

# IBPS SO (IT Officer) Previous Years Papers

Exam Date: 14<sup>th</sup> February 2016

## Reasoning Ability

Q1. This questions consists of an information and two statements numbered I and II given below it. You have to decide which of the given statements weaken/s or strengthen/s the information, and decide the appropriate answer.

I. The number of applications for admission in law colleges of country G has been consistent since the past 5 years.

II. The number of students ready to pay heavy donations to get admission in the most sought after law-college of country G are consistently increasing for past three years.

- a) Both statements I and statement II are neutral statements.
- b) Both statements I and statement II weakens the information.
- c) Statement I strengthens the information, while statement II weakens the information.
- d) Statement I weakens the information, while statement II strengthens the information.
- e) Both statement I and statement II strengthen the information.

Ans: e

Solution:

It is clear from the given information that the number of applications for admission in law collages of country G has been increased. So, law colleges of country G are

consistently increasing for past three years. Hence, both statement I and II are strengthen the information.

Q2. Read the given information and answer the questions.

Patients of lung ailments were mostly prescribed Medicine X which contains only **two constituents 'viz' agnet and 'serovil'**. However, there were reports that many patients developed severe addiction to it on long term use. Therefore, doctors now **prescribe Medicine A to deal with the same because it contains 'agnet' and 'serovil'**.

Which of the following can be concluded from the given statement?

- a) A medicine containing only serovil would not aid in treatment of the mentioned lung disease at all.
- b) Medicine A contains no other constituent other than agnet.
- c) Short term usage of Medicine X does not develop its addiction even to a minor extent.
- d) Medicine X is not prescribed to treat any ailment these days.
- e) Serovil was the constituent responsible for causing addiction of Medicine X.

Ans: d

Solution:

It is clear from the given information that medicine X is not prescribed to treat any ailment these days.

Directions (Q3-7): Study the following information to answer the given questions.

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1 G, H, I, J, K and L are seated (but not necessarily in the same order) and all of them are facing

South. In row-2 S, T, U, V, W and X are seated (but not necessarily in the same order) and all of them are facing North. Therefore; in the given seating arrangement, each member seated in a row faces another member of the other row.

The one who faces H sits third to the left of V. V does not sit at any of the extreme ends of the line. S sits second to the left of V. The one facing T sits third to the right of G. T does not sit any of the extreme ends of the line. Only one person sits between G and I. K is neither an immediate neighbour of I nor H. The one facing W sits second to the left of L. L does not face X.

Q3. Who amongst the following sits second to the left of the person who faces T?

a) H

b) I

c) J

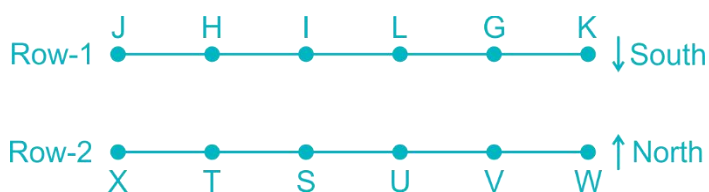
d) K

e) L

Ans: e

Solution:

According to the given information.



L sits second to the left of the person who faces T.

Q4. Which of the following is true regarding S?

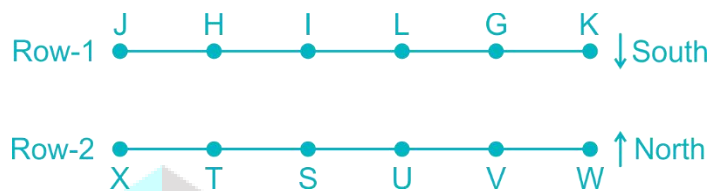
a) Both T and W are immediate neighbours of S.

- b) None of the given options is true.
- c) Only one person sits between S and U.
- d) S sits second to right of X.
- e) K is an immediate neighbour of the person who faces S.

Ans: d

Solution:

According to the given information.



S sits second to right of X is true regarding S.

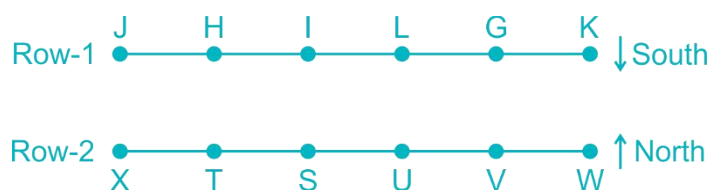
Q5. Who amongst the following faces L?

- a) U
- b) S
- c) T
- d) W
- e) V

Ans: a

Solution:

According to the given information.



U faces L.

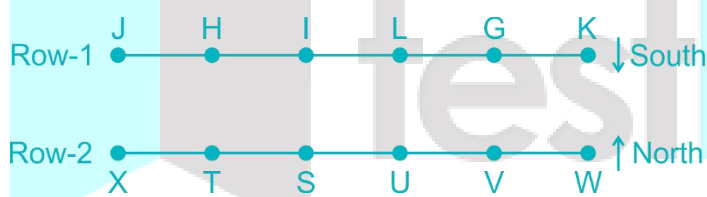
Q6. Which of the following groups of people represents the people sitting at extreme ends of both the rows?

- a) H, I, S, U
- b) L, J, X, U
- c) J, K, X, W
- d) I, L, U, X
- e) H, G, S, W

Ans: c

Solution:

According to the given information.



J, K, X, W represents the people sitting at extreme ends of both the rows.

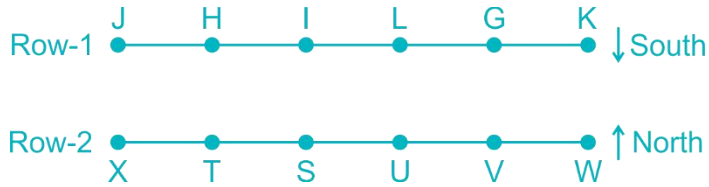
Q7. Which of the following is true with respect to the given information?

- a) I faces W.
- b) None of the given options is true.
- c) G sits exactly between J and I.
- d) U is an immediate neighbour of W.
- e) H faces one of the immediate neighbours of X.

Ans: e

Solution:

According to the given information.



From the given arrangement it is clear that H faces one of the immediate neighbours of X.

Directions (8-12): Study the following information carefully and answer the given questions.

When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and rearrangement.

(All the numbers are two-digits numbers.)

Input            Centre 24 actual 15 require impact 37 96 marine 49 unable 82

Step I            24 centre actual 15 require impact 37 96 marine unable 82 49

Step II            82 24 centre actual 15 require impact 96 marine unable 49 37

Step III          96 82 24 centre actual require impact marine 49 37 15 unable

Step IV          Centre 96 82 24 actual require impact marine 49 37 15 unable

Step V            marine centre 96 82 24 actual require 49 37 15 unable impact

Step VI           require marine centre 96 82 24 49 37 15 unable impact actual

Step VI is the last step of the above arrangement as the intended arrangement is obtained.

As per the rules followed in the given steps, find out the appropriate steps for the given input.

Input embark 53 palace 16 65 salute obvious 42 achieve 71 heaven 98

Q8. Which element is fourth to the right of the one which is ninth from the right end in Step III of the given input?

- a) 16
- b) achieve
- c) 53
- d) salute
- e) obvious

Ans: b

Solution:

The arrangement is as follows, as per given information.

Input embark 53 palace 16 65 salute obvious 42 achieve 71 heaven 98

Step I            16 embark 53 palace 65 salute obvious 42 achieve 71 heaven 98

Step II           42 16 embark 53 palace salute obvious achieve heaven 98 71 65

Step III          98 42 16 embark palace salute obvious achieve heaven 71 65 53

Step IV          embark 98 42 16 palace obvious achieve heaven 71 65 53 salute

Step V          obvious embark 98 42 16 place achieve 71 65 53 salute heaven

**Element 'achieve' is fourth to the right** to the right of the one which is ninth from the right end in step III of the given input.

Q9. Which element comes exactly between '16' and 'salute' in step V of the given input?

- a) Both obvious and heaven
- b) Only achieve
- c) Both embark and palace
- d) Only 65
- e) Only 71

Ans: e

Solution:

The arrangement is as follows, as per given information.

Input embark 53 palace 16 65 salute obvious 42 achieve 71 heaven 98

Step I      16 embark 53 palace 65 salute obvious 42 achieve 71 heaven 98

Step II     42 16 embark 53 palace salute obvious achieve heaven 98 71 65

Step III    98 42 16 embark palace salute obvious achieve heaven 71 65 53

Step IV    embark 98 42 16 palace obvious achieve heaven 71 65 53 salute

Step V     obvious embark 98 42 16 place achieve 71 65 53 salute heaven

Element '71' comes exactly between '16' and 'salute' in step V of the given input.

Q10. If in the Vth step, '16' interchanges its position with 'obvious' and 'heaven' also interchanges its position with '65', then which element will be fifth to the right of '42'?

- a) 16
- b) 65
- c) obvious
- d) 71



e) heaven

Ans: e

Solution:

The arrangement is as follows, as per given information.

Input embark 53 palace 16 65 salute obvious 42 achieve 71 heaven 98

Step I            16 embark 53 palace 65 salute obvious 42 achieve 71 heaven 98

Step II           42 16 embark 53 palace salute obvious achieve heaven 98 71 65

Step III          98 42 16 embark palace salute obvious achieve heaven 71 65 53

Step IV          embark 98 42 16 palace obvious achieve heaven 71 65 53 salute

Step V           obvious embark 98 42 16 place achieve 71 65 53 salute heaven

**Step V is as under, after change the position of '16' and 'obvious' and 'heaven' and '65'.**

Q11. Which of the following combinations represents the first two and last two elements in step VI of the given input?

- a) salute, obvious, embark, palace
- b) heaven, palace, achieve, obvious
- c) palace, heaven, obvious, embark
- d) salute, palace, embark, achieve
- e) embark, obvious, palace, achieve

Ans: b

Solution:

The arrangement is as follows, as per given information.

Input embark 53 palace 16 65 salute obvious 42 achieve 71 heaven 98

Step I            16 embark 53 palace 65 salute obvious 42 achieve 71 heaven 98

Step II           42 16 embark 53 palace salute obvious achieve heaven 98 71 65

Step III          98 42 16 embark palace salute obvious achieve heaven 71 65 53

Step IV          embark 98 42 16 palace obvious achieve heaven 71 65 53 salute

Step V           obvious embark 98 42 16 place achieve 71 65 53 salute heaven

Elements of option (b) represents the first two and last two elements in step VI of the given input.

Q12. In which step are the elements 'heaven 98 archive 71' found in the same order?

- a) Fourth
- b) Sixth
- c) Fifth
- d) Third

e) The given order of elements is not found in any step

Ans: e

Solution:

The arrangement is as follows, as per given information.

Input embark 53 palace 16 65 salute obvious 42 achieve 71 heaven 98

Step I            16 embark 53 palace 65 salute obvious 42 achieve 71 heaven 98

Step II           42 16 embark 53 palace salute obvious achieve heaven 98 71 65

Step III          98 42 16 embark palace salute obvious achieve heaven 71 65 53

Step IV          embark 98 42 16 palace obvious achieve heaven 71 65 53 salute

Step V      obvious embark 98 42 16 place achieve 71 65 53 salute heaven

The given order of elements is not found in any step.

Directions (13-17): Study the given information carefully to answer the given questions.

Eight people P, Q, R, S, W, X, Y and Z live on eight different floors of a building, but not necessarily in the same order. The lowermost floor of the building is numbered one, the one above that is numbered two and so on till the topmost floor is numbered eight.

P lives on an even numbered floor above the floor numbered three. Y lives immediately below P. Only three people live between Y and R. Only two people live between W and P as are there between W and Q. Only two people live between Q and Z. S lives immediately above Z.

Q13. Who amongst the following live exactly between Y and W?

- a) Only P
- b) Only X
- c) No one
- d) Both P and X
- e) Both X and Q

Ans: c

Solution:

From the given information sequence of all people is as below

Floor	8	7	6	5	4	3	2	1
People	P	Y	W	X	Q	R	S	Z

No one live exactly between Y and W.

Q14. Who amongst the following lives on the floor numbered five?

- a) X
- b) Q
- c) S
- d) R
- e) Y

Ans: a

Solution:

From the given information sequence of all people is as below

Floor	8	7	6	5	4	3	2	1
People	P	Y	W	X	Q	R	S	Z

X lives on the floor numbered five.

Q15. As per the given arrangement, four of the following five are alike in a certain way and so form a group. Which one of the following does not belong to the group?

- a) Q-Two
- b) V-Seven
- c) R-Five
- d) P-Six
- e) Z-Three

Ans: b

Solution:

From the given information sequence of all people is as below

Floor    8   7   6   5   4   3   2   1

People   P   Y   W   X   Q   R   S   Z

Except Y-seven, all other people have the floor numbered either two up or two down.

Q16. On which of the following floor numbers does R live?

- a) Seven
- b) Six
- c) Three
- d) Eight
- e) Two

Ans: c

Solution:

From the given information sequence of all people is as below

Floor    8   7   6   5   4   3   2   1

People   P   Y   W   X   Q   R   S   Z

R lives on floor numbered three.

Q17. If X and P interchange their places and so do Z and R, then who will live between P and Z as per the new arrangement?

- a) Q
- b) W
- c) R
- d) Y

e) Other than those given as options

Ans: a

Solution:

From the given information sequence of all people is as below

Floor 8 7 6 5 4 3 2 1

People P Y W X Q R S Z

If X and P interchange their position and same as Z and R, then new arrangement is as follows.

Floor 8 7 6 5 4 3 2 1

People X Y W P Q Z S R

Hence, as per new arrangement Q will have between P and Z.

Directions (Q18-23): Study the following information and answer the questions.

Seven friends, namely P, Q, R, S, T, U and V watch seven different movies namely Spectre, Joy, Burnt, Concussion, Frozen, Everly and Legend, not necessarily in the same order, starting from Monday to Sunday (of the same week)

T watches a movie on Thursday. Only one person watches movie between T and the one who watches Frozen. P watches movie immediately after the one who watches Frozen. Only three people watch movie between P and the one who watches Burnt.

Only two people watch movie between the one who watches Burnt and U. The one who watches Legend watch movie before U, but after Thursday. More than two people watch movie between the one who watches Legend and R. The one who watches spectre watches movie immediately before the one who watches Everly. The one who watches Conclusion watches movie immediately before Q. V does not watch movie on Tuesday.

Q18. Who amongst the following watches Joy?

- a) R
- b) S
- c) P
- d) T
- e) V

Ans: a

Solution:

The arrangement of information, as per given information

Friend	Day	Movie
S	Tuesday	Burnt
V	Monday	Concussion
Q	Sunday	Legend
U	Saturday	Frozen
P	Friday	Everly
T	Thursday	Spectre
R	Wednesday	Joy

R watches joy.

Q19. Four of the following five are alike in a certain way and so form a group. Which of the following does not belong to that group?

- a) R-Tuesday
- b) T-Thursday

- c) Q-Sunday
- d) P-Friday
- e) U-Saturday

Ans: a

Solution:

The arrangement of information, as per given information

Friend	Day	Movie
S	Tuesday	Burnt
V	Monday	Concussion
Q	Sunday	Legend
U	Saturday	Frozen
P	Friday	Everly
T	Thursday	Spectre
R	Wednesday	Joy

Except R-Tuesday, all others have the correct combination of friend and day.

Q20. Which of the following is true about S?

- a) S watches movie immediately after R.
- b) S watches Burnt.
- c) Only two people watch movie between S and R.
- d) All the given statements are true.
- e) S watches movie on Sunday.



Ans: b

Solution:

The arrangement of information, as per given information

Friend	Day	Movie
S	Tuesday	Burnt
V	Monday	Concussion
Q	Sunday	Legend
U	Saturday	Frozen
P	Friday	Everly
T	Thursday	Spectre
R	Wednesday	Joy

S watches Burnt.

Q21. Which of the following movies does T watch?

- a) Burnt
- b) Spectre
- c) Everly
- d) Concussion
- e) Legend

Ans: b

Solution:

T watches Spectre.

Q22. As per the given arrangement Q is related to the one who watches Burnt in a certain way and R is related to the one who watches Everly in the same way. To which of the following is U related to in the same way?

- a) The one who watches Joy.
- b) The one who watches concussion.
- c) The one who watches Burnt.
- d) The one who watches Spectre.
- e) The one who watches Legend.

Ans: b

Solution:

The arrangement of information, as per given information

Friend	Day	Movie
S	Tuesday	Burnt
V	Monday	Concussion
Q	Sunday	Legend
U	Saturday	Frozen
P	Friday	Everly
T	Thursday	Spectre
R	Wednesday	Joy

U is related to the one who watches conclusion.

Q23. On which of the following days does V watch a movie?

- a) Friday
- b) Sunday
- c) Wednesday
- d) Saturday
- e) Monday

Ans: e

Solution:

The arrangement of information, as per given information

Friend	Day	Movie
S	Tuesday	Burnt
V	Monday	Concussion
Q	Sunday	Legend
U	Saturday	Frozen
P	Friday	Everly
T	Thursday	Spectre
R	Wednesday	Joy

V watch a movie on Monday.

Q24. Read the following information and answer the questions.

The women of Village X are becoming financially independent after Shakti, an NGO, started assisted the women in mastering art of making organic colours thus helping them to earn a living.

Which of the following statements can be inferred from the given statements? (An inference is something by, which you can logically deduced something to be true based on known premises.)

- a) In order to master the art of making organic colours, one must seek the assistance of Shakti only.
- b) Organic colours made by the women of village X have captured the interest of people to some extent.
- c) The women of village X have never tried their hand at any art except colour making.
- d) Shakti provides assistance only in the field of organic colour making and specifically to women.
- e) Women of village X have never been assisted by any other NGO in the past.

Ans: c

Solution:

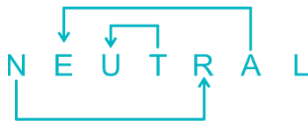
It is clear from the given information that the women of village X have never tried their hand at any art except colour making.

Q25. How many such pairs of letters are there in the word NEUTRAL each of which has as many letters in the word in both forward and backward directions as there are between them in English alphabetical series?

- a) Three
- b) None
- c) Two
- d) More than three
- e) One

Ans: a

Solution:



Hence, pair of letters are NR, AE and UT. i.e., three pair of letters.

Q26. Study the given information carefully to answer the given question.

**The following are two findings of an internal survey of a catering company ‘Mini Menu’ based in City X.**

A) Each year, the profit earned form the orders having multi-cuisine menu is much higher than that earned form Indian menu.

**B) This year, ‘Mini Menu’ had 45% more orders for multi-cuisine menu** as compared to any of the previous year, though the other remained more or less same.

Which of the following can be inferred from the given information?

(An inference is something by which you can logically deduce something to be true based on known premises.)

a) The ingredients used to clock Indian foods are costlier as compared to those used in other cuisines.

**b) This year, ‘Mini Menu’ earned the highest profit as compared to all the previous years of its service.**

c) The numbers of multi-cuisine orders placed within ‘Mini Menu’ this year were double the number of all other orders.

d) Indian cuisines require much more effort than any other cuisine, thus becoming the costliest menu for parties.

e) This year the numbers of parties/functions held in city X were much higher as compared to any other year.

Ans: d

Solution:

It is clear from the given information that Indian cuisines require much more effort than any other cuisine, thus becoming the costliest menu for parties.

Q27. Read the given information and answer the questions. Although School Z has started providing a number of facilities like free lunch for students, independent class report of each student and yearly picnics, for some years now, parents still prefer to enrol their children in school M over school Z.

**Which of the following may not be a reason for the parent's preference for school M over school Z?**

- a) School M is the only school in the city which has student friendly class rooms so that even those sitting at the last benches can clearly hear the teacher and see the board.
- b) School M provides door to door bus service for students, while school Z provides bus service up to the nearest bus stop which may be within 2 km of the house of the child.
- c) Unlike school Z, school M uses audio visual aids for teaching, which helps students to understand concepts better and to retain them.
- d) School M allows the students to give specific feedback regarding the teachers, while school Z has surprise inspection every month to assess the effectiveness of the teacher.
- e) School M; unlike school Z, provides locker facilities to students and gives notes and homework on pen drive, to ensure that students do not have to carry heavy bags to the school every day.

Ans: e

Solution:

It is clear from the given information that if home work of students would be given into the pen drive, then they do not do the hard work and the growth of mind will be stopped.

Q28. If '3' is subtracted for each odd digit and '1' is added to each even digit in the number 8547692, which of the following numbers will appear twice in the new number thus formed?

- a) Only 2
- b) Both 3 and 7
- c) None
- d) Both 3 and 5
- e) Only 4

Ans: c

Solution:

Given Number	8	5	4	7	6	9	2
	↓ +1	↓ -3	↓ +1	↓ -3	↓ +1	↓ -3	↓ +1
New Number	9	2	5	4	7	6	3

It is clear from above that none of the number appear twice in the new number formed.

Directions (Q29-30): In each of the questions, two/three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given conclusion logically follows from the given statements disregarding commonly known facts.

Give answer

- a) If only conclusion I follows
- b) If only conclusion II follows
- c) If either conclusion I or II follows
- d) If neither conclusion I nor II follows
- e) If both conclusions follow

Q29. Statements:

Some ideas are clues.

Some clues are hints.

No hint is a notion.

Conclusions:

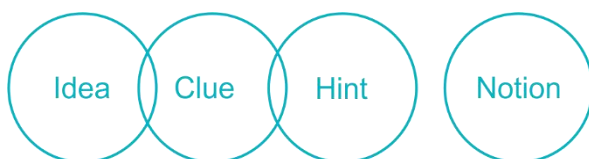
I. No idea is a hint.

II. At least some ideas are hints.

Ans: b

Solution:

According to the statements,



It is clear from diagram that only conclusion II follows.

Q30. Statements:

All gardens are parks.



All parks are lawns.

Some lawns are orchards.

Conclusions:

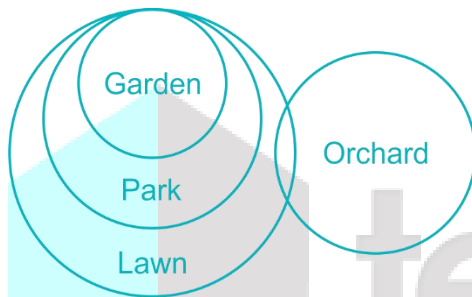
I. At least some orchards are gardens.

II. All lawns are parks.

Ans: d

Solution:

According to the statements,



It is clear from diagram that neither conclusion I nor II follows.

Q31. Statements:

All gardens are parks.

All parks are lawns.

Some lawns are orchards.

Conclusion:

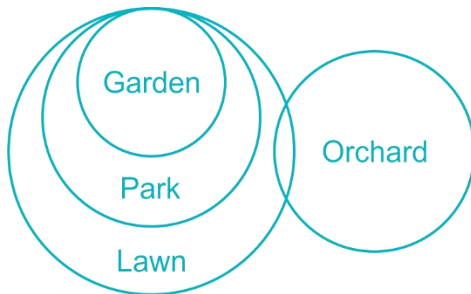
I. All gardens are lawns.

II. All orchards being parks is a possibility.

Ans: a

Solution:

According to the statements,



It is clear from diagram that only conclusion I follows.

Q32. Statements:

No spice is a flavour.

No flavour is a colour.

Conclusions:

I. At least some spices are colours.

II. All spices being colours is a possibility.

Ans: d

Solution:

According to the statements,



It is clear from diagram neither conclusion I nor II follows.

Q33. Statements:

Some ideas are clues.

Some clues are hints.

No hints is a notion.

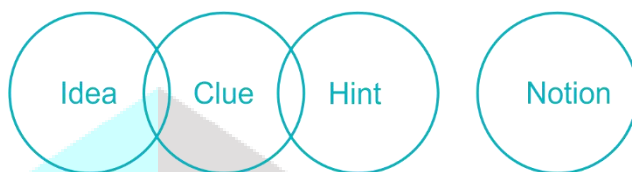
Conclusions:

I. No notion is a clue.

II. At least some ideas are notions.

Ans: a

Solution:



It is clear from diagram that only conclusion I follows.

Directions (Q34-38): In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer.

Give answer

- a) If only conclusions I is true.
- b) If neither conclusions I nor II is true
- c) If both conclusions are true
- d) If only conclusion II is true
- e) If either conclusions I or II is true

34. Statements:

$$U > Y \geq W \leq K; W = X \geq Z$$

Conclusions:

I.  $U > K$

II.  $Z \leq K$

Ans: a

Solution:

Given,

$$\begin{array}{c} U > Y \geq W \leq K \\ \parallel \\ X \\ IV \\ Z \end{array}$$

Conclusion:

I.  $U > K$  (✓)

II.  $Z \geq K$  (×)

Hence, only conclusion I is true.

Q35. Statements:

$$G \geq H > J \leq K; H > M; J > U$$

Conclusions:

I.  $H > U$

II.  $M < G$

Ans: d

Solution:

$$\begin{array}{c} G \geq H > J \leq K \\ \vee \quad \vee \\ M \quad I \end{array}$$

Conclusion:

I.  $H > U$  (×)

II.  $M < G$  (✓)

Hence, only conclusion II is true.

Q36. Statements:

$$L \leq K > J \geq U ; J \leq T \leq R$$

Conclusion:

I.  $T > L$

II.  $U \leq R$

Ans: c

Solution:

Given,

$$\begin{array}{c} L \leq K < J \geq U \\ \quad \wedge \\ \quad T \\ \quad \wedge \\ \quad R \end{array}$$

Conclusion:

I.  $T < L$  (✓)

II.  $U \leq R$  (✓)

Hence, both conclusion are true.

Q37. Statements:

$$P \geq Q \geq W = S \geq L; Y \geq S$$

Conclusions:

I.  $P > Y$

II.  $Y = P$

Ans: e

Solution:

Given,

$$P \geq Q \geq W = S \geq L$$

IV  
Y

Conclusion

I.  $P > Y$

II.  $Y = P$  (any one true)

Hence, either conclusion I or II is true.

Q38. Statements:

$$G \geq H > J \leq K; H > M; J > U$$

Conclusions:

I.  $M < K$

II.  $K > U$

Ans: c

Solution:

Given,

$$G \geq H > J \leq K$$

V V  
M U

Conclusion:

I.  $M < K$  (✓)

II.  $K > U$  (✓)

Directions (Q39-43): Study the following information carefully and answer the given questions.

Eight friends, J, K, L, M, N, O, P and Q are sitting around a square table in such a way that four of them sit at four corners while four sit in the middle of each of the four sides. The ones who sit in middle of the sides face the centre while those who sit at the four corners face outside (i.e. opposite to the centre.) L sits third to the right of M. M sits in middle of one of the sides of the table. Only three people sit between L and Q. Only One person sits between Q and P. N is one of the immediate neighbours of P. Only three people sit between N and K. J sits second to the right of K.

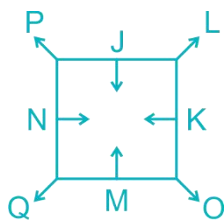
Q39. How many people sit between J and P when counted from the right of P?

- a) Two
- b) One
- c) None
- d) Three
- e) Four

Ans: c

Solution:

From given information, the sitting arrangement is as follows.



None of the people sit between J and P when counted from the right of P.

Q40. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?

a) Q

b) O

c) P

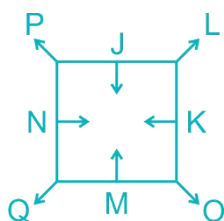
d) L

e) K

Ans: e

Solution:

From given information, the sitting arrangement is as follows.



Except K, all other are sitting on corner of table.

Q41. Which of the following is true regarding O?

a) O sits at middle of the one of the sides.

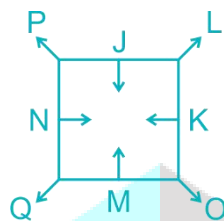


- b) Both M and K are immediate neighbours of O.
- c) N sits second to left of O.
- d) Only three people sit between O and J.
- e) None of the given options is true.

Ans: b

Solution:

From given information, the sitting arrangement is as follows.



Both M and K are immediate neighbours of O.

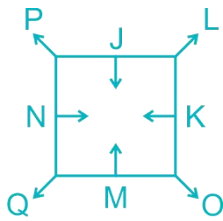
Q42. What is the position of L with respect to P?

- a) Second to the right
- b) Fourth to the right
- c) Third to the left
- d) Fourth to the left
- e) Second to the left

Ans: a

Solution:

From given information, the sitting arrangement is as follows.



The position of L with respect to P is second to the right.

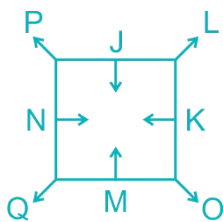
Q43. Who sits second to the left of Q?

- a) P
- b) O
- c) K
- d) J
- e) N

Ans: b

Solution:

From given information, the sitting arrangement is as follows.



Sits second to the left of Q.

Directions (Q44-48): Study the given information carefully to answer the given questions.

In a certain code language.

'ban all animal products' is written as 'tp fm ax bz'

'animal hunting is wrong' is written as 'ke hw tp cu'

'all are wrong answers' is written as 'dy ni bz hw'

'products are well known' is written as 'fm gr sl dy'

(All codes are two-letter codes only)

Q44. What does the code 'sl' stand for in the given code language?

a) either 'well' or 'known'

b) products

c) either 'hike' or 'people'

d) are

e) profit

Ans: a

Solution:

From given information,

ban all animal products → tp fm ax bz ..... (1)

animal hunting is wrong → ke hw tp cu ..... (2)

all are wrong answers → dy ni bz hw ..... (3)

products are well known → fm gr sl dy ..... (4)

Q45. What will be the possible code for 'wrong products received' in the given code language?

a) tp dy gr

b) fm zu hw

c) gr fm tp

d) fm hw ni

e) ni zu fm

Ans: b

Solution:

From given information,

ban all animal products → tp fm ax bz ..... (1)

animal hunting is wrong → ke hw tp cu ..... (2)

all are wrong answers → dy ni bz hw ..... (3)

products are well known → fm gr sl dy ..... (4)

Q46. In the given code language, if 'busy' is coded as 'ot' then how will 'is busy hunting' be coded as?

a) cu ot hw

b) tp ke ot

c) ot hw tp

d) ot ke hw

e) ot cu ke

Ans: e

Solution:

From given information,

ban all animal products → tp fm ax bz ..... (1)

animal hunting is wrong → ke hw tp cu ..... (2)

all are wrong answers → dy ni bz hw ..... (3)

products are well known → fm gr sl dy ..... (4)

Q47. What will be the code for 'animal' in the given code language?

- a) cu
- b) hw
- c) tp
- d) fm
- e) Other than those given as options

Ans: c

Solution:

From given information,

ban all animal products → tp fm ax bz ..... (1)

animal hunting is wrong → ke hw tp cu ..... (2)

all are wrong answers → dy ni bz hw ..... (3)

products are well known → fm gr sl dy ..... (4)

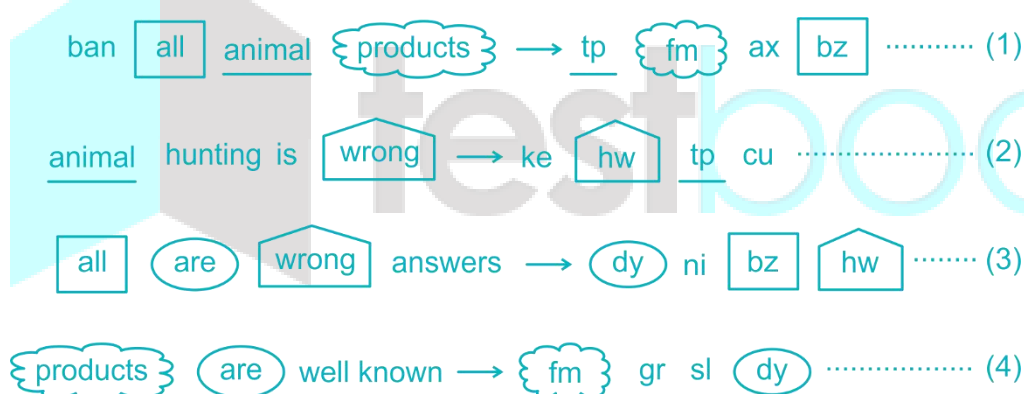
Q48. What is the code for 'all' in the given code language?

- a) hw
- b) ax
- c) bz
- d) ni
- e) dy

Ans: c

Solution:

From given information,



Directions (Q49-50): The following questions consist of a questions and two statements numbered I and II given below it. You have decide whether data given in the statements are sufficient to answer the questions. Read both the statements and

Give answer

- a) If the data in statement I alone are sufficient to answer the questions, while the data in statement II alone are not sufficient to answer the questions

- b) If the data in statement II alone are sufficient to answer the questions, while the data in statement I alone not sufficient to answer the question
- c) If the data either in statement I alone or in statement II alone are sufficient to answer the question
- d) If the data even in both statements together are not sufficient to answer the question
- e) if the data in both statements together are necessary to answer the question

Q49. How far is point R from point T?

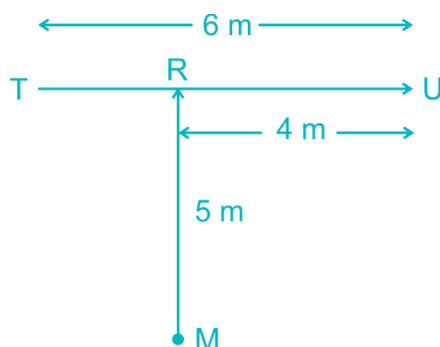
I. Point R is 5 m to the north of point M. Point U is 4 m to the east of point R. Point T is to the west of point R such that point U, R and T form a straight line of 6 m.

II. Point Z is to the south of point T. Point U is 6 m to the east of point T. Point M is 2 m to the East of Point Z. Point R is 5 m to the North of Point M. Point R lies on the line formed by joining points T and U.

Ans: c

Solution:

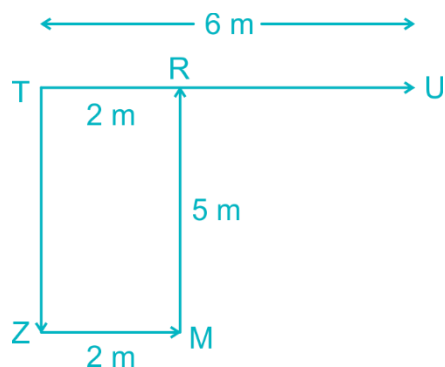
From Statement I



From figure,  $TR = TU - RU = 6 - 4 = 2\text{m}$

Hence, point T is 2m away from point R.

From Statement II



It is clear from diagram that point T is 2m away from point R.

Hence, data either in statement I alone or statement II alone are sufficient to answer the questions.

Q50. How many people are standing in a straight line?

(Note all are facing North)

I. R stands third from the left end of the line. Only one person stands between R and U. V stands second to the right of U. V stands at one of the extreme ends of the line.

II. M stands at exactly the centre of the line. Only two people stand between M and J. Only three people stand between J and U. Only one person stands between U and V.

Ans: e

Solution:

From both statements



From the information given in both the statements it is clear that there are seven persons in the row. Hence, data given in both statements together are necessary to answer the questions.

## English Language



Directions (Q51-55): The questions has two blanks, each blank indicating that something has been omitted, Choose the set of words for each blank that best fits the meaning of the sentence as a whole.

**51. Couples possessing a specific gene were less bothered by the emotional ..... in their marriage as ..... to those who didn't have that gene.**

- a) upheavals; compared
- b) traumas ; against
- c) challenges ; belonged
- d) tribulations ; regards
- e) along ; forced

Ans: a

Solution:

Option (a) is the correct because there is clear comparison being made between couples with and without a specific gene.

**Q52. Chhattisgarh was ..... the first few states in the country that ..... a ban on 'Gutkha'.**

- a) among ; imposed
- b) between ; set
- c) part ; restricted
- d) one ; lifted
- e) along ; forced

Ans: a

Solution:

Option (a) is the correct because Chhattisgarh has been pointed as one of many **States enforcing a law of ban** where ‘among’ and ‘imposed’ are appropriate terms supporting the statement and its literal meaning grammatically.

Q53. Right from a young age, children should be taught about the harmful effects of smoking so that they ..... **From ..... in it once they grow up.**

- a) avert ; revelling
- b) resolve ; rejoicing
- c) refrain ; indulging
- d) abstain ; taking
- e) withdraw ; addicting

Ans: c

Solution:

**Option (c)** is the correct answer as ‘refrain’ means ceasing/stopping oneself to do something and its is advisory in the statement to stop oneself from ‘indulging’ (taking part) in something.

Q54. **Childhood obesity** is a major health ..... and a leading ..... of cancer.

- a) hazard ; result
- b) issues ; reason
- c) matter ; grounds
- d) problem ; cause
- e) phenomenon ; base

Ans: d

Solution:

Option (d) is the correct answer as obesity is a single health issue being talked about and is the reason behind cancer.

Q55. A police **team** was ..... to ..... the case.

- a) formed ; following
- b) constituted ; investigate
- c) located ; adjudge
- d) remanded ; study
- e) expected ; probe

Ans: b

Solution:

Option (b) is the correct answer as the team was indicated to have been formed and a **case is only 'investigated'** by the police.

Directions (Q56-65): Read each sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. Mark the **part with the error as your answer. If there is no error, mark 'No error'** as your answer.

(Ignore the errors of punctuation, if any.)

Q56. Bad lipstick woes/strike even/the most diligent/of makeup users.

- a) Bad lipstick woes
- b) Strike even
- c) the most diligent

d) of makeup users

e) No error

Ans: d

Solution:

**Option (d) has an error as there is no use of the word ‘of’ before makeup users as it is self-sufficient of who is being talked about.**

Q57. Our behaviour/and interest in/ socialising is determined/ by our genes.

a) Our behaviour

b) and interest in

c) socialising is determined

d) by our genes

e) nor error

Ans: e

Solution:

Q58. With the problem of/shortage of doctors/plagues the entire State,/rural areas are the worse hit.

a) with the problem of

b) shortage of doctors

c) plagues the entire state

d) rural areas are the worse hit

e) No error

Ans: a

Solution:

Option (a) is the correct answer as the statement talks about the reason of problem.  
**Thus, 'as' should have been used instead of 'with'.**

Q59. While the government continue to/promise better health care facilities/for all the residents of the rudiments of the State/rural areas remain a major cause on concern.

- a) While the government continues to
- b) Promise better health care faculties
- c) For all the residents of the State
- d) Rural areas remain a major cause on concern
- e) No error

Ans: d

Solution:

Option (d) has an **error because 'on concern' is grammatically incorrect.**

Q60. Human temperamental factors/which motivate people to/form relationship and maintain them,/are prove to have a genetic base.

- a) Human temperamental factors
- b) Which motivate people to
- c) Form relationships and maintain them
- d) Are prove to have a genetic base,
- e) No error

Ans: d

Solution:

**Option (d) has an error. The word 'prove' is incorrect as the statement is a fact and already declared. Thus past tense of 'prove' should have been used.**

Q61. The man, who was allegedly/stolen a sum of Rs.6 lakh/was finally arrested by the police.

- a) The man, who was allegedly
- b) Stolen a sum of Rs.6 lakh
- c) Was finally
- d) Arrested by the police

e) No error

Ans: a

Solution:

**Option (a) has an error. Instead of 'was', 'had' should have been used as the statement is in Past Perfect Tense.**

Q62. The tobacco laced toothpaste,/popular in the rural areas of the State,/is considered to been the major cause behind/the rising member of oral cancer cases.

- a) The tobacco laced toothpaste
- b) Popular in the rural areas of the state
- c) is considered to been the major cause behind
- d) the rising member of oral cancer cases
- e) No error

Ans: d

Solution:

Option (d) has an error as 'member' is not an appropriate word to be used for such an implication. Instead rising 'number' is the correct phrase to be used.

Q63. It is important to note/that childhood cancers can be prevented/to a greatest extent/if a healthy lifestyle is followed.

- a) It is important to note
- b) that childhood cancers can be prevented
- c) to a greatest extent
- d) if healthy lifestyle is followed

e) No error

Ans: c

Solution:

Option (c) has an error. The superlative degree of great used in the sentence is grammatically incorrect as no comparison is being made.

Q64. A watermelon/is one of the healthiest fruit/to eat, if you are/planning to go on a diet.

- a) A watermelon
- b) Is one of the healthiest fruit
- c) to eat, if you are
- d) planning to go on a diet
- e) no error

Ans: b

Solution:

**Option (b) 'fruit' used in singular form is incorrect as the statement refers to a list of fruits (plural-more than one).**

Q65. Patients can now scheduled/appointments while at home/and get confirmation for the same/via email.

- a) Patients can now scheduled
- b) appointments while at home
- c) and get confirmation for the same
- d) via email

e) No error

Ans: a

Solution:

**In option (a), the word 'schedule' is in past form of tense while the sentence is in present form.**

Directions (Q66-75): Read the following passage carefully and answer the questions. Certain words/phrases are given in bold to help you locate them, while answering some of the questions.

In 2012, the Arctic was hot. But while it still matters for environmental reasons, the surge of interest in its economy has ebbed. That surge was driven by three things. First, the Arctic contains vast amounts of energy, which could become accessible as the world warms and the ice retreats in summer.



The US Geological survey has said that about a quarter of the world's undiscovered oil and gas lies in Arctic waters. Second, the melting ice allows cargo ships to sail **round Russia's northern coast for about two months in summer. This cuts the** distance for ships travelling from Shanghai to Rotterdam by almost a quarter and the transit time by about two weeks. It was once said the Northern

Sea Route would one day rival the Suez canal as the best way to ship goods from East Asia to Europe. Third, the Arctic seemed a model of international cooperation. The eight countries with territory inside the Arctic circle settled through the Arctic Council, originally a scientific forum which in 2011-13 signed its first treaties, on search and rescue missions and cleaning up oil spills. Nothing exemplified its popularity better than the rush of tropical Asian countries to join. China, India and Singapore were granted observer status in 2013.

But since mid - 2014, the **Arctic's allure has lessened. Its energy is pricey. Even at \$ 100 a barrel**, many fields were marginal because the weather is so extreme. A Russian and Norwegian firm together developing one of the largest gasfields ever discovered, mothballed the project in 2012. With oil at \$ 50 a barrel, few Arctic fields would be economic. Energy exploration in the Arctic is in fact referred to by some as a licence to lose money. With regard to the Northern Sea Route – In 2013, **71-ships traversed Russia's Arctic, according to the Northern Sea Route Information Office** : a large increase since 2010, when the number was just four. But 16000 ships passed through the Suez canal between Europe and Asia in 2013, so the northern route is not starting to compete. In 2014 traffic along the Northern Sea Route fell to 53 Ships, only four of which sailed from Asia and docked in Europe (the rest went from one Russian port to another).

The route does not yet link Europe and East Asia. The decline in 2014 was partly caused by the weather : less sea ice melted last summer than in 2013, so the route was more dangerous. But its limitations go beyond that. Cutting a week or two off transit time is not the benefit it may seem if the vessel arrives a day late. In shipping just-in-time arrival matters, not only speed. The new-generation container ships are

too cumbersome to use the Arctic so, as these become more common, the northern route becomes less attractive.

The Arctic Council continues to expand: it is setting up a new economic body to boost business. But however much its members cooperate, the council cannot offset hostilities between Russia and the West-hostilities, which affect the Arctic, too. Russia is stepping up its military operations there. This does not mean fighting is about to break out in the Arctic; nor are shipping and energy exploration about to end.

Q66. Which of the following can be said about the Suez canal?

- a) Its shipping traffic has dramatically reduced with the opening up of the Northern Sea Route.
- b) Russian shipping traffic through this route is increasing dramatically.
- c) It is at present the best way to ship goods between Europe and East Asia.
- d) New-generation cargo ships are facing challenges along this route.
- e) Work to expand its capacity should be undertaken soon.

Ans: c

Solution:

It is at present the best way to ship goods between Europe and East Asia.

Q67. Which of the following is true in the context of the passage?

- a) Climate change has resulted in a huge increase in Arctic temperatures.
- b) Oil and natural gas reserves in the Arctic have more or less been depleted.
- c) Coal and natural gas are the most cost effective energy sources today.
- d) Asian countries have been awarded the major mining rights in the Arctic.
- e) None of the given statements is true in the context of the passage.

Ans: e

Solution:

Q68. What does **the phrase** 'as a license to lose money' convey?

- a) the penalties for polluting the Arctic are very heavy.
- b) Exploring the energy in the Arctic is expensive and may not be profitable for companies.
- c) It is very difficult to obtain requisite permissions to explore the Arctic region.
- d) Mining for minerals in the Arctic poses risks to the health and lives of explorers.
- e) As countries have deliberately lowered the price of oil, Russian oil companies are in financial trouble.

Ans: b

Solution:

Q69. Choose **the word which is most nearly the same in meaning to the word 'Lies'** given in bold as used in the passage.

- a) Rests
- b) Reclines
- c) Untruths
- d) Reality
- e) Lazy

Ans: a

Solution:

Option (a) is the correct answer because it is a synonym of 'lies' and means the same as it.

Q70. Which of the following is the central ideal of the passage?

- a) The Arctic has a lot of resource and many countries are fighting over these at present.
- b) Dialogue is the only way to achieve resolution of the conflict between Russia and the West.
- c) The Arctic region has seen a major economic transformation thanks to its natural heath.
- d) The Arctic circle is in the midst of a tremendous environmental and economic crisis.
- e) While the potential of the arctic was hyped in the past, today there are reservations about it.

Ans: e

Solution:

Q71. What does the author suggest regarding the Arctic Council?

- A) It should convince its members to reduce the price of oil.
  - B) It should not be exclusive and should admit other countries as members.
  - C) It should continue to remain purely a scientific body.
- a) Only A
  - b) B and C
  - c) All of these

- d) A and C
- e) None of these

Ans: e

Solution:

Q72. Choose the word which is opposite **in meaning** to the word 'Extreme' given in bold as used in the passage.

- a) Nearest
- b) Minimum
- c) Moderate
- d) Peaceful
- e) Insignificant

Ans: e

Solution:

**Option (e) is the correct answer as insignificant means 'not significant at all' and 'extreme' refers to a very high degree.**

Q73. What is the author's view regarding Russia's present actions?

- a) It will shortly result in military conflict in the region.
- b) It has caused closure of shipping through the Northern Sea Route.
- c) Oil and gas projects with Norway will be suspended.
- d) It will adversely affect the spirit of cooperation in the Arctic region.
- e) Other than those given as options

Ans: e

Solution:

Q74. Which of the following is/are (a) reason/s which impact energy exploration in the Arctic?

A. High cost of exploration projects.

B. Climatic conditions.

C. Excessive red tape and clearances to be obtained from the Arctic Council.

a) Only A

b) Only B

c) All of these

d) A and B

e) B and C

Ans: a

Solution:

Q75. What do the statistics regarding the Northern Sea Route cited in the passage indicate?

a) It has drastically reduced the burden on the Suez canal.

b) It has not been utilised to the degree anticipated.

c) It has caused the Arctic to be severely polluted.

d) There have been a huge number of accidents along this route.

e) The burden on Russian ports has decreased substantially.

Ans: b

Solution:

Option (b) is the correct answer as inferred from the passage.

Directions (Q76-85): Which of the phrases given against the sentence should replace the word/phrase given in bold in the sentence to make it grammatically correct? IF the sentence is correct as it is given and no correction is required, mark **‘No correction required’ as the answer.**

76. While buying a home or renting an apartment, one of the most sought after spaces is that of parking.

- a) few of the much
- b) some of much
- c) once the most
- d) one for the most
- e) no correction required

Ans: e

Solution:

Q77. Some of the best experiments coming from outside the chain of command.

- a) comes of
- b) comes from
- c) coming for
- d) come from
- e) No correction required

Ans: d

Solution:

**Option (d) is the correction required as 'coming from' is in Present Continuous Tense and the sentence is a general statement.**

Q78. Besides the obvious tangible benefits, the new policy will have an immensely positively effect on the mind-sets of working women.

- a) immensely positively affect
- b) effective positive
- c) immense positive affect
- d) immensely positive effect
- e) No correction required

Ans: d

Solution:

**Option (d) is the correct option as 'immensely positively' is grammatically incorrect to be used together.**

Q79. Banks will now take control of a company that owes its customers Rs.9500 crore.

- a) take controlling of
- b) takes control of
- c) controlled
- d) taking control for
- e) No correction required



Ans: e

Solution:

Q80. Labour markets around the world have not been able to keep pace on rapid shifts in the global economy.

- a) kept pace with
- b) keep pace with
- c) keeping pace on
- d) keeps pace in
- e) no correction required

Ans: b

Solution:

**Option (b) is the correct answer as 'with' is the appropriate word to be used with 'pace' while comparison and otherwise.**

Q81. According to media, the CEO has energised the company and build strong foundations for its future.

- a) built strong
- b) strongly build
- c) building strong
- d) strongly building
- e) No correction required

Ans: a

Solution:

Option (a) is the correct option as the Present form of 'build' is used in the sentence despite of the sentence being in the Past form.

Q82. India now qualifies among the sixteen countries having the longer paid leave for new mothers.

- a) having the long
- b) having the longest
- c) who has the longer
- d) the longest
- e) no correction required

Ans: b

Solution:

**Option (b) is the correction required because 'longest' is the approximate form of tense that should be used in the sentence.**

Q83. Dr. APJ Abdul Kalam rose **from humbly binging's to become the country's top** missile scientist and its first technocrat president.

- a) rose form humble
- b) rising from humble
- c) rise of humble
- d) risen humbly of
- e) no correction required

Ans: a

Solution:

Option (a) is the correction required as humbly is an adverb used to describe the beginnings and humble is the grammatically correct adjective.

Q84. To secure privacy meaningfully, some limits have to be place on the **government's** ability to gather information.

- a) has to be placed on
- b) having being placed in
- c) have to be placed on
- d) had placed on to
- e) no correction required

Ans: c

Solution:

Option (c) is the correct because the sentence talks about laws that needs to be imposed with certainty.

Q85. As predicted by the IMO, monsoon is likely too stay strong for the next strong days.

- a) lie to stay
- b) likely for staying
- c) likely to stay
- d) liked for staying
- e) no correction required

Ans: c

Solution:

Option (c) is the correct because the sentence talks about laws that needs to be imposed with certainty.

Directions (Q86-90): Rearrange the following six sentences A, B, C, D, E and F in a proper sequence to form a meaningful paragraph, then answer the given questions.

A. To this affect, the Prime Minister recently appealed to the farmers to grow pulses on a part of their land.

B. We would rather not produce this to be deposed of crop in the first place as production takes a toll not only on the natural resources like soil and water, but also impacts environment because of green house emissions.

C. Every year Indians spend cores of rupees from the public exchequer for preventing decay of specific food grains, but to no avail.

D. Alternatively, we could produce other crops like pulses; which we import very often.

E. But such appeals in all likelihood will go unheeded as long as distorted incentives to produce cereals – wheat and rice-continue.

F. We then spend a fortune again to dispose of the plied up waste.

Q86. Which of the following should be the third sentence after the rearrangement?

a) A

b) B

c) F

d) D

e) E

Ans: c

Solution:

Q87. Which of the following should be the sixth (last) sentence after the rearrangement?

- a) A
- b) E
- c) D
- d) C
- e) B

Ans: b

Solution:

Q88. Which of the following should be the first sentence after the rearrangement?

- a) A
- b) B
- c) C
- d) D
- e) E

Ans: c

Solution:

Q89. Which of the following should be the fourth sentence after the rearrangement?

- a) A
- b) B

c) C

d) E

e) D

Ans: e

Solution:

Q90. Which of the following should be the second sentence after the rearrangement?

a) A

b) B

c) C

d) D

e) E

Ans: b

Solution:



Directions (Q. Q91-100): In the given passage, there are blanks, each of which has been numbered. Against each, five words are suggested, one of which fits the blank approximately. Find the approximate word in each case.

(91) it innovation on steroids, innovation at warp speed or just the innovation of rapid innovation, the essential point remains. Technology is (92) innovation at its core, allowing companies to test new ideas at speeds and prices that were (93) even a decade ago. They can stick features, on websites and tell within hours how customers respond. They can see results from in-store promotions, or efforts to boots process productivity, almost as quickly. The (94)? Innovation initiatives that used to take

months and megabucks to coordinate and launch can now be started in seconds, for peanuts.

And that makes innovation, the lifeblood of growth, more (95) and cheap. Companies are able to get a much better idea of how their customers behave and what they want this gives new offerings and marketing efforts a better shot at success.

As a result, companies will also be (96) to try out new things because the price of failure is so much lower. That will bring big changes in corporate culture making it easier to challenge accepted wisdom, for instance and forcing managers to give more employees a (97) in the innovation process.

There will be even better payoffs for customers, their likes and dislikes will have much more (98) **on companies' decisions. In globally competitive markets, they will** ultimately end up getting products and services better (99) to their needs. Already, this powerful new capability is (100) the way some of the biggest companies in the world do business, inspiring new strategies and revolutionizing the research-and-development process.

Q91.

- a) Call
- b) Says
- c) Yell
- d) Greet
- e) Welcome

Ans: a

Solution:

**‘Call’ is the correct as it is the only appropriate to refer.**

Q92.

- a) Curbing
- b) transforming
- c) letting
- d) remaining
- e) acting

Ans: b

Solution:

Option (b) is the correct answer because the sentence demands a word meaning same as changing drastically.

Q93.

- a) aware
- b) fathom
- c) unimaginable
- d) their
- e) curious

Ans: c

Solution:

Option (c) is the correct option as the achievements talked about were not thought of according to the passage.

Q94.



- a) pitfall
- b) issue
- c) cause
- d) result
- e) next

Ans: d

Solution:

**‘Result’ is the** correct answer as the next paragraph talks of the consequences of the change in innovation.

Q95.

- a) fragile
- b) dynamics
- c) efficient
- d) skilled
- e) inept

Ans: c

Solution:

Option (c) is the correct option as inferred from the passage, technology has become more efficient due to innovation.

Q96.

- a) prone

- b) willing
- c) responsibly
- d) foreword
- e) volunteer

Ans: b

Solution:

Option (c) is the correct option because the cheap cost of innovation provokes people to try and the word **‘willing’ supports and means the same.**

Q97.

- a) talk
- b) assert
- c) say
- d) faith
- e) sound

Ans: c

Solution:

**Option (c) is the correct answer because ‘say’ here means having an impact on and authority in the decision.**

Q98.

- a) affect
- b) crush

- c) impress
- d) attitude
- e) impact

Ans: e

Solution:

Option (e) is the correct answer because the 'impact' here clearly depicts the effect of people's lifestyle on the companies decision.

Q99.

- a) specifically
- b) tailored
- c) comfortable
- d) order
- e) design

Ans: b

Solution:

Option (b) is the correct answer because in the sentence, the word 'tailored' rightfully means 'customised'.

Q100.

- a) changing
- b) certain
- c) paving

- d) working  
e) qualifying

Ans: a

Solution:

‘Changing’ is the correct answer as the sentence depicts a change in the way of decision making.

## Quantitative Aptitude

Directions (Q101-105) : What approximate value will come in place of question mark in the given question? (You are not expected to calculate the exact value.)

Q101.  $64.01^1 \times 65^{\frac{1}{3}} \times 25.99^2 \div (2^{11} \times 12.97^2) = 2^?$

- a) 4  
b) 5  
c) 2  
d) 3  
e) 6

Ans : b)

Solution :  $(64.01)^2 \times (65)^{\frac{1}{3}} \times (25.99)^2 \div \{2^{11} \times (12.97)^2\} = 2^?$

$$\Rightarrow \frac{(64)^2 \times (64)^{\frac{1}{3}} \times (26)^2}{(2)^{11} \times (13)^2} = 2^?$$

$$\Rightarrow 2^? = \frac{(64)^{\frac{7}{3}} \times (2)^2 \times (13)^2}{(2)^{11} \times (13)^2}$$

$$= \frac{(2^6)^{\frac{7}{3}} \times (2)^2}{(2)^{11}}$$

$$\Rightarrow 2^? = (2)^{14} \times (2)^2 \times (2)^{-11}$$

$$\Rightarrow 2^? = (2)^{14+2-11} = (2)^5$$

$$\Rightarrow = 5$$

Q102.  $\frac{3}{10}$  of 111 = ?  $\div$  (1.8  $\times$  0.499)

a) 100

b) 10

c) 3

d) 30

e) 60

Ans : d)

Solution :  $\frac{3}{10}$  of 111 = ?  $\div$  (1.8  $\times$  0.499)

$$\Rightarrow 110 \times \frac{3}{10} = ? \div (2 \times 0.5)$$

$$\Rightarrow 33 = ? \div 1$$

$$\Rightarrow 33 = ?$$

$$\Rightarrow ? = 33 \approx 30$$

$$\Rightarrow ? = 30$$

Q103.  $\sqrt{1024.002} \div 3.996 \times 9.98 \div 2.9 = ?$

a) 3

b) 9

c) 30

d) 90

e) 80

Ans : a)

Solution :  $\sqrt{1024.002} \div 3.996 \times 9.98 \div 2.9 = ?$ 

$$\Rightarrow = \sqrt{1024} \div 4 \div 10 \div 3$$

$$\Rightarrow = 32 \div 4 \div 10 \div$$

$$\Rightarrow ? = \frac{\frac{32}{4}}{\frac{10}{3}} = \frac{32 \times 3}{4 \times 10} = \frac{24}{10}$$

$$\Rightarrow ? = 2.4$$

$$\Rightarrow ? \approx 3$$

Q104.  $(24.99\% \text{ or } 399.995) \div ? = (125\% \text{ of } 4.111)^2$ 

a) 80

b) 4

c) 60

d) 16

e) 40

Ans : b)

Solution :  $(24.99\% \text{ or } 399.995) \div ? = (125\% \text{ of } 4.111)^2$ 

$$\Rightarrow (25\% \text{ of } 400) \div ? = (125\% \text{ of } 5)^2$$

$$400 \times \frac{25}{100} \div ? = \left(4 \times \frac{125}{100}\right)^2$$

$$\Rightarrow 100 \div ? = (5)^2$$

$$\Rightarrow \frac{100}{?} = 25$$

$$\Rightarrow ? = \frac{100}{25} = 4$$

$$\Rightarrow ? = 4$$

Q105.  $\sqrt{?} = (1248.28 + 51.7) \div 99.9 \div 7.98$

a) 49

b) 81

c) 64

d) 16

e) 25

Ans : e)

Solution :  $\sqrt{?} = (1248.28 + 51.7) \div 99.9 - 7.98$

$$\Rightarrow \sqrt{?} = (1248 + 52) \div 100 - 8$$

$$\Rightarrow \sqrt{?} = 1300 \div 100 - 8 = 13 - 8$$

$$\Rightarrow \sqrt{?} = 5 \Rightarrow (\sqrt{?})^2 = (5)^2$$

$$\Rightarrow ? = 25$$

Q106. The distance between two places A and B is 110 km. 1<sup>st</sup> car departs from place A to B, at a speed of 40 km/h at 11 am, 2<sup>nd</sup> car departs from place B to A at a speed of 50 km/h at 1 pm. At what time will both the cars meet each other?

a) 1:50 pm

b) 1:20 pm

c) 2:00 pm

d) 2:30 pm

e) 2:15 pm

Ans : b)



IBPS IT\_1

Total time from 11:00 am to 1:00 pm = 2 hours

∴ Total distance covered by Ist car up to 1:00 pm =  $40 \times 2 = 80$  km

∴ Distance between both the cars

$$= 110 - 80 = 30 \text{ km}$$

Now, meeting time of both cars =  $\frac{\text{Distance between both the cars}}{\text{Total speed of both cars}}$

$$= \frac{30}{40+50} = \frac{30}{90} = \frac{3}{9} = \frac{1}{3} \text{ hours}$$

$$= \frac{1}{3} \times 60 \text{ min}$$

$$= 20 \text{ min}$$

Hence, both car will meet at 1:00 + 0:20 = 1:20 pm

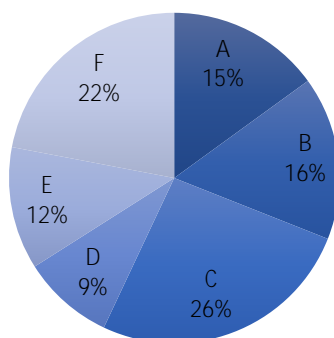
Directions (Q. Nos. 107-112) : Refer to the pie-chart and answer the given questions.

**Percentage of Employees in Different Departments of Branch 'XYZ' in the Year 2014**

Total Number of Employees : 450



Percentage of Employees in Different Departments  
of Branch 'XYZ' in the Year 2014  
Total Number of Employees : 450



Q107. In 2014, the number of female employees in department C was  $\frac{5}{13}$  of the total number of employees in same department. If the number of female employees in department F was 4 less than that in department C, what is the number of male employees department F?

- a) 41
- b) 42
- c) 58
- d) 54
- e) 48

Ans : c)

Solution : Total number of employee in department

$$C = 450 \times \frac{26}{100} = 117$$

Female employee in department C

$$= 117 \times \frac{5}{13} = 45$$

Now, total number of employee in department

$$F = 450 \times \frac{22}{100} = 99$$

Female employee in department

$$F = 45 - 4 = 41$$

∴ Male employee in department F

$$= 99 - 41 = 58$$

Q108. In 2014, there were 25% post graduate employees in department B. In 2015, **22 employees of the same department were shifted to Branch 'PQR'**. If in 2015, the percentage of post graduate employees in Department B became 28%, how many **post graduate employees were shifted to branch 'PQR'**?

- a) 8
- b) 12
- c) 6
- d) 4
- e) 14

Ans : d)

Solution : Total number of employee in department

$$B = 450 \times \frac{16}{100} = 72$$

Post graduate employee in department B

$$= 72 \times \frac{25}{100} = 18$$

Number of employee shifted to branch 'PQR' = 22

∴ Number of post graduate employee shifted to branch PQR = 22 - 18 = 4

Q109. What is the average number of employees in departments A, D and F?

a) 65

b) 70

c) 75

d) 72

e) 69

Ans : e)

Solution : Total number of employee in department

$$A = \frac{450 \times 15}{100} = \frac{135}{2}$$

Total number of employee in department D

$$= \frac{450 \times 9}{100} = \frac{81}{2}$$

Total number of employee in department F

$$= \frac{450 \times 22}{100} = 99$$

∴ Average number of employees in department A, D and F

$$= \frac{1}{3} \left( \frac{135 + 81 + 99}{2} \right)$$

$$= \frac{1}{3} \left( \frac{135 + 81 + 198}{2} \right)$$

$$= \frac{414}{3 \times 2} = \frac{414}{6} = 69$$

Q110. In department E, the respective ratio between the number of female employees and male employees was 5 : 4. There were equal number of unmarried males and unmarried females in department E. If the respective ratio between

married females and married males was 3 : 2, what is the number of unmarried females?

- a) 6
- b) 15
- c) 12
- d) 4
- e) 8

Ans : c)

Solution : Total number of employees in department E =  $\frac{450 \times 12}{100} = 54$

∴ Female employee in department E

$$= \frac{5}{5+4} \times 54 = \frac{5}{9} \times 54 = 5 \times 6 = 30$$

∴ Male employee in department

$$E = 54 - 30 = 24$$

Let, unmarried males and Females in department E = x

∴ Married females in department E = (30 - x) and married males in department E (24 - x)

Now, according to the question,

$$\frac{30-x}{24-x} = \frac{3}{2}$$

$$\Rightarrow 72x - 3x = 60 - 2x$$

$$\Rightarrow -3x + 2x = 60 - 72$$

$$\Rightarrow -x = -12$$

$$\Rightarrow x = 12$$

Hence, number of unmarried females = 12

Q111. What is the central angle corresponding to the number of employees in department E?

- a)  $43.2^\circ$
- b)  $46.5^\circ$
- c)  $41.6^\circ$
- d)  $42.8^\circ$
- e)  $45.9^\circ$

Ans : a)

Solution : Central angle of number of employees in department E

$$= \frac{12}{100} \times 360^\circ = 43.2$$

Q112. The number of employees in department E is what percent less than the number of employees in departments A, B and C together?

- a) 72%
- b) 60%
- c) 65%
- d) 70%
- e) 68%

Ans : d)

Solution : Total number of employee in department A =  $\frac{135}{2}$

Total number of employee in department C = 117

∴ Total number of employee in department

$$(A + C) = \frac{135}{2} + 117 = \frac{369}{2}$$

And Total number of employee in department E = 54

$$\therefore \text{Required percentage} = \frac{\frac{369}{2} - 54}{\frac{369}{2}} \times 100$$

$$= \frac{\frac{261}{2}}{\frac{369}{2}} \times 100 = \frac{261}{369} \times 100$$

$$= \frac{29}{41} \times 100 = 70.73 \approx 70\%$$

Q113. In the year 2013, the population of a village A was 20% more than the population of village B. The population of village A in 2014 increased by 10% as compared to the previous year. If the population of village A in 2014 was 5610, what was the population of village B in 2013?

a) 4650

b) 5550

c) 4250

d) 5800

e) 4500

Ans : c)

Solution : Let, population of village B in year 2013 = x

Then, population of village A in year 2012

$$= x + \frac{x \times 20}{100} = \frac{6x}{5}$$

And population of village A in year 2014

$$= \frac{6x}{5} + \frac{6x}{5} \times \frac{10}{100} = \frac{6x}{52} + \frac{6x}{50}$$

According to the question,

$$\frac{6x}{5} + \frac{6x}{50} = 5610$$

$$\Rightarrow \frac{60x+6x}{50} = 5610$$

$$\Rightarrow \frac{66x}{50} = 5610$$

$$\Rightarrow x = \frac{5610 \times 50}{66} = 4250 \Rightarrow x = 4250$$

Hence, population of village B in year 2013 = 4250

Q114. Five years ago, the respective ratio between the age of Opi and that of Mini was 5 : 3. Nikki is 5 years younger to Opi. Nikki is five years older to Mini. What is **Nikki's present age?**

- a) 35 years
- b) 25 years
- c) 20 years
- d) 10 years
- e) 30 years

Ans : b)

Solution : Let, present age of Nikki = x years

Present age of Opi = y years

And present age of Mini = z years

According to the question,

$$\frac{y-5}{z-5} = \frac{5}{3} \quad \text{-----i)}$$

and  $x = (y - 5)$  -----ii)

and  $x = z + 5$

$\Rightarrow z = x - 5$  -----iii)

Now, putting the value of  $(y - 5)$  and  $z$  from Eqs. ii) and iii) to Eq. i), we have

$$\frac{x}{x-5-5} = \frac{5}{3} \Rightarrow \frac{x}{x-10} = \frac{5}{3}$$

$$\Rightarrow 5x = 50 = 3x$$

$$\Rightarrow 5x - 3x = 50$$

$$\Rightarrow 2x = 50$$

$$\Rightarrow x = 25$$

Hence, present age of Nikki = 25 years

Q115. Mohan gave 25% of a certain amount of money to Ram. From the money Ram received, he spent 20% on buying books and 35% on buying a watch. After the mentioned expenses, Ram has Rs. 2700 remaining. How much did Mohan have initially?

a) Rs. 16000

b) Rs. 15000

c) Rs. 24000

d) Rs. 27000

e) Rs. 20000

Ans : c)

Solution : Let, Mohan have initially amount = Rs.  $x$

$$\text{He gave to Ram} = x \times \frac{25}{100} = \frac{x}{4}$$



Now, according to the question,

$$\frac{x}{4} - \frac{x}{4} - \frac{20}{100} - \frac{x}{4} \times \frac{35}{10} = 2700$$

$$\Rightarrow \frac{x}{4} - \frac{20x}{400} - \frac{35x}{400} = 2700$$

$$\Rightarrow \frac{100x - 20x - 35x}{400} = 2700$$

$$\Rightarrow \frac{100x - 55x}{400} = 2700$$

$$\Rightarrow \frac{45x}{400} = 2700$$

$$\Rightarrow x = \frac{400 \times 2700}{45} = 24000$$

$$\Rightarrow x = \text{Rs. } 24000$$

Hence, Mohan have initially amount = Rs. 24000

Directions (Q.116-121) : What will come in place of question mark in the given number series?

Q116. 849 282 93 30 9 ?

a) 1

b) 3

c) 4

d) 6

e) 2

Ans : e)

Solution :  $\begin{array}{cccccc} 849 & 282 & 93 & 30 & 9 & \boxed{2} \\ \downarrow & \uparrow & \downarrow & \uparrow & \downarrow & \uparrow \\ \div 3-1 & \div 3-1 & \div 3-1 & \div 3-1 & \div 3-1 & \div 3-1 \end{array}$

IBPS IT\_2

Q117. 18 20 14 26 6 ?

- a) 18
- b) 26
- c) 32
- d) 28
- e) 36

Ans : c)

Solution :  $\begin{array}{ccccc} 18 & 20 & 14 & 26 & 6 & \boxed{32} \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 9 \times 2 & 10 \times 2 & 7 \times 2 & 13 \times 2 & 3 \times 2 & 16 \times 2 \end{array}$

IBPS IT\_3

Q118. 12 13 20 39 82 ?

- a) 259
- b) 232
- c) 210
- d) 198
- e) 173

Ans : e)

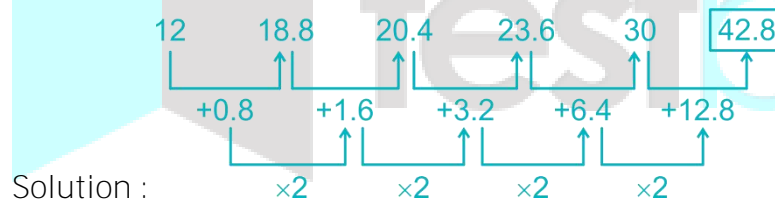


IBPS IT\_4

Q119. 18 18.8 20.4 23.6 30 ?

- a) 44.4
- b) 43.5
- c) 49.2
- d) 49.6
- e) 42.8

Ans : e)



IBPS IT\_5

Q120. 17 9 10 16.5 35 ?

- a) 85
- b) 70
- c) 92.5
- d) 90
- e) 84.5

Ans : d)



IBPS IT\_ 6

Q121. 6 4 5 11 ? 189

- a) 82
- b) 39
- c) 44

d) 65

e) 96

Ans : b)



IBPS IT\_ 7

Q122. 16 men and 10 women together can complete a project in 10 days. If 12 women can complete the project in 25 days, in how many days 10 men complete the same project?

- a) 28 days
- b) 24 days
- c) 18 days
- d) 26 days

e) 10 days

Ans : c)

Solution : One day work of  $(16M + 10W) = \frac{1}{10}$  ..... i)

And One day work of  $12W = \frac{1}{25}$  ..... ii)

Now, Eq. i) multiply by 12 and Eq. ii) multiply by 10 and then subtract Eq. ii) from Eq. i), we have

$$192M + 120W = \frac{12}{10}$$

$$120W = \frac{10}{25}$$

$$192M = \frac{12}{10} - \frac{10}{25}$$

$$192M = \frac{60-20}{50} = \frac{40}{50} = \frac{4}{5}$$

$$M = \frac{4}{5 \times 192} = \frac{1}{5 \times 48} = \frac{1}{240}$$

So, 1 man's one day work =  $\frac{1}{240}$

So, 1 man will complete the work in 240 days.

Hence, 10 men will complete the work in  $\frac{240}{10}$  i.e., 24 days.

Q123. A and B started a business with an investment of Rs. 2800 and Rs. 5400 respectively. After 4 months, C joined with Rs. 4800. If the difference between C's share and A's share in the annual profit was Rs. 400, what was the total annual profit?

a) Rs. 13110

b) Rs. 12540

c) Rs. 17100

d) Rs. 11400

e) Rs. 14250

Ans : d)

Solution : Ratio of profit of A, B and C

$$= 2800 \times 12 : 5400 \times 12 : 4800 \times (12 - 4)$$

$$= 28 \times 12 : 54 \times 12 : 48 \times 8 = 14 : 27 : 16$$

Let, total annual profit = Rs. X

And let profit of A, B and C be  $14x$ ,  $27x$  and  $16x$  respectively.

Now, according to the question,

$$\frac{16x}{(14+27+16)} - \frac{14x}{(14+27+16)} = 400$$

$$\Rightarrow \frac{16x}{57} - \frac{14x}{57} = 400$$

$$\Rightarrow \frac{2x}{57} = 400$$

$$\Rightarrow x = \frac{400 \times 57}{2} = 200 \times 57$$

$$\Rightarrow x = 11400$$

Hence, annual profit = Rs. 11400

**Q124. The interest earned when Rs. 'P' is invested for five years in a scheme offering 12% p.a. simple interest is more than the interest earned when the same sum (Rs. P) is invested for two years in another scheme offering 8% p.a. simple interest, by Rs. 1100. What is the value of P?**

a) Rs. 2500

b) Rs. 2000

c) Rs. 4000

d) Rs. 3500

e) Rs. 3000

Ans : a)

Solution : According to the question,

$$\frac{P \times 12 \times 5}{100} - \frac{P \times 8 \times 2}{100} = 1100$$

$$\Rightarrow \frac{60P}{100} - \frac{16P}{100} = 1100$$

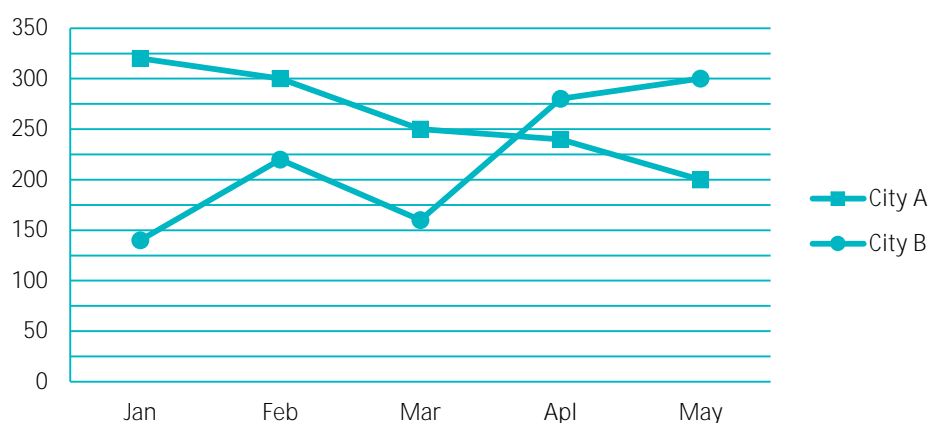
$$\Rightarrow \frac{44P}{100} = 1100$$

$$\Rightarrow P = \frac{1100 \times 100}{44}$$

$$\Rightarrow P = \text{Rs. } 2500$$

Directions (Q. Nos. 125-130) : Refer to the graph and answer the given questions.

Data Regarding Number of Tourists in Two Cities A and B in  
Five Different Months in the Year 2005.  
Data are Given in Hundreds.



Q125. What is the average number of tourists in city B in February and march?

- a) 18000
- b) 23000
- c) 19000
- d) 21000
- e) 17500

Ans : c)

Solution : Average number of tourist in city B in the month of February and March

$$= \frac{(220+160)}{2} \times 100$$

$$= \frac{380}{2} \times 100$$

$$= 190 \times 100 = 19000$$

Q126. Number of tourists in city B in April are what percent more than that in city A in march?

- a) 20%
- b) 18%
- c) 12%
- d) 25%
- e) 8%

Ans : c)

Solution : Number of tourist in city B in April = 280

Number of tourist in city A in March = 250

∴ Required percentage



$$= \left( \frac{280-250}{250} \right) \times 100$$

$$= \frac{30}{250} \times 100 = 12\%$$

Q127. What is the respective ratio between the total number of tourists in city A in January and February together and that in city B in the same months together/

- a) 25 : 11
- b) 16 : 9
- c) 30 : 17
- d) 16 : 11
- e) 31 : 18

Ans : e)

Solution : Total number of tourist in city A in the month of January and February

$$= 320 + 300 = 620$$

And total number of tourist in city B in the month of January and February

$$= 140 + 220 = 360$$

$$\therefore \text{Required ratio} = 320 : 360 = 31 : 18$$

Q128. In the month of June that year, the total number of tourists in both the cities together reduced by 40% from the previous month. What was the number of tourists in both the cities together in June?

- a) 32000
- b) 40000
- c) 20000

d) 42000

e) 30000

Ans : e)

Solution : Number of tourist in city A in the month of June =  $200 - 200 \times \frac{40}{100}$

$$= 200 - 80 = 120$$

∴ Total number of tourist in both the cities in the month of June =  $120 + 180 = 300$

$$= 300 + 100 = 30000$$

Q129. What is the difference between the total number of tourists in cities A and B together in may and that in march?

a) 10000

b) 9000

c) 7000

d) 8000

e) 9500

Ans : b)

Solution : Total number of tourists in cities A and B together in the months of May

$$= 200 + 300 = 500$$

And total number of tourists in cities A and B together in the month of March

$$= 250 + 160 = 410$$

∴ Required difference =  $(500 - 410) \times 100 = 90 \times 100 = 9000$

Q130. The number of tourists in city A in April is what percent less than that in the same city in January?

a)  $30\frac{3}{4}\%$

b) 20%

c)  $20\frac{1}{4}\%$

d) 30%

e) 25%

Ans : e)

Solution : Number of tourist in city A in the month of April = 240

And number of tourist in city A in the month of January = 320

∴ Required percentage

$$= \frac{(320+240)}{320} \times 100$$

$$= \frac{80 \times 100}{320} = 25\%$$

testbook

Directions (Q131-136) : Study the table and answer the given questions.

Data regarding number of books sold in either hard bounds or paperback editions and also the categories of books sold in Fiction and Non-Fiction category, by four different shops, in a particular month (January, 2014)

Book Shop	Respective Ratio Between Number of Hard bounds Sold and	Number of Paperbacks Sold Out of Total Number of Books Sold	Percentage of Fiction (Hard bound + Paperback) Sold Out of
-----------	---	---	--

	Number of Paperbacks Sold		Total Books Sold
A	2 : 3	600	45
B	3 : 6	450	75
C	1 : 3	450	50
D	2 : 7	1400	60

Total books sold = Number of hard bounds sold + Number of paperbacks sold

As per given information,

Total books sold by shop A  $\times \frac{3}{5} = 600$

$\Rightarrow$  Total books sold by shop A = 1000

Total books sold by shop B  $\times \frac{5}{8} = 450$

$\Rightarrow$  Total books sold by shop B = 720

Total books sold by shop C  $\times \frac{3}{4} = 450$

$\Rightarrow$  Total books sold by shop C = 600

Total books sold by shop D  $\times \frac{7}{9} = 1400$

$\Rightarrow$  Total books sold by shop D = 1800

Now, number of hardbound sold by shop A =  $1000 - 600 = 400$

Number of hardbound sold by shop

B =  $720 - 450 = 270$

Number of hardbound sold by shop

$$C = 600 - 450 = 150$$

Number of hardbound sold by shop

$$D = 1800 - 1400 = 400$$

Percentage of non-fictions sold by shop

$$A = 100 - 45 = 55\%$$

Percentage of non-fictions sold by shop

$$B = 100 - 75 = 25\%$$

Percentage of non-fictions sold by shop

$$C = 100 - 50 = 50\%$$

Percentage of non-fictions sold by ship

$$D = 100 - 60 = 40\%$$

Q131. What is the respective ratio between the number of non-fiction sold by shop C and number of non-fiction sold by shop B?

a) 10 : 2

b) 5 : 2

c) 5 : 3

d) 7 : 3

e) 7 : 4

Ans : c)

Solution : Total number of non-fictions sold by shop

$$C = 600 \times \frac{50}{100} = \frac{600}{2} = 300$$

And total number of non-fictions sold by shop

$$B = 720 \times \frac{25}{100} = \frac{720}{4} = 180$$

∴ Required ratio = 300 : 180 = 5 : 3

Q132. In February, 2014, the number of paperback editions sold by shop D was 5% more than the same sold by the same shop in the previous month. The number of paperback editions sold in February, 2014 by shop D constituted 75% of the total number of books sold by shop D in February 2014. What was the total number of books sold in February 2014 by shop D?

a) 1840

b) 2040

c) 1960

d) 2080

e) 2400

Ans : c)

Solution : Paperback edition sold by shop D in the month of February

$$2014 = 1400 \times \frac{105}{100} = 14 \times 105 = 1470$$

And ratio between number of hardbounds sold and number of paperbacks sold by shop D

$$= (100 - 75\%) : 75\%$$

$$= 25 : 75 = 1 : 3$$

$$\therefore \text{Total books sold by shop D in the month of February 2014} = 1470 \times \frac{(1+3)}{3}$$

$$= 490 \times 4 = 1960$$

Q133. Number of non-fictions sold by shop C is what percent of number of non-fictions sold by shop D?

- a) 38%
- b)  $41\frac{2}{3}\%$
- c)  $45\frac{2}{5}\%$
- d) 60%
- e) 31%

Ans : b)

Solution : Number of non-fiction sold by shop

$$C = 600 \times \frac{50}{100} = \frac{600}{2} = 300$$

And number of non-fiction sold by shop

$$D = 1800 \times \frac{40}{100} = 18 \times 40 = 720$$

$$\therefore \text{Required percentage} = \frac{300}{720} \times 100$$

$$= \frac{125}{3} = 41\frac{2}{3}\%$$

Q134. Total number of books sold by shop is what percent more than sold by shop C?

- a) 50%
- b)  $25\frac{1}{3}\%$
- c)  $15\frac{1}{3}\%$

d) 30%

e) 20%

Ans : e)

Solution : Total number of books sold by shop B = 720

Total number of books sold by shop C = 600

∴ Required percentage

$$= \left( \frac{720-600}{600} \right) \times 100$$

$$= \frac{120}{600} \times 100 = \frac{100}{5} = 20\%$$

Q135. What is the average number of fictions sold by shops A and B?

a) 475

b) 470

c) 495

d) 480

e) 490

Ans : c)

Solution : Percentage of fiction sold by shop A = 45%

∴ Number of fiction sold by shop

$$A = 1000 \times \frac{45}{100} = 450$$

Now, percentage of fiction sold by shop B = 75%

∴ Number of fiction sold by shop



$$B = 720 \times \frac{75}{100} = 720 \times \frac{3}{4} = 540$$

Now, average number of fictions sold by shop A and B =  $\frac{4150+540}{2} = \frac{990}{2} = 495$

Q136. Number of hardbound editions sold by shop B is what percent less than that sold by shop D?

- a) 30%
- b) 36.75%
- c) 25%
- d) 32.5%
- e) 40.25%

Ans : d)

Solution : Number of hardbound sold by shop B = 720

And number of hardbound sold by shop D = 400

∴ Required percentage

$$= \left( \frac{400-270}{400} \right) \times 100$$

$$= \frac{130 \times 100}{400} \times \frac{130}{4} = \frac{65}{2}$$

$$= 32.5\%$$

Directions (Q137-141) : Each question consist of a question and two statements numbered I and II given below it. You have to decide whether the data given in statements are sufficient to answer the questions. Read both the statement and

Give answer

- a. If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question
- b. If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question
- c) If the data either in statement I alone are sufficient or in statement II alone are sufficient to answer the question
- d) If the data in both statements together are necessary to answer to question

Q137. What is the area of the circular field?

I. Area of the largest square that can be inscribed in the given circular field is 392 cm<sup>2</sup>.

II. Area of the smallest square in which the given circular field can be inscribed is 784 cm<sup>2</sup>.

Ans : a)

Solution : From Statement I

We know that area of largest square inscribed by circle =  $\frac{\pi r^2}{4}$

Where 'r' is the radius of circle

$$\Rightarrow 392 = \frac{\pi r^2}{4}$$

$$\Rightarrow \pi r^2 = 392 \times 4 \quad \text{.....i)}$$

And area of circular field =  $\pi r^2$

$$= 392 \times 4$$

$$= 1568 \text{ cm}^2$$

Hence, statement I is sufficient to answer the question.

Q138. What was the initial quantity of mixture of juice and water?

I. Juice and water were in the ratio of 6 : 1 respectively in the mixture initially.

II. When 7 litres of mixture is taken out and 5 litres of water is added the ratio between juice and water becomes 8 : 3 respectively.

Ans : e)

Solution : From Both Statements

Let, Initial quantity of juice and water in the mixture was  $6x$  and  $x$  respectively.

Total initial quantity =  $6x + x = 7 \times L$

Quantity of juice in 7L mixture =  $\frac{6x}{7x} \times 7 = 6L$

And quantity of water in 7L mixture

$$= \frac{x}{7x} \times 7 = 1L$$

Now, according to the questions,

$$\frac{6x-6}{x-1+5} = \frac{8}{3}$$

$$\Rightarrow \frac{6x-6}{x+4} = \frac{8}{3}$$

$$\Rightarrow 18x - 18 = 8x + 32$$

$$\Rightarrow 18x - 8x = 32 + 18$$

$$\Rightarrow 10x = 50$$

$$X = 5$$

Hence, Initial quantity of mixture =  $7x$

$$= 7 \times 5 = 35 L$$

Hence, both statements together are necessary to answer the question.

Q139. What is the curved surface area of the right circular cylinder?

I. Area of the base of the cylinder is  $616\text{cm}^2$ .

II. Volume of the cylinder is  $9240\text{ cm}^3$ .

Ans : e)

Solution : From Both Statements

$$9240 = \pi r^2 h = \pi r \times \pi h$$

$$9240 = \frac{22}{7} \times r \times 616 [\because rh = 616]$$

$$\Rightarrow r = \frac{9240 \times 7}{22 \times 616}$$

$$\Rightarrow r = \frac{105}{22}$$

$$\Rightarrow rh = 616 \Rightarrow \frac{105}{22} \times h = 616$$

$$\Rightarrow h = \frac{616 \times 22}{105}$$

$\therefore$  Curved surface area of right circular cylinder =  $2 \pi rh$

$$2 \times \frac{22}{7} \times \frac{105}{22} \times \frac{616 \times 22}{105}$$

$$= 2 \times \frac{22}{7} \times 616 = 2 \times 22 \times 88$$

$$= 3872\text{ cm}^2$$

Hence, both statements are necessary to answer the question.

Q140. In how many days can 'B' alone complete the work?

I. A, B and C together can complete the work in  $4\frac{32}{37}$  days.

II. A and B together can complete the work in  $6\frac{2}{3}$  days, B and C together can complete the work together in  $8\frac{2}{1}$  days and A and (together can complete the work in  $7\frac{1}{3}$  days.)

Ans : b)

Solution : From Statement II

(A + B) complete the work  $6\frac{2}{3} = \frac{20}{3}$  days

i.e.,  $A + B = \frac{20}{3}$  .....i)

Same as  $B + C = \frac{90}{11}$  .....ii)

And  $C + A = \frac{22}{3}$  .....iii)

Solving Eqs. i), ii) and iii), we have

$$B = \frac{124}{33} = 3\frac{25}{33}$$

Hence, B alone complete the work in  $3\frac{25}{33}$  days.

Hence, statement II alone are sufficient to answer the question.

Q141. How much money did Ms. Malini receive retirement funds?

I. Out of the total money received Ms. Malini gave 25% to her husband and 10% to her daughter. Out of the remaining she invested 30% in Mutual funds, 60% in pension Fund Scheme and remaining Rs. 260000 she spent on miscellaneous items.

II. Out of the total money received Ms. Malini invested 58.5% In various schemes, gave 35% of the total money received to her husband and daughter and remaining money she spent on miscellaneous items.

Ans : a)

Solution : From Statement I

Let Ms. Malini received = Rs. X

$$\text{Now, } x - \left( x \times \frac{25}{100} + x \times \frac{10}{100} \right)$$

$$= x - \frac{35x}{100} = \frac{65x}{100}$$

Now, again

$$\frac{65x}{100} - \left( \frac{65x}{100} \times \frac{30}{100} + \frac{65x}{100} \times \frac{60}{100} \right) = 260000$$

$$\Rightarrow \frac{65x}{100} - \frac{65x}{100} \left( \frac{30}{100} + \frac{60}{100} \right) = 260000$$

$$\frac{65x}{100} - \frac{65x}{100} \times \frac{90}{100} = 260000$$

$$\Rightarrow \frac{65x}{100} \left( 1 - \frac{90}{100} \right) = 260000$$

$$\Rightarrow \frac{65x}{100} \times \frac{10}{100} = 260000$$

$$\Rightarrow x = \frac{260000 \times 100 \times 10}{65}$$

$$\rightarrow x = 4000000$$

Hence, statement I is sufficient to answer the question.

Q142. The speed of a boat in still water is 16 km/h and the speed of the current is 2 km/h. The distance travelled by the boat from point A to point B downstream is 12 km more than the distance covered by the same boat from point S to point upstream in the same time. How much time will the boat take to travel from C to B downstream?

- a) 3 h
- b) 2 h 30 min
- c) 2 h 20 min
- d) 2 h 20 min
- e) 2 h

Ans : d)

Solution : Given, speed of boat in still water = 16 km/h

And speed of current = 2 km/h



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∴ Downstream speed of boat = 16 + 2 = 18 km/h

And upstream speed of boat = 16 – 2 = 14 km/h

Now, distance between point B and C = x km (say)

And distance between point A and B = (x + 12) km

Now, according to the question,

$$\frac{x}{14} = \frac{x+12}{18}$$

$$\Rightarrow 18x = 14x + 168$$

$$\Rightarrow 18x - 14x = 168$$

$$\Rightarrow 4x = 168 \rightarrow x = 42 \text{ km}$$

∴ Time taken by boat to travel from point C to B in downstream motion =  $\frac{x}{18} = \frac{42}{18}$

$$= \frac{7}{3} = 2\frac{1}{3}h = 2h + \frac{1}{3}h$$

$$= 2h + \frac{1}{3} \times 60 \text{ min.}$$

$$= 2h + 20 \text{ min}$$

$$= 2 \text{ h } 20 \text{ min}$$

Directions (Q. Nos. 143-148) : In the following questions, two equations numbered I and II are given solve both the equations and

Give answer

a) if  $x > y$

b) if  $x \geq y$

c) if  $x < y$

d) if  $x \leq y$

e) if  $x = y$  or the relationship cannot be established

Q143. I.  $x^2 - 6x + 9 = 0$

II.  $4y^2 - 15y + 14 = 0$

Ans : a)

Solution : I.  $x^2 - 6x + 9 = 0$

$$\Rightarrow x^2 - 3x - 3x + 9 = 0$$

$$\Rightarrow x(x - 3) - 3(x - 3) = 0$$

$$\Rightarrow (x - 3)(x - 3) = 0$$

$$\Rightarrow x = 3, 3$$

II.  $4y^2 - 15y + 14 = 0$

$$\Rightarrow 4y^2 - 8y - 7y + 14 = 0$$

$$\Rightarrow 4y(y - 2) - 7(y - 2) = 0$$

$$\Rightarrow (y - 2)(4y - 7) = 0$$

$$\Rightarrow y = 2, \frac{7}{4}$$

$$\therefore x > y$$



Q144. I.  $2x^2 - 9x + 4 = 0$

II.  $y^2 - 14y + 40 = 0$

Ans : d)

Solution : I.  $2x^2 - 9x + 4 = 0$

$$\Rightarrow 2x^2 - 8x - x + 4 = 0$$

$$\Rightarrow 2x(x - 4) - 1(x - 4) = 0$$

$$\Rightarrow (x - 4)(2x - 1) = 0$$

$$\Rightarrow x = 4, \frac{1}{2}$$

II.  $y^2 - 14y + 40 = 0$

$$\Rightarrow y^2 - 10y - 4y + 40 = 0$$

$$\Rightarrow y(y - 10) - 4(y - 10) = 0$$

$$\Rightarrow (y - 10)(y - 4) = 0$$

$$\Rightarrow y = 10, 4$$

$$\therefore x \leq y$$

Q145. I.  $x^2 - 10x + 25 = 0$

II.  $y^2 - 9y + 20 = 0$

Ans : b)

Solution : I.  $x^2 - 10x + 25 = 0$

$$\Rightarrow x^2 - 5x - 5x + 25 = 0$$

$$\Rightarrow x(x - 5) - 5(x - 5) = 0$$

$$\Rightarrow (x - 5)(x - 5) = 0$$

$$\Rightarrow x = 5, 0$$

$$\text{II. } y^2 - 9y + 20 = 0$$

$$\Rightarrow y^2 - 5y - 4y + 20 = 0$$

$$\Rightarrow y(y - 5) - 4(y - 5) = 0$$

$$\Rightarrow (y - 5)(y - 4) = 0$$

$$\Rightarrow y = 5, 4$$

$$\therefore x \geq y$$

$$\text{Q146. I. } 4x^2 - 13x + 10 = 0$$

$$\text{II. } 2y^2 - 15y + 22 = 0$$

Ans : d)

$$\text{Solution : I. } 4x^2 - 13x + 10 = 0$$

$$\Rightarrow 4x^2 - 8x - 5x + 10 = 0$$

$$\Rightarrow 4x(x - 2) - 5(x - 2) = 0$$

$$\Rightarrow (x - 2)(4x - 5) = 0$$

$$\Rightarrow x = 2, \frac{5}{4}$$

$$\text{II. } 2y^2 - 15y + 22 = 0$$

$$\Rightarrow 2y^2 - 4y - 11y + 22 = 0$$

$$\Rightarrow 2y(y - 2) - 11(y - 2) = 0$$

$$\Rightarrow (y - 2)(2y - 11) = 0$$

$$\Rightarrow y = 2, \frac{11}{2}$$

$$\therefore x \leq y$$

Q147. I.  $30x^2 + 17x + 2 = 0$

II.  $3y^2 + 8y + 4 = 0$

Ans : c)

Solution : I.  $30x^2 + 17x + 2 = 0$

$$\Rightarrow 30x^2 + 5x + 12x + 2 = 0$$

$$\Rightarrow 5x(6x + 1) + 2(6x + 1) = 0$$

$$\Rightarrow (6x + 1)(5x + 2) = 0$$

$$\Rightarrow x = -\frac{1}{6}, -\frac{2}{5}$$

II.  $3y^2 + 8y + 4 = 0$

$$\Rightarrow 3y^2 + 6y + 2y + 4 = 0$$

$$\Rightarrow 3y(y + 2) + 2(y + 2) = 0$$

$$\Rightarrow (y + 2)(3y + 2) = 0$$

$$\Rightarrow y = -2, -\frac{2}{3}$$

$$\therefore x < y$$

Q148. I.  $6x^2 + 11x + 3 = 0$

II.  $20y^2 + 9y + 1 = 0$

Ans : a)

Solution : I.  $6x^2 + 11x + 3 = 0$

$$\Rightarrow 6x^2 + 9x + 2x + 3 = 0$$

$$\Rightarrow 3x(2x + 3) + 1(2x + 3) = 0$$

$$\Rightarrow (2x + 3)(3x + 1) = 0$$

$$\Rightarrow x = -\frac{3}{2}, -\frac{1}{3}$$

$$\text{II. } 20y^2 + 9y + 1 = 0$$

$$\Rightarrow 20y^2 + 5y + 4y + 1 = 0$$

$$\Rightarrow 5y(4y + 1) + 1(5y + 1) = 0$$

$$\Rightarrow (4y + 1)(5y + 1) = 0$$

$$\Rightarrow y = -\frac{1}{4}, -\frac{1}{5}$$

$$\therefore y > y$$

Q149. A jar has 40 L milk. From the jar, 8 L of milk was taken out and replaced by an equal quantity of water. If 8 L of the newly formed mixture is taken out of the jar, what is the final quantity of milk left in the jar?

a) 32.5 L

b) 30 L

c) 25.6 L

d) 24.2 L

e) 24 L

Ans : c)

Solution : In 40 L mixture of milk and water

Quantity of milk = 32 L

And quantity of water = 8 L

$\therefore$  Ratio of milk to water in mixture

$$= 32 : 8 = 4 : 1$$

Now, 8 L mixture is taken out from the jar.

∴ Quantity of milk taken out from jar

$$\frac{4}{5} \times 8 = 6.4L$$

And quantity of water taken out from jar

$$= \frac{1}{5} \times 8 = 1.6L$$

Now, final quantity of milk left in the jar

$$= 32 - 6.4$$

$$= 25.6 L$$

Q150. Two mobile phones were purchased at the same price. One was sold at a profit of 20% and second was sold at a price, which was Rs. 1520 less than the price at which the first was sold. If the overall profit earned by selling both the mobile phones was 1%, what was the cost price of one mobile phone?

a) Rs. 6000

b) Rs. 5200

c) Rs. 4800

d) Rs. 4000

e) Rs. 5000

Ans : d)

Solution : Let, CP of each mobile phone = Rs. X

Then, according to the questions,

$$\left(x + \frac{x \times 20}{100}\right) + \left(x + \frac{x \times 20}{100} - 1520\right)$$

$$= (x + x) + \frac{(x+x) \times 1}{100}$$

$$\Rightarrow x + \frac{20x}{100} + x + \frac{20x}{100} - 1520 = 2x + \frac{2x}{100}$$

$$\Rightarrow \frac{40x}{100} - \frac{2x}{100} = 1520$$

$$\Rightarrow \frac{38x}{100} = 1520$$

$$\Rightarrow x = \frac{1520 \times 100}{38} = 40 \times 100$$

$$\Rightarrow \text{Rs. } 4000$$

Hence, CP of each mobile phone = Rs. 4000

Q151. What are code generators?

- a) CASE tools that enable the automatic generation of program and database definition code directly from the design documents diagrams, forms and reports stored in the repository.
- b) CASE tools that support the circulation of graphical representations of various system elements such as process flow, data relationships, and program structures.
- c) CASE tools that enable the easy production of user documentation in standard formats.
- d) CASE tools that enable the easy production of technical documentation in standard formats.
- e) CASE tools that support the production of systems forms and reports in order to **prototype how systems will 'look and feel' to users.**

Ans : a

Q152. The Web layout View is available in, which Office 2013 application?

- a) Excel
- b) Word
- c) Access
- d) PowerPoint
- e) Webmaker

Ans : b

Solution :

Web Layout View is a view that shows a document as it will look when viewed with a web browser. In MS-Office 2013, Web Layout View is available in Word.

Q153. .... produces printout of a data in user-defined manner

- a) Query language
- b) DML
- c) Report generator
- d) DCL
- e) Metadata

Ans : c

Q154. Which security model is used in a peer-to-peer network?

- a) Password-protected Shares
- b) Access Control Lists
- c) Share-level Security

- d) User-level Security
- e) Access Control Entries (ACEs)

Ans : c

Q155. A hierarchical data model combines records and fields that are

- a) cross structure and relational structure
- b) tree structure
- c) logical manner
- d) cross structure
- e) relational structure

Ans : b

Solution :

A hierarchical data model combines records and fields that are related in a tree structure. This results in a one-to-many data model. Where each node may have zero, one or many children but only one parent.

Q156. Which protocol is used for transferring data and information from one network to the other network?

- a) Internet Protocol
- b) Transmission Control Protocol
- c) File Transfer Protocol
- d) Hyper-Text Transfer Protocol
- e) Ethernet Protocol



Ans : c

Solution :

The File Transfer Protocol (FTP) is a standard network protocol used to transfer computer files between a client and server on a computer network.

Q157. What does ios ate mean as an argument in ofstream in C++ ?

- a) Open file for read access only
- b) Open file, create
- c) Open file, but do not create
- d) Open file, set the position to the end
- e) Open file, for write access only

Ans : d

Q158. An object-oriented database does not depend upon ..... for interactions.

- a) data dictionary
- b) Oracle
- c) SQL
- d) index
- e) DBMS

Ans : c

Solution :

An object oriented database also does not depend upon SQL for interactions, so applications that are not SQL clients can work with these types of database.

Q159. What is a brownout in an electrical supply system?

- a) A slightly elevated voltage lasting from seconds to minute.
- b) Alternating power out, power on lasting a few minutes.
- c) Has nothing to do with electricity.
- d) Complete power out lasting a few minutes.
- e) A slightly decreased voltage lasting from seconds to minutes or more.

Ans : e

Q160. Which common backstage view task creates a PDF file from an existing file?

- a) Export
- b) Account
- c) Create
- d) Options
- e) Info

Ans : a

Q161. Which device operates at the internet layer of the TCP/IP model?

- a) Switch and Hub
- b) Router
- c) Switch
- d) PBX
- e) Firewall

Ans : b

Solution :

Routers operate on the internet layer of the TCP/IP mode. The internet layer is synonymous with the network layer of the OSI model.

Q162. A coding scheme recognized by system software for representing organizational data best defines a

- a) data type
- b) data size
- c) tuple
- d) hyperlink
- e) hashing algorithms

Ans : a

Q163. Which phase of the SDLC involves converting to the new system?

- a) Systems design
- b) Systems implementation
- c) Systems analysis
- d) Systems development
- e) Other than those mentioned as options

Ans : b

Solution :

System implementation might involve conversion of old files and also the training of users so that they would become friendly with this new system.

Q164. What is the purpose of ARP?

- a) To resolve known IP addresses to unknown physical addresses.
- b) To resolve domain names to unknown IP addresses.
- c) To resolve MAC addresses and NetBIOS names to IP addresses.
- d) To resolve known MAC addresses to unknown IP addresses.
- e) To resolve NetBIOS names to IP addresses.

Ans : a

Q165. In Java, communication between objects is done by

- a) calling a method
- b) creating a class hierarchy
- c) defining a Java class
- d) creating a class
- e) running a program

Ans : a

Solution :

Object A calls a method on object B. This is clearly the simplest type of communication between two objects, but is also the way which results in the highest coupling.

Q166. Which of the following CASE tools generate reports that help you identify possible inconsistencies, redundancies and omissions in diagrams, forms and reports?

- a) Form generators
- b) Report generators
- c) Diagramming tools
- d) Analysis tools
- e) Documentation generators

Ans : b

Q167. An attribute whose value is unique across all occurrences

- a) primary key
- b) recursive key
- c) join attribute
- d) data marker
- e) single-valued key

Ans : a

Solution :

A primary key, also called a primary keyword, is a key in a relational database that is unique for each record.

Q168. AN IP protocol field of  $0 \times 06$  indicates that IP is carrying what as its payload?

- a) UDP or IGRP

- b) UDP
- c) ICMP
- d) TCP
- e) IGRP

Ans : c

Q169. A named set of table rows stored in a contiguous section of secondary memory best describes a

- a) entity
- b) collection
- c) physical file
- d) pointer
- e) relation

Ans : c

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Q170. Which of the following attributes makes TCP reliable?

- a) Connectionless establishment
- b) Low overhead and Null sessions
- c) Null sessions
- d) Connection establishment
- e) Low overhead

Ans : d

Q171. Which shortcut will create a new folder in a Windows folder?

- a) Ctrl + C
- b) Ctrl + Shift + N
- c) Ctrl + V
- d) Ctrl + Alt
- e) Ctrl + O

Ans : b

Q172. Which of the following is not a benefit of networks?

- a) Increased data integrity
- b) Sharing of peripheral devices
- c) Sharing of programs and data
- d) Access to databases
- e) Better communications

Ans : a

Q173. Which type of software is best used with specific questions to verify hypotheses?

- a) Data fusion tools
- b) Intelligent agents
- c) Data cleansing tools
- d) Query and reporting tools
- e) Multidimensional-analysis tools

Ans : d

Q174. Which method of database recovery involves undoing unwanted changes to the database, such as undoing a partially completed transaction interrupted by a power failure?

- a) Rollforward
- b) Mirroring
- c) Reprocessing
- d) Rollback
- e) Other than those given as options

Ans : d

Solution :

In database technologies, a rollback is in operation which returns the database to some previous state.

Q175. What is the default maximum number of processes that can exist in Linux (with a 32-bit platform)?

- a) 1024
- b) 32768
- c) Unlimited
- d) 4096
- e) 99999

Ans : b

Solution :



The default maximum value of processes is 32768. This maximum is important because it is essentially the maximum number of processes that can exist simultaneously on a system.

Q176. The network database model uses

- a) rows and fields
- b) data elements
- c) keys
- d) records and sets
- e) data dictionary

Ans : d

Q177. .... Is a communication medium where data are transformed into light pulses.

- a) Twisted-pair cable
- b) Optical fibre
- c) Coaxial cable
- d) Copper cable
- e) Satellite

Ans : b

Solution :

Optical fibre is a flexible, transparent fiber made by drawined glass which is used as a communication medium where data are transformed into light pulses.

Q178. .... is a computer with a web server that serves the pages for one or more websites.

- a) Portal
- b) backbone
- c) Business Service Provider
- d) Host
- e) Gateway

Ans : d

Solution :

Host is a computer or other device connected to a computer with a web server.

Q179. the database management software creates and reads the data dictionary to ascription what ..... exits and checks to see if specific users have the proper access rights to view them.

- a) data element definitions
- b) schema objects
- c) meta data
- d) reference keys
- e) metadata and data element definitions

Ans : b

Q180. the foreign key is not necessarily the ..... in its current table.

- a) report generator

- b) foreign key
- c) primary key
- d) data dictionary
- e) schema objects

Ans: c

Solution:

The foreign key is not necessarily the primary key in its current table. It only has to **contain the same information that is held in another table's primary key.**

Q181. **Hierarchical databases do not use .....** As relational databases do for searching procedures.

- a) indexes
- b) primary key
- c) database dictionary
- d) rows and columns
- e) foreign key

Ans : a

Q182. **A/an .....** can shield electronic equipment for power spikes.

- a) UPS
- b) surge protector
- c) firewall
- d) encryption program

e) antivirus

Ans : b

Q183. If there are no functional dependencies between two (or more) non-primary key attributes, this describes

- a) third normal form
- b) fifth normal form
- c) second normal form
- d) first normal form
- e) fourth normal form

Ans : c

Q184. .... is a special field value, distinct from 0, blank or any other value, that indicates that the value for the field is missing or otherwise unknown.

- a) BLOB value
- b) Designated value
- c) Null value
- d) Hashed value
- e) Non specific value

Ans : c

Solution :

Null value in a table is a value in a field that appears to be blank. A field with a Null value is a field with no value.

Q185. The concept of 'zero administration' is associated with

- a) Desktop computers
- b) Mini computers
- c) PDAs and organisers
- d) Portable computers
- e) Network computers

Ans : e

Q186. Collecting personal information and effectively posing as another individual is a crime known as

- a) Spoofing
- b) Identity theft
- c) Hacking
- d) Personality theft
- e) Spooling

Ans : b

Q187. A relational database model uses ..... to contain and organize information.

- a) records and fields
- b) image, audio, documents
- c) columns and rows
- d) foreign key
- e) data dictionary

Ans : c

Q188. Which of the following forms is used specifically to identify the entity created when encapsulating data inside data link layer headers and trailers?

- a) Packet
- b) Segment
- c) Data
- d) Chunk
- e) Frame

Ans : e

Q189. Which of the following is a valid class declaration in C++ ?

- a) Class B {}
- b) public class A {}
- c) Class B {} and public class A {}
- d) Class A {int x};
- e) Object A {int x};

Ans : d

Q190. .... is a device that have been customized to perform few specialized computing tasks well with minimal effort.

- a) Dedicate appliance
- b) Information appliance
- c) Shopping bot
- d) Server appliance
- e) Substandard device

Ans : b

Q191. A good example of an operating system that makes your computer function and controls the working environment is

- a) Microsoft Account
- b) File explorer
- c) Microsoft Office 2013
- d) Windows 8
- e) Task Manager

Ans : d

Q192. .... are used to refer to Java methods or variables that belongs to other classes.

- a) Simple names
- b) Keywords
- c) External names
- d) Qualified names
- e) Method calls

Ans : b

Q193. Which connectionless protocol is used for its low overhead and speed?

- a) ARP
- b) TCP & ARP
- c) ICMP

d) UDP

e) TCP

Ans : d

Q194. Which spread spectrum technology does the BO2.11b standard define for operation?

a) IR, FHSS and DSSS

b) DSSS

c) DSSS and FHSS

d) FHSS

e) IR

Ans : b

Direct Sequence Spread Spectrum (DSSS) is a spread spectrum modulation technique, which include IEEE 802.11b specification used in Wi-Fi networks.

Q195. Which of the following ensures that only authorized users can use or apply specific software applications?

a) Servicelevel agreement

b) Access log

c) Dongle

d) Private key

e) Authorised program analysis report

Ans : c



Q196. .... is an attempt to make a machine or network resource unavailable to its intended users, such as to temporarily or indefinitely interrupt or suspend service of a host connected to the internet due to bombardment of fake traffic.

- a) Cracking
- b) A Trojan horse
- c) A virus
- d) A denial of service attack
- e) A worm

Ans : d

Q197. Which of the following best supports communication availability, acting as a counter-measure to the vulnerability of component failure?

- a) Integrated corrective network controls
- b) Simple component redundancy
- c) High network throughput rate
- d) Careful network monitoring with a dynamic real-time alerting system
- e) Other than those given as options

Ans : b

Q198. Data transmission technologies vary. Which one does Ethernet use?

- a) CSMA/CS
- b) CSMA/CA or CSMA/CS
- c) CSMA/CD

d) CSMA/CD

e) CSMA/CA

Ans : c

Q199. Applications communicate with kernel by using

a) unit calls

b) shell script

c) system calls

d) shell

e) C programs

Ans : c

Q200. In which of the following office applications, can you name a file at the same time you create it?

a) Access

b) PowerPoint

c) Paint

d) Word

e) Excel

Ans : a

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