box D and box D is packed with pink paper and both are in the top 4 positions when boxes are arranged from top to bottom.

2. The box containing dairy milk is kept immediately below blue paper packed box and is packed with

same colour paper as E.

3. Box C is kept somewhere between G and H, and H being below C.

4. The two green paper packed boxed are kept vertically adjacent to each other and one of the green paper packed box is immediately under the pink paper packed box.

5. Fruit and nut chocolate is kept exactly between F and the box containing milky bar.

6. H doesn't contain silk chocolate.

- 7. There is one box between box E and box G, and box G is kept immediately below the box containing dairy milk.
- 8. The box containing 5-star chocolate is placed at even numbered place but is not placed at the bottom.
- 9. The yellow paper packed box which is kept at top either contains silk or kit-kat.
- 10. Box E is not packed with green paper.
- 11. F which contains Bubbly is packed with blue paper and among top five.
- 12. The box containing temptation is packed with blue paper.
- 13. C doesn't contain any of silk or 5-star chocolate.

Which of the following boxes is kept immediately above the box containing dairy milk?

A) Box containing bubbly B) Box containing milky bar C) Box containing silk \sqrt{D}) Box containing temptation E) None of the above

Explanation:- From the given information the arrangement is as follows

1	В	Silk	Yellow
2	А	Temptation	Blue
3	D	Dairy Milk	Pink
4	G	5-Star	Yellow
5	F	Bubbly	Blue
6	Е	Fruit and nut	Pink
7	С	Milky bar	Green
8	Н	Kit-Kat	Green

Box containing temptation is kept immediately above the box containing dairy milk.

Eight boxes namely, A, B, C, D, E, F, G and H are placed from top to bottom not in the same order. They contain different chocolates, such as silk, temptation, fruit and nut, dairy milk, bubbly, milky bar, kit-kat and 5 star-boxes are packed with different colour paper, such as Yellow, Pink, Blue and Green. Exactly two boxes are packed with same colour paper. Consider the top position as 1st position.

1. There is one box between box B and box D and box D is packed with pink paper and both are in the top 4 positions when boxes are arranged from top to bottom.

2. The box containing dairy milk is kept immediately below blue paper packed box and is packed with

same colour paper as E.

3. Box C is kept somewhere between G and H, and H being below C.

4. The two green paper packed boxed are kept vertically adjacent to each other and one of the green paper packed box is immediately under the pink paper packed box.

5. Fruit and nut chocolate is kept exactly between F and the box containing milky bar.

6. H doesn't contain silk chocolate.

7. There is one box between box E and box G, and box G is kept immediately below the box containing dairy milk.

8. The box containing 5-star chocolate is placed at even numbered place but is not placed at the bottom.

9. The yellow paper packed box which is kept at top either contains silk or kit-kat.

10. Box E is not packed with green paper.

11. F which contains Bubbly is packed with blue paper and among top five.

12. The box containing temptation is packed with blue paper.

13. C doesn't contain any of silk or 5-star chocolate.

Four of the following five are alike in a certain way based on the given arrangement and hence form a group. Which of the following does not belong to the group?

A) A-Dairy milk B) G-Bubbly \sqrt{C} H-Kit-kat D) B-Temptation E) D-5-Star

Explanation:- From the given information the arrangement is as follows

1	В	Silk	Yellow
2	А	Temptation	Blue
3	D	Dairy Milk	Pink
4	G	5-Star	Yellow
5	F	Bubbly	Blue
6	Е	Fruit and nut	Pink
7	С	Milky bar	Green
8	Н	Kit-Kat	Green

H – Kit-Kat is the correct combination and all other are incorrect.

Which of the following boxes contains fruit and nut?

√A) E B) A C) D D) H E) G

Explanation:- From the given information the arrangement is as follows

1	В	Silk	Yellow
2	А	Temptation	Blue
3	D	Dairy Milk	Pink
4	G	5-Star	Yellow
5	F	Bubbly	Blue
6	Е	Fruit and nut	Pink
7	С	Milky bar	Green
8	Н	Kit-Kat	Green

E contains fruit and nut.

Question No. : 10

What is the position of B in the given stack of boxes?

A) First from the top B) Third from the bottom C) Fifth from the top \checkmark E) second form the top

D) second from the bottom

Explanation:- From the given information the arrangement is as follows

1	В	Silk	Yellow
2	А	Temptation	Blue
3	D	Dairy Milk	Pink
4	G	5-Star	Yellow
5	F	Bubbly	Blue
6	Е	Fruit and nut	Pink
7	С	Milky bar	Green
8	Н	Kit-Kat	Green

B is first from the top.

[Type text]

Question No. : 11

Which of the following represents the contents of box G?

✓A) Temsptation B) 5-Star C) Kit-kat D) Silk E) Bubbly

Explanation:- From the given information the arrangement is as follows

1	В	Silk	Yellow
2	А	Temptation	Blue
3	D	Dairy Milk	Pink
4	G	5-Star	Yellow
5	F	Bubbly	Blue
6	Е	Fruit and nut	Pink
7	С	Milky bar	Green
8	Н	Kit-Kat	Green

Box G contains 5-Star.

Question No. : 12

Which two boxes are packed with pink paper?

A) D and F B) C and H C) B and G \sqrt{D} D and E E) G and C

Explanation:- From the given information the arrangement is as follows

1	В	Silk	Yellow
2	А	Temptation	Blue
3	D	Dairy Milk	Pink
4	G	5-Star	Yellow
5	F	Bubbly	Blue
6	Е	Fruit and nut	Pink
7	С	Milky bar	Green
8	Н	Kit-Kat	Green

D and E are packed with pink paper.

DIRECTION for the question: Read the information given and answer the question that follows.

Question No. : 13

If two objects (or events) are correlated by cause and effect in such a manner that A causes B, it is argued that B also causes A. For example, high debts in a country causes slow growth, therefore slow growth in a country will definitely lead to increase in debts. Which of the following examples DOES NOT fall in line with the condition presented above?

A) Better health leads to higher incomes therefore people with higher incomes definitely have better health.

- B) We never vote because politicians never what our group wants therefore politicians are paying more heed to us in order to make us vote.
- C)Higher the intake of high calorie diet, higher is the risk of coronary heart diseases, therefore people who have coronary heart diseases definitely consume high calorie diets.
- D) Company A generates higher profits in the year in which its client Beets generates higher profits, therefore the company A generates higher profits. Beets will definitely make higher profits as well.
- E) A windmill rotates faster when more wind is observed, therefore more winds will be caused if the windmill is rotating faster.

Explanation:- People who have coronary heart diseases are likely to consume lesser calories as a measure to reduce the risk to their health. Hence statement 3 does not fall in line with the condition.

Question No. : 14

Eight people - P, Q R, S, T, U, V and W were born in different years, viz.

1954,1961,1968,1971,1978,1985, 1989 and 1995 but not necessarily in the same order.

NOTE: (A) All calculations are done with respect to the present year, 2017 assuming the month and date to be same as that of the years of birth as mentioned above.

(B) Each person is assumed to be born on the same date and same month of the respective years. V was born in a year after 1970. R is younger than V. The difference between the present ages of R and T is 24 years. The difference between the present ages of T and W is more than 15 years. W was not born in the year 1989. The year of birth of S is an odd number. P is younger than S. The sum of present ages of P and U is 67 years. P is older than U.

If K is 12 years older than U, what is the present age of K (in years)?

A) 44 B) 28 C) 58 D) 34 🔨 40

Explanation:- From the given information, we can make the following arrangement.

Person	W	S	Q	Т	Р	V	U	R
Year	1954	1961	1968	1971	1978	1985	1989	1995

If K is 12 years older than U, then age of K is 40 years.

DIRECTIONS for the question: Study the following information carefully and answer the given question.

Question No. : 15

Eight people - P, Q R, S, T, U, V and W were born in different years, viz.

1954,1961,1968,1971,1978,1985, 1989 and 1995 but not necessarily in the same order.

NOTE: (A) All calculations are done with respect to the present year, 2017 assuming the month and date to be same as that of the years of birth as mentioned above.

(B) Each person is assumed to be born on the same date and same month of the respective years.

V was born in a year after 1970. R is younger than V. The difference between the present ages of R and T is 24 years. The difference between the present ages of T and W is more than 15 years. W was not born in the year 1989. The year of birth of S is an odd number. P is younger than S. The sum of present ages of P and U is 67 years. P is older than U.

Who amongst the following was born in the year 1968?

√A) Q B) U C) P D) T E) S

Explanation:- From the given information, we can make the following arrangement.

Person	W	S	Q	Т	Р	V	U	R
Year	1954	1961	1968	1971	1978	1985	1989	1995

Q was born in the year 1968

Question No. : 16

Eight people - P, Q R, S, T, U, V and W were born in different years, viz.

1954,1961,1968,1971,1978,1985, 1989 and 1995 but not necessarily in the same order.

NOTE: (A) All calculations are done with respect to the present year, 2017 assuming the month and date to be same as that of the years of birth as mentioned above.

(B) Each person is assumed to be born on the same date and same month of the respective years. V was born in a year after 1970. R is younger than V. The difference between the present ages of R and T is 24 years. The difference between the present ages of T and W is more than 15 years. W was not born in the year 1989. The year of birth of S is an odd number. P is younger than S. The sum of present ages of P and U is 67 years. P is older than U.

Who amongst the following was born in an even numbered year?

A) R B) S C) V D) T √E) P

Explanation:- From the given information, we can make the following arrangement.

Person	W	S	Q	Т	Р	V	U	R
Year	1954	1961	1968	1971	1978	1985	1989	1995

P was born in an even numbered year.

DIRECTIONS for the question: Study the following information carefully and answer the given question.

Question No. : 17

Eight people - P, Q R, S, T, U, V and W were born in different years, viz.

1954,1961,1968,1971,1978,1985, 1989 and 1995 but not necessarily in the same order.

NOTE: (A) All calculations are done with respect to the present year, 2017 assuming the month and date to be same as that of the years of birth as mentioned above.

(B) Each person is assumed to be born on the same date and same month of the respective years. V was born in a year after 1970. R is younger than V. The difference between the present ages of R and T is 24 years. The difference between the present ages of T and W is more than 15 years. W was not born in the year 1989. The year of birth of S is an odd number. P is younger than S. The sum of present ages of P and U is 67 years. P is older than U.

Who amongst the following is older than W?

A) R B) T C) S D) Q \sqrt{E}) No one as W is the oldest

Explanation:- From the given information, we can make the following arrangement.

Person	W	S	Q	Т	Р	V	U	R
Year	1954	1961	1968	1971	1978	1985	1989	1995

No one is older than W.

Question No. : 18

Eight people - P, Q R, S, T, U, V and W were born in different years, viz.

1954,1961,1968,1971,1978,1985, 1989 and 1995 but not necessarily in the same order.

NOTE: (A) All calculations are done with respect to the present year, 2017 assuming the month and date to be same as that of the years of birth as mentioned above.

(B) Each person is assumed to be born on the same date and same month of the respective years. V was born in a year after 1970. R is younger than V. The difference between the present ages of R and T is 24 years. The difference between the present ages of T and W is more than 15 years. W was not born in the year 1989. The year of birth of S is an odd number. P is younger than S. The sum of present ages of P and U is 67 years. P is older than U.

What is the sum of present ages of T and W (in years)?

A) 113 B) 78 C) 95 D) 71 🗸 E) 109

Explanation:- From the given information, we can make the following arrangement.

Person	W	S	Q	Т	Р	V	U	R
Year	1954	1961	1968	1971	1978	1985	1989	1995

The sum of ages of T and W = 46 + 63 = 109 years

DIRECTIONS for the question: After a few statements, conclusion/conclusions is/are given. Mark your answer as

Question No. : 19

Decision: Company X decided to issue 1,00,000 additional equity shares three months after it had issued equity shares in the market

I. Company X lacks money to fund the new project it had started three months ago in collaboration with company Y. II. The equity market in which Company X has issued its additional shares is going down due to recession in the economy.

A) Both statement I and statement II weaken the decision.

 \sqrt{B}) Statement I strengthens the decision while statement II weakens the decision.

C) Both statement I and statement II strengthen the decision. D) Both statement I and statement II are neutral statements.

E) Statement I weakens the decision while statement II strengthens the decision.

Explanation:- Statement I strengthens the main statement as this could be one of the reasons that company has decided to issue equity. Statement II weakens the main statement as the company will not be able to get the expected gains from the market.

Question No. : 20

L, M, N, O, P, Q and R have to attend a meeting in January, June, October and November months of the same year. In each month, except in January, the meeting will be conducted on only the 15th and 24th of the month. In January, the meeting will be conducted only on the 24th. Not more than two of the given people have a meeting in the same month. Each one of them also likes a different colour- Red, Violet, Pink, Green, Black, Silver and Yellow, but not necessarily in the same order.

N has a meeting on the 24th of a month which has 30 days. Only one person has a meeting between N and the one who likes Pink. The one who likes Pink has a meeting before N. Only two people have a meeting between the one who likes Pink and the one who likes Silver. Both L and the one who likes Silver have a meeting in the same month but not on the same date. M has a meeting after L but not in October. M and L have meetings on different dates. The number of people having a meeting between M and the one who likes Pink is same as that between R and the one who likes Silver. Only one person has a meeting between R and the one who likes violet. No one has a meeting after the one who likes Red. O and the one who likes Red have a meeting on the same date. P has a meeting on one of the days after Q. Neither P nor R likes Yellow. The one who likes Green does not have a meeting in October.

How many people have a meeting after O?

A) One B) Five C) Four D) None \sqrt{E}) Two

Explanation:- From the given information we can make the following arrangement.

Date	Person	Colour
24 January	R	Green
15 June	Q	Silver
24 June	L	Violet
15 October	Ρ	Black
24 October	0	Pink
15 November	М	Yellow
24 November	Ν	Red.

Two people have a meeting after O.

Question No. : 21

As per the given schedule, four of the following five are alike in a certain way and so form a group. Which of the following does not belong to the group?

A) Q-June B) L-Silver C) Yellow-November \sqrt{D} M-Violet E) O-P

Explanation:- From the given information we can make the following arrangement.

Date	Person Colour	
24 January	R	Green
15 June	Q	Silver
24 June	L	Violet
15 October	Р	Black
24 October	0	Pink
15 November	М	Yellow
24 November	Ν	Red.

M and The one who likes violet have meetings in different month. All others have meetings in the same month.

[Type text]

Question No. : 22

How many people have a meeting between P and the one who likes Yellow?

A) Two \sqrt{B}) One C) Three D) More than three E) None

Explanation:- From the given information we can make the following arrangement.

Date	Person	Colour
24 January	R	Green
15 June	Q	Silver
24 June	L	Violet
15 October	Ρ	Black
24 October	0	Pink
15 November	М	Yellow
24 November	Ν	Red.

Only one person have a meeting between P and the one who likes yellow

Question No. : 23

Which colour does P like?

A) Red (S) Black C) Pink D) Silver E) Green

Explanation:- From the given information we can make the following arrangement.

Date	Person Colour	
24 January	R	Green
15 June	Q	Silver
24 June	L	Violet
15 October	Р	Black
24 October	0	Pink
15 November	М	Yellow
24 November	Ν	Red.

P likes black colour

Which of the following statements is true as per the given schedule?

A) M has a meeting on 24th November B) R likes Pink C) None of the given statements is true D) P has a meeting after M \checkmark E) The one who likes Pink has a meeting in October

Explanation:- From the given information we can make the following arrangement.

Date	Person	Colour
24 January	R	Green
15 June	Q	Silver
24 June	L	Violet
15 October	Ρ	Black
24 October	0	Pink
15 November	М	Yellow
24 November	Ν	Red.

O likes pink and he has a meeting in October

Question No. : 25

When does R have a meeting?

A) 11thOctober B) 15th June C) 24th October D) 15thNovember \sqrt{E}) 24th January

Explanation:- From the given information we can make the following arrangement.

Date	Person Colour	
24 January	R	Green
15 June	Q	Silver
24 June	L	Violet
15 October	Р	Black
24 October	0	Pink
15 November	М	Yellow
24 November	Ν	Red.

R has a meeting on 24th January

Section : Abstract Reasoning

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 1

Problem Figures



Explanation:- Here, two patterns are going consecutively. Figure a, c, e, b and d make pattern. Hence, option figure (c) is the correct answer.

Question No 2

:Problem Figures



Explanation:- The half arrow in the middle moves 90° anti-clockwise. The line and L moves anti-clockwise alternately.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 3

Problem Figures



Explanation:-

In one step, the first and second symbols (counting is CW direction) interchange positions and in the next step, the first and the third symbols interchange positions. This goes on alternately. The remaining symbol moves to the vacant position and gets replaced by a new symbol in each step.

Question No. : 4

Problem Figures



Explanation:- (In every figure, symbols get replaced by a new one and they rotate in the following manner.



DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 5

Problem Figures



Explanation:- The 'circle' moves 45° clockwise and is replaced by a new symbol in every alternate figure. The 'equal' sign moves 135° clockwise, gets replaced by a new symbol and appears in every alternate figure.

Question No. 6

Problem Figures



Explanation:- Here, in each figure one line, two lines and then three lines are added.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 7

Problem Figures



Explanation:- All the arrows are pointing in four different directions.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. 8

Problem Figures



Explanation:- The figure rotates 45°, 90° and 135° clockwise, gets laterally invested and a new arc is added in each step.

Question No. 9:

Problem Figures



Explanation:- The arrow moves one step, two step and so on in each figure. Also, the arrow rotates 90° and 180° anti-clockwise alternately.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 10

Problem Figures



Explanation: All the symbols move 45° clockwise and a new symbol is added in each step.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No 11. :

Problem Figures



Explanation:- The arrow moves one step, two steps, three steps and so on in anti-clockwise direction and gets laterally inverted. (The degree is increasing in each step as 45°, 90°, 135°, 180°, ...)

Question No 12. :

Problem Figures



Explanation:- The figure gets laterally inverted and one line and two lines are added alternately.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. 13 :

Problem Figures



Explanation:- Both the elements move to the adjacent side in a clockwise direction. The half arrow rotates 90° anti-clockwise. The semi-circular element rotates 90° anti-clockwise and gets laterally inverted.

Question No. 14:

Problem Figures



Explanation:- Here, the symbols move in the following pattern :



Also, element Y interchanges its position with the next element and the remaining third element gets inverted in each step.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. 15 :

Problem Figures



Explanation:- Here, the figure, moves in anticlockwise direction at an angle of 45°, then 90°, 135° and then again 45°. Also, a line is added in each step in clockwise direction.

DIRECTIONS for the questions: The second figure in the first unit of the problem figures bears a certain relationship to the first figure. Similarly one of the figures in the answer figures bears the same relationship to the first figure in the second unit of the problem figures. You are therefore to locate the figure which would fit in the question mark.

Question No. 16 :

Problem Figures



Explanation:- From I figure to II figure, each element changes its position is the following manner.

(i) The element in the bottom left corner goes up and gets vertically inverted.

(ii) The element in the top left corner comes down and its side increases by 1.

(iii) The element in the top right corner comes down and gets horizontally inverted.

(iv) A new element is added in the top right corner.

DIRECTIONS for the questions: The second figure in the first unit of the problem figures bears a certain relationship to the first figure. Similarly one of the figures in the answer figures bears the same relationship to the first figure in the second unit of the problem figures. You are therefore to locate the figure which would fit in the question mark.

Question No. 17:

Problem Figures



Explanation:- Here, all the element gets vertically inverted. Also, the row of elements comes down to bottom right corner.

DIRECTIONS for the questions: The second figure in the first unit of the problem figures bears a certain relationship to the first figure. Similarly one of the figures in the answer figures bears the same relationship to the first figure in the second unit of the problem figures. You are therefore to locate the figure which would fit in the question mark.

Question No.18 :

Problem Figures



Explanation:-

Here, the pattern is Also, two new elements are added in top left and bottom left corners. Hence, option figure (d) is the correct answer.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 19

Problem Figures



Explanation:- Here only the top right and bottom left lines get inverted.

DIRECTIONS for the questions: The second figure in the first unit of the problem figures bears a certain relationship to the first figure. Similarly one of the figures in the answer figures bears the same relationship to the first figure in the second unit of the problem figures. You are therefore to locate the figure which would fit in the question mark.

Question No. : 20

Problem Figures



Explanation:- Here, each element rotates 90° clockwise. Now, observe the inversion of each element separately.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 21



Explanation:- Here, the first element gets vertically inverted and the half arrow moves 180° clockwise. Also, the second element gets vertically and horizontally inverted. Among the given figures, only option figure (b) follows the similar pattern.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 22



Explanation:- Here, the right half of the element is removed. Also, shaded portion gets unshaded and vice-versa. Among the given figures, only option figure (c) follows the similar pattern.

Question No. : 23



Explanation:- Here, the figure gets rotated 90° anti-clockwise. Also, the element changes their position in clockwise manner as follows:



Among the given figure, only option figure (5) follows the same pattern.

DIRECTIONS for the question: In the question given below which one of the answer figures should come after the problem figures given, if the sequence were continued?

Question No. : 24



Here, the pattern of rotation of element is as follows Among, the given figures, only option figure (5) follows the similar pattern.

Question No. : 25



Explanation:- Here, the line rotates 90° anti-clockwise and top and bottom elements interchange their positions. Among, the given figures, only option figure (4) follows the similar pattern.

Section : Verbal Usage & Reading Comprehension

Question No. : 1

Last year was supposed to bring faster economic growth and a good monsoon that would end the miseries of two back-toback years of drought. That complacency gave way to the sober realisation that optimism doesn't wait for facts.

A. Optimism will wait for facts is established

- B. Despite last year being successful
- C. It was believed that last year

A) Only A B) Both A & C C) Both A & B 🗸 D) Only C E) None

Explanation:- Only C option talks about the last year and if used would portray the same meaning as the first line of the sentence.

DIRECTIONS for the question: In the sentence provided a part of the sentence is underlined. Beneath the sentence, four/five different ways of paraphrasing the underlined part are indicated. Choose the best alternative amongst the four/five.

Question No. : 2

Over five crore citizens suffered from depression, a major contributor to global suicides which occurs mainly in low-and middleincome countries. Over three crore others suffered from anxiety disorders.

A. Because a major contributor to global suicides occurs

- B. In addition to over five crore citizens
- C. Ever since over three crore citizens suffer

A) Only A B) Both A & C C) Both A & B D) Only B VE) None

Explanation:- Statement tells us that Depression is the major contributor to global suicides. None of the option states the same. Option A does not mention about depression being the major contributor

DIRECTIONS for the question: In the sentence provided a part of the sentence is underlined. Beneath the sentence, four/five different ways of paraphrasing the underlined part are indicated. Choose the best alternative amongst the four/five.

Question No. : 3

Expectation of the buyer is different in different geographies. Companies must understand the psyche of the buyer and then come up with a product based on what they need.

A. Even if buyers understand the psyche ofB. While coming up with a productC. When expectation of the buyer is

✓A) Both B and C B) Both A and C C) Both A & B D) Only B E) None

Explanation:- Option A cannot be the starter as it talks about the psyche of the buyers and the same is mentioned in the second line of the statement. Option B is correct as it talks about the product whose expectation is different in different geographies. Option C too talks about the expectation, so it can definitely be used as the first line of the statement.

DIRECTIONS for the question: In the sentence provided a part of the sentence is underlined. Beneath the sentence, four/five different ways of paraphrasing the underlined part are indicated. Choose the best alternative amongst the four/five.

Question No. : 4

Migration to urban areas is a worldwide phenomenon. Currently thirty-two percent of the population live in urban areas in another five years, it is estimated to grow to thirty-eight percent.

A. Even though thirty-two percent of the population

B. When it is estimated that the population growth

C. Urban areas are saturated with worldwide

A) Only A B) Both A and C C) Both A & B D) Only B VE) None

Explanation: None of the options state the same meaning reagrding migration being a worldwide phenomenon.

DIRECTIONS for the question: In the sentence provided a part of the sentence is underlined. Beneath the sentence, four/five different ways of paraphrasing the underlined part are indicated. Choose the best alternative amongst the four/five.

Question No. : 5

Laws to protect the privacy and financial details of people using electronic payments are on the cards. The move, aimed at preventing data theft, comes in the wake of a surge in phone banking and electronic payments.

A. In the wake of a surge in phone banking

B. Preventing data theft is not a priority

C. In order to protect financial details

A) Only A S) Both A and C C) Both A & B D) Only B E) None

Explanation:- Statement states that laws to protect the privacy of people using e-cards are being made; Both Options A & C are good starters.

DIRECTIONS for the question: In the question below a sentence with four words printed in **bold** type is given. These are numbered as (A), (B), (C) and (D). One of these four words printed **in bold** may be either wrongly spelt or inappropriate in the correct in the context of the sentence. Find out the word, which is wrongly spelt or is inappropriate, if any. The number of that word is your answer. If all the words printed **in bold** are correctly spelt and also appropriate in the correct of the sentence, mark (E) i.e. 'All Correct' as your answer.

Question No. : 6

The first satellites launched five years ago, could send off pictures of just 3,000 square kilometres a day, but the satellites have followed a trajectory of improving more closer to that seem in cell phones and the latest satellites can be covered 2.5 million square kilometres a day.

A. can send- advancement close- can report on B. could send back- improvement similar- can cover

C. would send- improvement skin- are covering

A) Only (B) & (C) B) All (A), (B) & (C) C) Only (A) & (B) D) Only (C) E) No correction required

Explanation:- We are talking about 5 years ago, So option A is incorrect as it is in present tense. Option B & C both are suitable to be used in the statement.

DIRECTIONS for the question: In the given paragraph, the last line has been deleted. Choose the option that logically follows the paragraph.

Question No. : 7

Italy's fragmented banking industry is consolidating. The resolution in November 2015 of four tiny banks, in which bondholders were bailed in, caused uproar. Now UBI Banca, the fifth-largest lender hopes to buy three of the four "good" residual banks for $\in 1.$ (_____). Another is on the horizon, of two Venetian banks. Analysts at Credit Service suggest that the government's $\in 20$ billion fund should suffice to plug any remaining capital gaps. All this is necessary-but not sufficient.

A) Carved, a ratings agency, predict that by 2018, bad loans will always be back to their pre-crisis level-although

 \sqrt{B}) A merger finalised on January 1stcreated Banca BPM, now Italy's third largest bank.

C) All this is necessary- but not sufficient- the vicious cycle will be hard to break.

D) The finance minister says, the banking system is turning a page and he is yet to be proved right.

E) All the given options fit.

Explanation:- The word "another" after the blank is the clue that suggests something has happened before which we can locate in option (2).

DIRECTIONS for the question: Read the passage and answer the question based on it.

Question No. : 8

The need for regulation to protect the environment gets widespread but grudging acceptance: widespread because everyone wants a liveable planet, grudging because of the lingering belief that environmental regulations erode competitiveness. The prevailing view is that there is an inherent and fixed trade-off: ecology versus the economy. On one side of the trade-off are the *social* benefits that arise from strict environmental standards. On the other are industry's *private* costs for prevention and cleanup—costs that lead to higher prices and reduced competitiveness. With the argument framed this way, progress on environmental quality has become a kind of arm-wrestling match. One side pushes for tougher standards; the other tries to roll them back. The balance of power shifts one way or the other depending on the prevailing political winds.

This static view of environmental regulation, in which everything except regulation is held constant, is incorrect. If technology, products, processes, and customer needs were all fixed, the conclusion that regulation must raise costs would be inevitable. But companies operate in the real world of dynamic competition, not in the static world of much economic theory. They are constantly finding innovative solutions to pressures of all sorts—from competitors, customers, and regulators.

Properly designed environmental standards can trigger innovations that lower the total cost of a product or improve its value. Such innovations allow companies to use a range of inputs more productively—from raw materials to energy to labor—thus offsetting the costs of improving environmental impact and ending the stalemate. Ultimately, this enhanced *resource productivity* makes companies more competitive, not less.

Consider how the Dutch flower industry has responded to its environmental problems. Intense cultivation of flowers in small areas was contaminating the soil and groundwater with pesticides, herbicides, and fertilizers. Facing increasingly strict regulation on the release of chemicals, the Dutch understood that the only effective way to address the problem would be to develop a closed-loop system. In advanced Dutch greenhouses, flowers now grow in water and rock wool, not in soil. This lowers the risk of infestation, reducing the need for fertilizers and pesticides, which are delivered in water that circulates and is reused. The tightly monitored closed-loop system also reduces variation in growing conditions, thus improving product quality. Handling costs have gone down because the flowers are cultivated on specially designed platforms. In addressing the environmental problem, then, the Dutch have innovated in ways that have raised the productivity with which they use many of the resources involved in growing flowers. The net result is not only dramatically lower environmental impact but also lower costs, better product quality, and enhanced global competitiveness.

This example illustrates why the debate about the relationship between competitiveness and the environment has been framed incorrectly. Policy makers, business leaders, and environmentalists have focused on the static cost impacts of environmental regulation and have ignored the more important offsetting productivity benefits from innovation. As a result, they have acted too often in ways that unnecessarily drive up costs and slow down progress on environmental issues. This static mind-set has thus created a self-fulfilling prophecy leading to ever more costly environmental regulation. Regulators tend to set regulations in ways that deter innovation. Companies, in turn, oppose and delay regulations instead of innovating to address them. The whole process has spawned an industry of litigators and consultants that drains resources away from real solutions.

Which of the following is/are not true in the context of the passage?

- 1. Following advanced technologies, successful access Europe, has helped the Dutch flower industry boom.
- 2. Having a static view of environmental regulation is not desirable
- 3. There exist disagreements among shareholders with respect to the regulation to protect the environment.

A) Only A B) Both A and C C) Only B \sqrt{D} Only C E) All the given options are true

Explanation:- Option C is incorrect. In the last few lines, author states that the disagreements happen but nothing is mentioned about the shareholders.

Question No. : 9

The author in the given passage _____

A) is Dutch \sqrt{B} encourage policymakers and stakeholders to innovate

- C) is pessimistic about the outlook people have towards environment protection
- D) encourages forest to adopt the closed-loop system for all crops
- E) is contented with the present governments for playing their role efficiently

Explanation:- The passage has motivational connotation so option (b) is appropriate.

Which of the following correctly explains the meaning of the phrase 'ending the stalemate' as used In terms of innovation in the passage?

A) dependent on technological advancements \sqrt{B}) resolves a deadlock C) depletes resources D) adversely affects the environment E) curbs innovation

Explanation:- Statement means a draw kind of situation; So option B is correct as it says resolving a deadlock which means the same as its meaning.

Question No. : 11

Which of the following is most nearly the opposite in meaning as the word **TRIGGER**' as used in the passage?

A) support B) Affect \checkmark C) Prevent D) Switch E) Illicit

Explanation:- Refer para 3, line 1where trigger means to start and opposite is prevent.

Question No. : 12

Which of the following is most nearly the same in meaning as the word **SPAWNED** as used in the passage?

✓A) Created B) Mounted C) Issued D) Spared E) Destroyed

Explanation:- Refer last line in last para and contextual meaning of spawned is to create.

Question No. : 13

An mentioned in the passage, the need for regulation to protect the environment

A. exists in different intensities among the stakeholders.

B. is affected by political pressures.

C. always forms out to be an expensive affair.

A) Only A B) Both A and C C) Both A and B \sqrt{D}) Only C E) Both B and C

Explanation:- Refer 4th and 5th line of para 1.

Question No. : 14

Which of the following is a suitable title for the passage?

A) Stringent Environmental Regulations- A Must For Supporting the Economy

B) *Green and*Competitive- Accommodating Two Sweets at*One*Sheath C) Innovation in Agriculture Across the World D) Environmental Policies- Effective Only on Paper E) All those given as options

Explanation:- Option B is most appropriate. As it talks about the environment and the related competition together in one passage

Question No. : 15

As mentioned in the passage, companies can gain a competitive edge if _____

A. there exists a team of experts responsible for implementing practices having a history of success.

B. the environment is devoid of competition.

C. there is thoughtful utilisation of resources.

A) Only A B) Both A and C C) Only B \sqrt{D} Only C E) None

Explanation:- Refer 3rd para last line.

DIRECTIONS for the question: In the given paragraph, the last line has been deleted. Choose the option that logically follows the paragraph.

Question No. : 16

Work smarter, not harder: It is one of the more irritating things a book can tell you. But at the macroeconomic level, it is important Growth can come from having more labour (recruiting more workers, or making existing employees work for longer hours), more capital, or from using that labour and capital more effectively- something known as total factor productivity (TFP). This can come from the kind of brilliant innovations devised by Thomas Edison. (____)

- A) This shows that at the global level, total factor productivity fell last year, was flat the two years before, and has barely budged since 2007.
- B) It could also come from the less-heralded but equally important improvements such as the adoption of the moving conveyor belt to speed up assembly work.
- \checkmark C) Whatever the reason, economic growth did not rebound until productivity perked up,
- D) A recovery has been underway for a while.
- E) Others might counter that the full benefits of new technology are not reflected in the data

Explanation:- Option C is most appropriate as it mentions increase in productivity with increase in growth.

DIRECTIONS for the question: In the given paragraph, the last line has been deleted. Choose the option that logically follows the paragraph.

Question No. : 17

(_____). Rising prosperity in the region means the cost of manual work, outsourced to the region is rising. Labour shortages loom. Certain jobs require craft skills which are becoming rarer. From the first sketch of a completely new pair of trainers to making and testing prototypes, ordering materials, sending samples back and forth, rebooting a factory, working up production and eventually shipping the finished goods to the shops can take the industry as long as 18 months.

A) Currently, trainers (shoes) are made mostly by hand in giant factories, often in Asian countries, with people assembling components or shaping, bonding and sewing materials.

✓B) In Asia wealth is rising.

C) Many people now have the wherewithal to avoid tasks that are thought of as manual and monstrous.

D) The company will use robots and novel production techniques such as 3D printing to reinvent its manufacturing process.

E) All the given options fit.

Explanation:- Rising prosperity is complementary to option B i.e. " in Asia wealth is rising"

DIRECTIONS for the question: In the given paragraph, the last line has been deleted. Choose the option that logically follows the paragraph.

Question No. : 18

(____). By 2022 more than 4.5 million are expected every year- about the same as the country's resident population. Tourism has overtaken dairy produce as the biggest export, helped by a large In the number of visitors from China. They are seen to experience the natural beauty promised by the country's "100% pure New Zealand" advertising campaign and shown off in the film adaptations of "The Lord of the Rings" and 'The Hobbit", which were shot in New Zealand's breathtaking wilderness.

✓A) In 2016 New Zealand hosted 3.5 million tourists from overseas.

B) Tourists already contribute around NZ \$1.1 billion through the country's 15 percent sales tax.

C) It would be difficult to prevent tourists from sneaking around the toll booths.

D) Many New Zealanders foresee a huge influx of foreigners who have been seeking to four national parks.

E) All the given options fit.

Explanation:- Some comparison about the time period is made so option A is appropriate.

DIRECTIONS for the question: Which of the phrases (A), (B), (C) and (D) given below should replace the phrase given in bold the following sentence to make the sentence grammatically meaningful and correct?

Question No. : 19

Which of these sentences is/are correct?

A. The spokesperson announced that a female police officer would be the next Commissioner of the police force.

B. Wounds made by words are hard to hear.

C. The film depicts an inspirational story of a young tribal girl who dreams of climbing Mount Everest.

D. The captives used this woollen sticks to write on the internal side of envelopes.

A) Only B B) Only B, C and D C) Only A and D \sqrt{D}) Only A and C E) All are correct

Explanation:- Option A & C are correct. Option B will have 'heal' instead of 'hear'. Option D will have 'these' instead of 'this'

DIRECTIONS for the question: Which of the phrases (A), (B), (C) and (D) given below should replace the phrase given in bold the following sentence to make the sentence grammatically meaningful and correct?

Question No. : 20

Which of these sentences is/are incorrect?

- A. What is bred in the bone will not wear out of the flesh.
- B. He was so annoyed on been contradicted.
- C. It is not for such as they, to dictate us.

D. There never had arise a great man who has not been misunderstood.

A) Only C B) Only B, C and D \checkmark C) Only B and C D) Only A and D E) Only D

Explanation:- In option A it should be 'will come out' instead of 'will not wear out'. In option D it should be 'has arisen' instead of 'had arise'

DIRECTIONS for the question: Which of the phrases (A), (B), (C) and (D) given below should replace the phrase given in bold the following sentence to make the sentence grammatically meaningful and correct?

Question No. : 21

Which of these sentences is/are correct?

- A. The army had to suffer terrible privations due to the war.
- B. He was as tired as he could scarcely stand.
- C. The most exquisitely work of literary art exhibits a certain crudeness and coarseness.
- D. Education and poverty are the most pressing issues for our country.

A) Only B and C B) Only A, C and D \checkmark C) Only A and D D) Only A and B E) Only D

Explanation:- Grammatically sentence A and D are correct. Option B will be 'so tired' instead of 'as tired as'. Option C use 'exquisite' instead of 'exquisitely'.

DIRECTIONS for the question: Which of the phrases (A), (B), (C) and (D) given below should replace the phrase given in bold the following sentence to make the sentence grammatically meaningful and correct?

Question No. : 22

Which of these sentences is/are correct?

A. Do not be idle, lest you come to ruins.
B. As he had not paid his bid, following his electricity was cut off.
C. Giving on wrong pleasure is not self-sacrifice, though self-culture.
D.4. There were doors all around the hall, but they were all locked.
A) Only D B) Only A, B and C C) Only A and D

Explanation:- Grammatically only sentence C and D are correct. Option A will be 'else you'll come' instead of 'lest'. Option B will have 'bill' instead of 'bid'.

DIRECTIONS for the question: In the question below a sentence with four words printed in **bold** type is given. These are numbered as (A), (B), (C) and (D). One of these four words printed **in bold** may be either wrongly spelt or inappropriate in the correct in the context of the sentence. Find out the word, which is wrongly spelt or is inappropriate, if any. The number of that word is your answer. If all the words printed **in bold** are correctly spelt and also appropriate in the correct of the sentence, mark (E) i.e. 'All Correct' as your answer.

Question No. : 23

As less of 5 percent of the total fleet of cars in Norway are electric at present, the country's transport minister calls it 'realistic' **expectation** an end to sales of new cars **power** fossil fuels by 2025.

A. Though less than-to expect-powered by

- B. Since approximately- an expectation- controlling
- C. All though not even- to envisage- fuelled by

√A) Only(A) &(C) B) All (A), (B) & (C) C) Only (A) & (B) D) Only (A) E) No correction required

Explanation: Option B is incorrect, as the word power cannot be replaced by controling. Option A & C can be the replacements in the given statement.

DIRECTIONS for the question: In the question below a sentence with four words printed in **bold** type is given. These are numbered as (A), (B), (C) and (D). One of these four words printed **in bold** may be either wrongly spelt or inappropriate in the correct in the context of the sentence. Find out the word, which is wrongly spelt or is inappropriate, if any. The number of that word is your answer. If all the words printed **in bold** are correctly spelt and also appropriate in the correct of the sentence, mark (E) i.e. 'All Correct' as your answer.

Question No. : 24

To some audiences, orchestral conductors **seemingly to** dramatically wave their arms with no discernible effect on the music,, whereas really, conductors undergo rigorous conservatory training, followed by further feedback on the job **when their climb** the career ladder.

A. merely- in reality- In their climb up B. seem to- in fact- as they climb up C. will- actually- while their climb

A) Only(C) (A) All (A), (B) & (C) C) Only(A) & (B) D) Only (A) E) No correction required

Explanation:- All options can fit well in the statement

DIRECTIONS for the question: In the question below a sentence with four words printed in **bold** type is given. These are numbered as (A), (B), (C) and (D). One of these four words printed **in bold** may be either wrongly spelt or inappropriate in the correct in the context of the sentence. Find out the word, which is wrongly spelt or is inappropriate, if any. The number of that word is your answer. If all the words printed **in bold** are correctly spelt and also appropriate in the correct of the sentence, mark (E) i.e. 'All Correct' as your answer.

Question No. : 25

Like roads, which have well-established rules, lane markings and traffic signals to guide autonomous vehicle being use, the pavements running alongside those roads are what roboticists **known to** "unstructured environments".

A. While -in use of- called

B. Unlike- using those- refer to

C. Although- being in use- speak of

√A) Only(B) B) All (A), (B) & (C) C) Only(A) & (B) D) Only (C) E) No correction required

Explanation:- First line states the contrast between roads and lane markings; For contrast 'unlike' is appropriate. So only option B is correct. While & Although cannot be used.

DIRECTIONS for the question: In the given paragraph, the last line has been deleted. Choose the option that logically follows the paragraph.

Section : Quantitative Ability

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 1

12 women can complete a project in 36 days and 15 men complete the same project In 27 days. 16 women start working and after 6 days they were replaced by 'X' men. If 'X' men complete the remaining work in 5 days, what is the value of 'X'?

A) 40 (1) 57 C) 45 D) 21 E) 42

According to questi

to question
$$\frac{16 \times 6}{12 \times 36} + \frac{5x}{15 \times 27} = 1$$

Explanation:-

Solving we get x = 57

DIRECTIONS for the questions: In the given question two quantities are given, one as Quantity I and another as Quantity II. You have to determine the relationship between two Quantities and choose the appropriate option.

Question No. : 2

The sum of cubes of a and b is 7560. The sum of a and b is 30.

Quantity I: The sum of reciprocals of a and b. **Quantity II:** 1/3

A) Quantity I = Quantity II or the relationship cannot be established from the information that is given B) Quantity I \leq Quantity II C) Quantity I \geq Quantity II \checkmark D) Quantity I < Quantity II E) Quantity I > Quantity II

```
Explanation: a^3 + b^3 = 7560
a + b = 30
So a = 18, b = 12
Quantity I \frac{1}{18} + \frac{1}{12} = \frac{5}{36}
Quantity II \frac{1}{3}
So quantity I < Quantity II.
So answer is option D
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DIRECTIONS for the questions: In the given question two quantities are given, one as Quantity I and another as Quantity II. You have to determine the relationship between two Quantities and choose the appropriate option.

Question No. : 3

'M' is an even integer.

Quantity I: Number of distinct prime factors of 16M. **Quantity II:** Number of distinct prime factors of M.

A) Quantity I = Quantity II or the relationship cannot be established from the information that is given B) Quantity I \leq Quantity II C) Quantity I \geq Quantity II D) Quantity I < Quantity II E) Quantity I > Quantity II

Explanation:- Both are equal as in 16 the only prime factor is 2, which is already in M.

DIRECTIONS for the questions: In the given question two quantities are given, one as Quantity I and another as Quantity II. You have to determine the relationship between two Quantities and choose the appropriate option.

Question No. : 4

A and B can together finish a piece of work in 10 days. If A starts working and after 3 days is replaced by B, B can finish the remaining work in 24 days.

Quantity I: Number of days taken by B alone to finish the piece of work. **Quantity II:** Number of days taken by C alone to finish the piece of work. (C is 40% less efficient than A.)

A) Quantity I = Quantity II or the relationship cannot be established from the information that is given B) Quantity I \leq Quantity II C) Quantity I \geq Quantity II D) Quantity I < Quantity II \checkmark E) Quantity I > Quantity II

Explanation:- As per the question,

 $\frac{1}{A} + \frac{1}{B} = \frac{1}{10} \text{ and } \frac{3}{A} + \frac{24}{B} = 1$ $\Rightarrow A = 15 \text{ and } B = 30$ Also $C = \frac{15}{0.6} = 25$ Quantity I = 30Quantity I = 25Hence I > II, E option **DIRECTIONS for the questions:** In the given question two quantities are given, one as Quantity I and another as Quantity II. You have to determine the relationship between two Quantities and choose the appropriate option.

Question No. : 5

A and (X) is cut into 3 equal parts. The resultant rods are cut into 10, 30 and 36 equal parts respectively. Each of these resulting rods has an integer length (in m).

Quantity I: the minimum possible length of the rod X (in m). **Quantity II:** 520m

A) Quantity I = Quantity II or the relationship cannot be established from the information that is given B) Quantity I \leq Quantity II C) Quantity II D) Quantity I < Quantity II \checkmark E) Quantity I > Quantity II

Explanation:- Quantity I of each part Minimum possible length = LCM (10, 30, 36) = 180. Total minimum length = 180 × 3 = 540 Quantity II = 520 So quantity I > quantity II

DIRECTIONS for the questions: In the given question two quantities are given, one as Quantity I and another as Quantity II. You have to determine the relationship between two Quantities and choose the appropriate option.

Question No. : 6

Bag A contains 8 red and 4 blue balls. Bag B contains 1 red and 5 blue balls. One bag is selected at random. From the selected bag one half is drawn at random.

Quantity I: 5/12 **Quantity II:** Probability that the ball is red.

A) Quantity I = Quantity II or the relationship cannot be established from the information that is given B) Quantity I \leq Quantity II C) Quantity I \geq Quantity II D) Quantity I < Quantity II E) Quantity I > Quantity II

Quantity A =
$$\frac{5}{12}$$

Quantity B = $\frac{1}{2} \times \frac{8}{12} + \frac{1}{2} \times \frac{1}{6} = \frac{5}{12}$

Explanation:-Hence both are equal. **DIRECTIONS for the question:** Go through the pie chart/s given below and answer the question that follows.



Question No. : 7

NOTE: No new employees joined the given banks or left the given banks from January 2015 to December 2015.

What is the average number of scale I officers In Banks D, E and F?

√C) 64 D) 67 E) 68 A) 63 B) 65

Explanation:- Required average $=\frac{24\% + 14\% + 10\%}{3} \times 400 = \frac{48}{3} \times 400 = \frac{48}{3 \times 100} \times 400 = 64$

Question No. : 8

In December 2014,4% of the candidates who applied for job as Scale 1 officer were recruited in Bank A. If Bank A had 44 Scale I officers in 2014, what was the number of candidates who applied for the job?

A) 240 B) 450 VC) 400 D) 250 E) 300

Explanation:- No. of officers in Bank A in 2014 = 44 No. of officers in Bank A in 2015 = 60. Seleected = 60 - 44 = 16 ATQ. Total applied = x $\frac{4}{100}$ x = 16 x = 400

Question No. : 9

In January 2015, 32% of the total number of scale I officers in Banks B, D and E together were unmarried. If the respective ratio between the number of unmarried male officers in these banks was 3:2:3, what was the number of unmarried Scale I officers in Bank D?

```
A) 18 B) 24 C) 14 D) 20 VE) 16
                          Employees in B, D and E = \frac{50}{100} \times 400 = 200
                          Unmarried = \frac{32}{100} \times 200 = 64
                          Unmarried in Bank D = 64 \times \frac{2}{9} = 16
Explanation:-
```

In January 2016,20% and 15% Scale I officers were promised to scale II in banks A and F respectively and therefore the total number of scale II officers in Banks A and F together was 126. If in Bank A, the number of scale II officers in December 2015 was 100% more than that in bank F, what was the number of scale II officers in Bank F in December 2015?

Explanation:- Scale II officers in A in 2015 = AScale II officers in F in 2015 = F1.2A + 1.15F = 126and A = 2FBy solving these two equations F = 36

Question No. : 11

In January 2015, the number of male Scale I Officers in Bank B was three times the number of female Scale I Officers in the same bank. If in Bank D, the number of female Scale I Officers was same as that in bank B; what was the number of male Scale I Officers in Bank D?

A) 80 B) 78 C) 82 \sqrt{D}) 84 E) 76

Employees in Bank B = $\frac{12}{100} \times 400 = 48$

Males in B = $\frac{3}{4} \times 48 = 36$

Explanation:-

Females in B = 12Females in D = 12. Total in $D = \frac{24}{100} \times 400 = 96$ Males = 96 - 12 = 84

Question No. : 12

In January 2016, some Scale I Officers resigned from Bank C and all of them joined Bank B. If the resultant respective ratio between the number of Scale I Officers in Bank c and that in Bank B is 24 :13, what is the number of Scale I Officers who resigned from Bank C?

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A) 3 B) 6 C) 7 (b) 4 E) 5
\frac{\frac{29}{100} \times 400 - x}{\frac{12}{12} \times 400 + x} = \frac{24}{13}
Explanation:- 100
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A's age six years ago was equal to twice of B's age four years ago. C is nine years elder to B and also nine years younger to A. What is the sum of present ages of A, B and C?

A) 90 years B) 64 years C) 65 years \checkmark D) 87 years E) 81 years

Explanation: Let B's age 4 year ago = x \therefore A's age 51 × year ago = 2x \therefore present age of B = x + 4Present age of A = 2x + 6

According to question x + 4 + 9 = 2x + 6 - 9 x + 13 = 2x - 3 x = 16 \therefore required sum = x + 4 + 2x + 6 + x + 13 = 4x + 23= 64 + 23 = 87

DIRECTIONS for the question: In the following series, one of the terms given is **wrong**. Find that term and mark that as your answer.

Question No. : 14

54 57 62 69 78 90 102 A) 57 B) 69 √C) 90 D) 78 E) 62

Explanation:-

The sequence is +3, +5, +7, +9 Hence in place of 90 it should be 78 + 11 = 89

DIRECTIONS for the question: In the questions given below a series is given. Understand the series to pick one of the options given in the alphabetical form, which is again a series of similar pattern.

Question No. : 15

4 7 15 30 54 91 137

A) 54 B) 30 C) 15 D) 7 VE) 91

Explanation:- The difference between consecutive numbers is +3, +8, +15, +24 So next gap should be 35. Hence in place of 91 it should be 54 + 35 = 89 So 91 is the wrong number.

DIRECTIONS for the question: In the questions given below a series is given. Understand the series to pick one of the options given in the alphabetical form, which is again a series of similar pattern.

Question No. : 16

446 445 437 410 348 221 5

A) 410 **(B)** 348 C) 221 D) 445 E) 437

Explanation: The difference between consecutive terms is -1, -8, -27 i.e. 1^3 , 2^3 , 3^3 in place of 348 it should be $410 - 4^3 = 410 - 64 = 346$

DIRECTIONS for the question: In the questions given below a series is given. Understand the series to pick one of the options given in the alphabetical form, which is again a series of similar pattern.

Question No. : 17

16 10 8 16 64 512 8192 A) 16 B) 512 ✓C) 10 D) 8 E) 64

Explanation: The difference between consecutive numbers is $\times .5$, $\times 1$, $\times 2$, $\times 4$ ----- so in place of 10 it should be $16 \times .5 = 8$

DIRECTIONS for the question: In the questions given below a series is given. Understand the series to pick one of the options given in the alphabetical form, which is again a series of similar pattern.

Question No. : 18

5 3 6 15 56 275 1644 (A) 3 B) 6 C) 275 D) 6 E) 15

Explanation: The sequence is $\times 1 - 1$, $\times 2 - 2$, $\times 3 - 3$ and so on. So in place of 3 it should be $5 \times 1 - 1 = 4$ So 3 is the wrong number.

DIRECTIONS for the question: In the questions given below a series is given. Understand the series to pick one of the options given in the alphabetical form, which is again a series of similar pattern.

Question No. : 19

160 80 40 20 10 4.5 2.5

A) 60 **(B)** 4.5 C) 20 D) 40 E) 10

Explanation:- Each term is obtained by multiplying previous term by .5 so in place 4.5 it should be $10 \times .5 = 5$

DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 20

Pipe A and B together can fill an empty tank in 1 3/5 hours. Pipe B alone takes 6 hours more than the time taken by pipe A alone to fill the tank. If Pipe B was opened for 2.5 hours and then closed, what portion of the tank will remain empty?

A) 3/4 B) 13/16 🗸 11/16 D) 15/16 E) 5/16

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Explanation:- A = x hr

B = x + 6

ATQ.

= \frac{x(x+6)}{x+x+6} = \frac{8}{5}

x = 2

B = 2 + 6 = 8 hrs

Tank filled by B in \frac{5}{2} hrs = \frac{5}{2} \times \frac{1}{8} = \frac{5}{16}

Remaining = 1 - \frac{5}{16} = \frac{11}{16}
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DIRECTIONS for the question: Solve the following question and mark the best possible option.

Question No. : 21

20 L of pure water was added to a vessel containing 80 L of pure milk. 36 L of the resultant mixture was then sold and some more pure milk and pure water was added to the vessel in the respective ratio of 7 :2. If the final quantity of water was 3 litres less than the initial quantity of water in the vessel, what was the quantity of pure milk that was added to the vessel? (in litres)

A) 15.4 (B) 14.7 C) 13.9 D) 16.8 E) 16.1

Explanation:- Total = $82 + 20 = 100 \$ Milk withdrawn = $36 \times \frac{80}{100} = \frac{144}{5} = 28.8 \$ Remaining milk = 80 - 28.8 = 51.2Water = 36-28.8 = 72Reaminign water = 20 - 7.2 = 12.8Milk in new solution = 7KWater = 36 - 28.8 = 7.2ATQ. 12.8 + 12k = 17 K = 2.1Milk added = $7 \times 2.1 = 14.7$

DIRECTIONS for the question: Analyse the graph/s given below and answer the question that follows.



Question No. : 22

What is the respective ratio between the total vote count at Centre D in 2013 and 2014 together and that at Centre E in both years together?

A) 7:6 B) 8:7 C) 9:7 D) 5:4 🗸 E) 6:5

Explanation:- Required ratio = 20 + 16 : 14 + 16 = 36 : 30 = 6 : 5

If the vote count at centre A in 2014 comprised 40% of the total number of registered voters for that centre, what was the total number of registered voters for Centre A?

✓A) 50000 B) 54000 C) 60000 D) 40000 E) 48000

Explanation: Required number = $\frac{20}{.4} \times 1000 = 50000$

Question No. : 24

What is the average vote count at Centres B, C and E in 2013 (in thousands)?

A) 16 B) 17 C) 14 D) 18 🔨 15

Required average = $\frac{18+13+14}{3} = \frac{45}{3} = 15$ (thousand)

Question No. : 25

Out of the total vote count at Centre C in 2013 and 2014 together, 18% were invalid. How many votes at Centre C in both these years were valid?

A) 29800 B) 24750 VC) 23780 D) 30050 E) 21400

Explanation:- Required numbers = 82% of $(13 + 16) \times 1000$ = $\frac{82}{100} \times 29 \times 1000 = 23780$