All India Mock for IBPS RRB Clerk Prelims Mock 1 (19-20 May)

Directions (1-5): Study the following information carefully and answer the questions given below.
निम्नलिखित जानकारी का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।

Eight persons sit around a circular table in such a way that all of them face towards the table. Three persons sit between P and R who sits immediate right of K. Q neither sits adjacent to R nor adjacent to P. N faces M who doesn't sit adjacent to R. L sits 3rd to the left of S.

आठ व्यक्ति एक वृत्ताकार मेज के चारों ओर इस प्रकार बैठे हैं कि उन सभी का मुख मेज की ओर है। P और R, जो K के ठीक दायें बैठा है, के बीच तीन व्यक्ति बैठे हैं। Q न तो R के आसन्न बैठा है और न ही P के आसन्न बैठा है। N का मुख M, जो R के आसन्न नहीं बैठा है, की ओर है। L, S के बायें से तीसरे स्थान पर बैठा है।

Q1. Who among the following sits immediate left of L?
निम्नलिखित में से कौन L के ठीक बायें बैठा है?

(a) M
(b) Q
(c) K
(d) P
(e) N

Q2. How many persons sit between Q and M when counted from right of M?
M के दायें से गिनने पर Q और M के मध्य कितने व्यक्ति बैठे हैं?

(a) Three / तीन
(b) Two / दो
(c) One / एक
(d) Four / चार
(e) More than four / चार से अधिक

Q3. Who among the following faces K?
निम्नलिखित में से किसका मुख K की ओर है?

(a) Q
(b) P
(c) L
(d) S
(e) None of these / इनमें से कोई नहीं

Q4. If all the persons are arranged according to alphabetical order in clockwise direction starting from K, then position of how many persons remain unchanged except K?
यदि K से प्रारंभ करते हुए सभी व्यक्तियों को दक्षिणावर्त दिशा में वर्णानुक्रम के अनुसार व्यवस्थित किया जाता है, तो K को छोड़कर कितने व्यक्तियों की स्थिति अपरिवर्तित रहती है?
(a) None / कोई नही
(b) Two / दो
(c) One / एक
(d) Three / तीन
(e) Four / चार

Q5. What is the position of M with respect to Q?
Q के सन्दर्भ में M का स्थान क्या है?
(a) Immediate right / ठीक दाए
(b) 2nd to the right / दाएं से दूसरा
(c) 2nd to the left / बाएं से दूसरा
(d) 3rd to the left / बाएं से तीसरा
(e) 3rd to the right / दाएं से तीसरा

Directions (6-10): Study the following information carefully and answer the questions given below.
निम्नलिखित जानकारी का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।

Eight persons R, Q, M, O, P, T, S and N live on eight different floors of a building (but not necessarily in the same order) such that bottommost floor is numbered as 1 and the floor just above it is numbered as 2 and so on till the topmost floor is numbered as 8.
Four persons live between M and R who lives on an even numbered floor. One person lives between M and N. T lives just below P and above Q. Number of persons live between S and P is same as live between S and O. T doesn't live on even numbered floor. At least two persons live above P.
आठ व्यक्ति R, Q, M, O, P, T, S और N एक इमारत की आठ अलग-अलग मंजिलों पर रहते हैं, (लेकिन जरूरी नहीं कि इसी क्रम में हों) जैसे कि सबसे नीचे वाली मंजिल की संख्या 1 और उसके ठीक ऊपर की मंजिल की संख्या 2 और इसी तरह सबसे ऊपरी मंजिल की संख्या 8 है।
M और R, जो एक सम संख्या वाली मंजिल पर रहता है, के मध्य चार व्यक्ति रहते हैं। M और N के बीच एक व्यक्ति रहता है। T, P के ठीक नीचे और Q के ऊपर रहता है। S और P के बीच रहने वाले व्यक्तियों की संख्या S और O के बीच रहने वाले व्यक्तियों की संख्या के समान है। T सम संख्या वाली मंजिल पर नहीं रहता है। P के ऊपर कम से कम दो व्यक्ति रहते हैं।

Q6. Who among the following lives on 6th floor?
निम्नलिखित में से कौन छठी मंजिल पर रहता है?
(a) M
(b) P
(c) R
(d) S
(e) Q

Q7. How many persons live between O and T?
O और T के मध्य कितने व्यक्ति रहते हैं?
(a) None / कोई नही
(b) Two / दो
(c) One / एक
(d) Three / तीन
(e) More than three / तीन से अधिक

Q8. Who among the following lives on the topmost floor?
निम्नलिखित में से कौन सबसे ऊपरी मंजिल पर रहता है?
(a) O
(b) R
(c) M
(d) N
(e) S

Q9. Who among the following lives exactly between Q and M?
निम्नलिखित में से कौन Q और M के ठीक बीच में रहता है?
(a) R
(b) S
(c) P
(d) N
(e) T

Q10. Four of the following five are alike in a certain way and thus forms a group, who among the following doesn't belong to that group?
निम्नलिखित पांच में से चार एक निश्चित रूप से समान हैं, और इस प्रकार एक समूह बनाते हैं, निम्नलिखित में से कौन उस समूह से संबंधित नहीं है?
(a) O
(b) R
(c) P
(d) S
(e) Q

Directions (11-15): Study the following series carefully and answer the questions given below.
निम्नलिखित जानकारी का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।
5 8 2 4 % 8 2 # 1 9 4 7 * 4 2 & 2 8 @ 8 6 4 ! 3 4 9 0

Q11. How many numbers are there which are immediately followed by a symbol and immediately preceded by an even number?
ऐसी कितनी संख्याएँ हैं, जिनके ठीक बाद एक प्रतीक और ठीक पहले एक सम संख्या है?
(a) One / एक
(b) Two / दो
(c) More than four / चार से अधिक
(d) Three / तीन
(e) Four / चार

Q12. Which of the following element is 10th to the right of 5th element from the left end of the series?
निम्नलिखित में से कौन सा तत्व श्रृंखला के बाएं छोर से 5वें तत्व के दायें से 10वां है?
(a) 2
(b) 4
(c) *
(d)&
(e) 7

Q13. What will be the sum of the number which is 8th from the left end and the number which is 6th from the right end of the series?
उन संख्याओं का योग क्या होगा जो बाएं छोर से आठवीं है और जो संख्या श्रृंखला के दाएं छोर से छठी है?
(a) 16
(b) 15
(c) 17
(d) 19
(e) 20

Q14. How many even numbers are there which are immediately followed by an odd number?
ऐसी कितनी सम संख्याएँ हैं जिनके ठीक बाद एक विषम संख्या आती है?
(a) One / एक
(b) Four / चार
(c) Three / तीन
(d) Two / दो
(e) Five / पांच

Q15. How many 4s are there in the above series?
उपरोक्त श्रंखला में कितने 4 हैं?
(a) Two / दो
(b) Three / तीन
(c) Four / चार
(d) Five / पांच
(e) Six / छह

Directions (16-20): Study the following information carefully and answer the questions given below.
निम्नलिखित जानकारी का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।

In a certain code language: - एक निश्चित कूट भाषा में
''Daily walk is good'' is coded as '' li og im ka''
"Good exercise daily'' is coded as ''sx og li''
''Daily long walk'' is coded as ''gl ka li''
''Daily walk is good'' को '' li og im ka'' के रूप में कूटित किया गया है।
"Good exercise daily'' को ''sx og li'' के रूप में कूटित किया गया है।
''Daily long walk'' को 'gl ka li'' के रूप में कूटित किया गया है।

Q16. What is the code for the word '' Good''?
'Good' शब्द के लिए कूट क्या है?
(a) li
(b) im
(c) og
(d) ka
(e) Can't be determined / निर्धारित नहीं किया जा सकता

Q17. What is the code for the word ''Long''?
''Long'' शब्द के लिए कूट क्या है?
(a) li
(b) gl
(c) ka
(d) Either gl or ka / या तो gl या ka
(e) Either li or gl / या तो li या gl

Q18. Which of the following word is coded as "im"?
निम्नलिखित में से किस शब्द को "im" के रूप में कूटित किया गया है?
(a) Good
(b) Exercise
(c) Daily
(d) Long
(e) Is

Q19. What is the code for the word ''Daily Long''?
''Daily Long'' शब्द के लिए कूट क्या है?
(a) sx gl
(b) im ka
(c) gl og
(d) li ka
(e) li gl

Q20. If ''Girl is Good'' is coded as '' im og lg'', then what is the code for ''Girl''?
यदि "Girl is Good" को "im og lg" के रूप में कूटित किया जाता है, तो "Girl" के लिए कूट क्या होगा?
(a) lg
(b) og
(c) im
(d) li
(e) Can't be determined / निर्धारित नहीं किया जा सकता

Q21. If we form a five-letter meaningful word with 3rd, 6th, 8th ,9th and 12th letter from the left end of the word "RELATIONSHIP", then what would be the third letter of that meaningful word? If no meaningful word is formed, then mark the answer as X. If more than one meaningful word is formed then, mark the answer as Z.
यदि हम शब्द "RELATIONSHIP" के बायें छोर से तीसरे, छठे, आठवें, नौवें और बारहवें अक्षर से पांच अक्षरों का एक अर्थपूर्ण शब्द बनाते हैं, तो उस अर्थपूर्ण शब्द का तीसरा अक्षर क्या होगा? यदि कोई सार्थक शब्द नहीं बनता है, तो उत्तर को X के रूप में चिह्नित कीजिए। यदि एक से अधिक सार्थक शब्द बनते हैं, तो उत्तर को Z के रूप में चिह्नित कीजिए।
(a) P
(b) L
(c) N
(d) X
(e) Z

Directions (22-26): Study the following information carefully and answer the questions given below.
निम्नलिखित जानकारी का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।

Seven Persons A, B, C, D, E, F and G go to the market in seven different day of week starting from Sunday to Saturday but not necessarily in the same order. C goes to market one of the days after Wednesday. Two persons go between C and G who goes just after B. One person goes between E and F. Number of persons goes after F is same as number of persons goes before D.
सात व्यक्ति A, B, C, D, E, F और G रविवार से शनिवार तक सप्ताह के सात अलग-अलग दिनों में बाजार जाते हैं, लेकिन जरूरी नहीं कि इसी क्रम में हों। C बुधवार के बाद किसी एक दिन बाजार जाता है। दो व्यक्ति C और G, जो B के ठीक बाद जाता है, के बीच जाते हैं। एक व्यक्ति E और F के बीच जाता है। F के बाद जाने वाले व्यक्तियों की संख्या उतनी ही है जितनी कि D से पहले जाने वाले व्यक्तियों की संख्या है।

Q22. Who among the following goes to market on Monday?
निम्नलिखित में से कौन सोमवार को बाजार जाता है?
(a) B
(b) A
(c) G
(d) E
(e) F

Q23. How many persons go between D and C?
D और C के मध्य कितने व्यक्ति जाते हैं?
(a) None / कोई नहीं
(b) One / एक
(c) Two / दो
(d) Three / तीन
(e) Four / चार

Q24. Which of the following combination is true?
निम्नलिखित में से कौन सा संयोजन सत्य है?
(a) F- Thursday / F- गुरुवार
(b) D- Monday / D- सोमवार
(c) A- Wednesday / A- बुधवार
(d) C- Saturday / C- शनिवार
(e) E- Tuesday / E- मंगलवार

Q25. G goes market on which of the following day?
G निम्नलिखित में से किस दिन बाजार जाता है?
(a) Thursday / गुरुवार
(b) Wednesday / बुधवार
(c) Monday / सोमवार
(d) Friday / शुक्रवार
(e) Tuesday / मंगलवार

Q26. If all the persons are arranged in alphabetical order from Sunday to Saturday, then the position of how many persons will remain unchanged?
यदि रविवार से शनिवार तक सभी व्यक्तियों को वर्णानुक्रम में व्यवस्थित किया जाता है, तो कितने व्यक्तियों की स्थिति अपरिवर्तित रहेगी?
(a) One / एक
(b) Two / दो
(c) Four / चार
(d) None / कोई नहीं
(e) Three / तीन

Directions (27-28): In each of the questions some statements are given below followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
प्रत्येक प्रश्न में कुछ कथन नीचे दिए गए हैं, और उसके बाद दो निष्कर्ष दिए गए हैं। आपको दिए गए कथनों को सत्य मानना है, भले ही वे सर्वज्ञात तथ्यों से भिन्न प्रतीत होते हों। सभी निष्कर्षों को पढ़िए और फिर तय कीजिए कि दिए गए निष्कर्षों में से कौन सा निष्कर्ष सामान्य रूप से ज्ञात तथ्यों की परवाह किए बिना दिए गए कथनों का तार्किक रूप से अनुसरण करता है।

Q27. Statements / कथन: Only K is U. Some K are P. No P is R.
केवल K, U है। कुछ K, P हैं। कोई P, R नहीं है।
Conclusions / निष्कर्ष: I. No R is U.
कोई R, U नहीं है।

II. Some K is not R.
कुछ K, R नहीं है।
(a) If only conclusion I follows.
यदि केवल निष्कर्ष I अनुसरण करता है।
(b) If only conclusion II follows.
यदि केवल निष्कर्ष II अनुसरण करता है।
(c) If either conclusion I or II follows.
यदि या तो निष्कर्ष I या II अनुसरण करता है।
(d) If neither conclusion I nor II follows.
यदि न तो निष्कर्ष I और न ही II अनुसरण करता है।
(e) If both conclusions I and II follows.
यदि निष्कर्ष I और II दोनों अनुसरण करते हैं।

Q28. Statements / कथन: Only a few Teeth are Pick. Some Pick are Drop. All Drop are Water.
केवल कुछ टीथ, पिक हैं। कुछ पिक, ड्रॉप हैं। सभी ड्रॉप, वाटर हैं।
Conclusions / निष्कर्ष: I. Some Pick are Water.
कुछ पिक, वाटर हैं।
II. All teeth can be Pick.
सभी टीथ, पिक हो सकते हैं।
(a) If only conclusion I follows.
यदि केवल निष्कर्ष I अनुसरण करता है।
(b) If only conclusion II follows.
यदि केवल निष्कर्ष II अनुसरण करता है।
(c) If either conclusion I or II follows.
यदि या तो निष्कर्ष I या II अनुसरण करता है।
(d) If neither conclusion I nor II follows.
यदि न तो निष्कर्ष I और न ही II अनुसरण करता है।
(e) If both conclusions I and II follows.
यदि निष्कर्ष I और II दोनों अनुसरण करते हैं।

Q29. How many pairs of letters are there in the word '**EXPECTED**', each of which have as many letters between them in the word as they have in English alphabetical series (both forward and backward direction)?
शब्द 'EXPECTED' में अक्षरों के ऐसे कितने युग्म हैं, जिनमें से प्रत्येक के बीच उतने ही अक्षर हैं जितने कि अंग्रेजी वर्णमाला श्रृंखला में (आगे और पीछे दोनों दिशाओं में) हैं?
(a) One / एक
(b) Three / तीन
(c) None / कोई नहीं
(d) Two / दो
(e) Four / चार

Directions (30-31): Study the following information carefully and answer the questions given below.

निम्नलिखित जानकारी का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।

There are six members in a family of three generation with two married couple. S is son-in-law of Z who is father of P. R is mother of C who is granddaughter of Y. P is unmarried member of the family. Number of females are more than male members.

तीन पीढ़ियों के एक परिवार में दो विवाहित जोड़े के साथ छह सदस्य हैं। S, Z, जो P का पिता है, का दामाद है। R, C, जो Y की पोती है, की माता है। P परिवार का अविवाहित सदस्य है। पुरुषों की तुलना में महिलाओं की संख्या अधिक है।

Q30. How is P related to C?

P, C से किस प्रकार संबंधित है?

(a) Sister / बहन

(b) Brother / भाई

(c) Uncle / अंकल

(d) Aunt / चाची/मौसी/मामी

(e) Father / पिता

Q31. How is Y related to S?

Y, S से किस प्रकार संबंधित है?

(a) Mother-in-law / सास

(b) Mother / मां

(c) Sister / बहन

(d) Aunt / चाची/मौसी/मामी

(e) Sister-in-law / सिस्टर इन लॉ

Q32. If in the number "**5389264863",** all the digits are arranged in descending order from left to right, then what will be the sum of the numbers which are 5th from the left end and 4th from the right end of the number thus formed after rearrangement?

यदि संख्या "5389264863" में, सभी अंकों को बाएं से दाएं अवरोही क्रम में व्यवस्थित किया जाता है, तो इस प्रकार पुनर्व्यवस्था के बाद बनाई गई संख्या में उन संख्याओं का योग क्या होगा जो बाएं छोर से पांचवी है, और जो दाएं छोर से चौथी हैं ?

(a) 10

(b) 12

(c) 9

(d) 8

(e) 11

Directions (33-37): Study the following information carefully and answer the questions given below.

निम्नलिखित जानकारी का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।

Six persons sit around an equilateral triangular table in such a way that three of them sit at the corner of the table and three of them sit at the middle of the side of the table and all of them face towards the table. Each of them likes six different colors i.e., Pink, Red, Blue, Black, Green and Yellow but not necessarily in the same order.

R sits 2nd to the left of P who likes Red. The one who likes pink faces R. Q sits neither adjacent to P nor adjacent to R. The one who likes Black faces the one who likes Yellow. U sits immediate right of one who likes Yellow. The one who likes blue sits 2nd to the right of S. The one who likes Green doesn't sit at the corner of the table. T is one of the persons.

छह व्यक्ति एक समबाहु त्रिभुजाकार मेज के चारों ओर इस प्रकार बैठे हैं कि उनमें से तीन मेज के कोने पर बैठे हैं, और उनमें से तीन मेज की भुजा के मध्य में बैठे हैं, और उन सभी का मुख मेज की ओर है। उनमें से प्रत्येक को छह अलग-अलग रंग पसंद हैं अर्थात गुलाबी, लाल, नीला, काला, हरा और पीला लेकिन आवश्यक नहीं इसी क्रम में हो।

R, P, जिसे लाल रंग पसंद है, के बाएं से दूसरे स्थान पर बैठा है। वह व्यक्ति जिसे गुलाबी रंग पसंद है उसका मुख R की ओर है। Q न तो P के आसन्न बैठा है और न ही R के आसन्न बैठा है। काला रंग पसंद करने वाले का मुख पीला रंग पसंद करने वाले व्यक्ति की ओर है। U, पीला रंग पसंद करने वाले के ठीक दायें बैठा है। वह व्यक्ति जिसे नीला रंग पसंद है वह S के दायें से दूसरे स्थान पर बैठा है। हरा रंग पसंद करने वाला व्यक्ति मेज के कोने पर नहीं बैठा है। T व्यक्तियों में से एक है।

Q33. Who among the following faces P?

निम्नलिखित में से कौन P के सम्मुख है?

(a) Q

(b) The one who likes Yellow / वह व्यक्ति जिसे पीला रंग पसंद है।

(c) The one who likes Blue / वह व्यक्ति जिसे नीला रंग पसंद है।

(d) S

(e) T

Q34. T likes which of the following color?

T को निम्नलिखित में से कौन सा रंग पसंद है?

(a) Black / काला

(b)Yellow / पीला

(c) Pink / गुलाबी

(d) Green / हरा

(e) Blue / नीला

Q35. What is the position of T with respect to S?

S के सन्दर्भ में T का स्थान क्या है?

(a) Immediate right / ठीक दाएं

(b) Immediate left / ठीक बाएं

(c) 3rd to the left / बाएं से तीसरा

(d) 2nd to the right / दाएं से दूसरा

(e) 2nd to the left / बाएं से दूसरा

Q36. Which of the following color is liked by U?
निम्नलिखित में से कौन सा रंग U को पसंद है?
(a) Pink / गुलाबी
(b) Green / हरा
(c) Blue / नीला
(d) None of these / इनमे से कोई नहीं
(e) Black / काला

Q37. How many persons sit between S and R when counted from right of S?
S के दायें से गिनने पर S और R के मध्य कितने व्यक्ति बैठे हैं?
(a) None / कोई नहीं
(b) One / एक
(c) Two / दो
(d) Three / तीन
(e) Four / चार

Directions (38-40): Study the following information carefully and answer the questions given below.
निम्नलिखित जानकारी का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।

A person starts walking towards east direction from a Point G. After walking 8m he reaches at Point M he takes a left turn and walks 10m to reach at Point S. From Point S, he takes a right turn and walks 12m and reaches at Point Q. From there, he takes two consecutive right turns of 10m and 6m to reach at Point C and Point K respectively. Finally, he reaches at Point A after walking 4m left from Point K.
एक व्यक्ति बिंदु G से पूर्व दिशा की ओर चलना शुरू करता है। 8 मीटर चलने के बाद वह बिंदु M पर पहुंचता है, वहां से वह बाएं मुड़ता है और बिंदु S पर पहुंचने के लिए 10 मीटर चलता है। बिंदु S से, वह दाएं मुड़ता है, और 12 मीटर चलता है और बिंदु Q पर पहुंचता है। वहाँ से वह क्रमशः बिंदु C और बिंदु K पर पहुँचने के लिए 10 मीटर और 6 मीटर के लिए दो बार क्रमागत दायें मुड़ता है। अंत में, वह बिंदु K से 4 मीटर बायीं ओर चलने के बाद बिंदु A पर पहुंचता है।

Q38. What is the direction of Point A with respect to Point G?
बिंदु G के सन्दर्भ में बिंदु A की दिशा क्या है?
(a) South / दक्षिण
(b) South-East / दक्षिण-पूर्व
(c) South-West / दक्षिण- पश्चिम
(d) North / उत्तर
(e) East / पूर्व

Q39. What is the total distance covered by him from Point Q to Point A?
बिंदु Q से बिंदु A तक उसके द्वारा तय की गई कुल दूरी कितनी है?
(a) 12m / 12 मीटर
(b) 14m / 14 मीटर
(c) 10m / 10 मीटर
(d) 16m / 16 मीटर
(e) 20m / 20 मीटर

Q40. If Point S is related to Point G in the same way Point Q is related to Point K, then which of the following is related to Point A?
यदि बिंदु S, बिंदु G से उसी प्रकार संबंधित है, जिस प्रकार बिंदु Q, बिंदु K से संबंधित है, तो निम्न में से कौन बिंदु A से संबंधित है?
(a) Point C / बिंदु C
(b) Point M / बिंदु M
(c) Point G / बिंदु G
(d) Point K / बिंदु K
(e) Point S / बिंदु S

Directions (41-46): What will come in the place of question (?) mark in following number series:
निम्नलिखित संख्या श्रृंखला में प्रश्न चिह्न (?) के स्थान पर क्या आएगा?

Q41. 32, 16, 16, 32, ?, 1024
(a) 136
(b) 128
(c) 132
(d) 148
(e) 112

Q42. 144, 288, 864, ?, 17280 , 103680
(a) 3456
(b) 3446
(c) 3448
(d) 3436
(e) 3416

Q43. 120, 125, 115, 130, ?, 135
(a) 105
(b) 130
(c) 120
(d) 110
(e) 90

Q44. 223, 227, 236, 252, 277, ?
(a) 309
(b) 311
(c) 313
(d) 315
(e) 317

Q45. 60, 71, 93, 126, ?, 225
(a) 200
(b) 185
(c) 190
(d) 180
(e) 170

Q46. 9, 17, ?, 108, 233 ,449
(a) 48
(b) 44
(c) 42
(d) 36
(e) 54

Directions (47-58): What will come in the place of question (?) mark in the following question:
निम्नलिखित संख्या श्रृंखला में प्रश्न चिह्न (?) के स्थान पर क्या आएगा?

Q47. $108 \times 2.5 = ? + 5^3$
(a) 165
(b) 125
(c) 115
(d) 135
(e) 145

Q48. $23\frac{2}{5}\ of\ 50\%\ of 200 = ?$
(a) 1170
(b) 2380
(c) 2340
(d) 2360
(e) 2320

Q49. $\sqrt{24.01} + \sqrt{12.96} = ?$
(a) 11.5
(b) 6.5
(c) 7.5
(d) 8.5
(e) 9.5

Q50. $2\frac{4}{7} \times 1\frac{3}{18} = ? - 1$
(a) 3
(b) 4
(c) 2
(d) 1
(e) 5

Q51. 25% of ?% of 80=560
(a) 2800
(b) 2400
(c) 2960
(d) 3000
(e) 3600

Q52. $37\frac{1}{2}\%$ of $240 + 14\frac{2}{7}\%$ $1400 = ?$
(a) 290
(b) 310
(c) 320
(d) 300
(e) 280

Q53. 55% of 600 – 40% of 200 = $?^2 \times 10$
(a) 8
(b) 5
(c) 9
(d) 4
(e) 3

Q54. $\sqrt[8]{1331} + \sqrt{961} - 5^2 + ? = 420 \div 4$
(a) 86
(b) 84
(c) 88
(d) 98
(e) 78

Q55. $80\%\ of\ \frac{2}{5}\ of\ 300 = ?^2 - 4$
(a) 6
(b) 14
(c) 8
(d) 12
(e) 10

Q56. 125% of $\frac{4}{7}th\ of$ of 2800 =?
(a) 4000
(b) 2400
(c) 1600
(d) 2000
(e) 3000

Q57. $1136 \div 142 - \frac{11}{5} + 2.2 = ?$

(a) 4
(b) 5.8
(c) 6
(d) 8
(e) 10.2

Q58. $4440 \div 80 + 180 \div 36 = ?$

(a) 72.5
(b) 60.5
(c) 70.5
(d) 58.5
(e) 64.5

Directions (59-63): Table given below shows number of employees recruited in three different company in four different years. Read the following table carefully and answer the questions given below.

नीचे दी गई तालिका चार अलग-अलग वर्षों में तीन अलग-अलग कंपनियों में भर्ती किए गए कर्मचारियों की संख्या दर्शाती है। निम्नलिखित तालिका का ध्यानपूर्वक अध्ययन कीजिए और नीचे दिए गए प्रश्नों के उत्तर दीजिए।

Years/वर्ष	Company/ कंपनी A	Company/ कंपनी B	Company/ कंपनी C
2017	500	400	500
2018	200	700	700
2019	850	500	400
2020	140	120	550

Q59. Find the ratio of number of employees recruited in company B in 2019 to number of employees recruited in company C in 2017?

2019 में कंपनी B में भर्ती कर्मचारियों की संख्या का 2017 में कंपनी C में भर्ती कर्मचारियों की संख्या से अनुपात ज्ञात कीजिए?

(a) 1:2
(b) 1:3
(c) 5:7
(d) 1:1
(e) 5 : 6

Q60. Total number of employees recruited in company B in 2018 is what percentage of number of employees recruited in company A in 2020?
2018 में कंपनी B में भर्ती किए गए कर्मचारियों की कुल संख्या, 2020 में कंपनी A में भर्ती किए गए कर्मचारियों की संख्या का कितना प्रतिशत है?
(a) 500%
(b) 250%
(c) 600%
(d) 400%
(e) None of these / इनमे से कोई नहीं

Q61. Find total number of employees recruited in company A in given four years?
दिए गए चार वर्षों में कंपनी A में भर्ती किए गए कर्मचारियों की कुल संख्या ज्ञात कीजिए?
(a) 1580
(b) 1240
(c) 1640
(d) 1690
(e) 1680

Q62. Find the average number of employees recruited in company A, B and C in 2017?
2017 में कंपनियों A, B और C में भर्ती किए गए कर्मचारियों की औसत संख्या ज्ञात कीजिए?
(a) 468 ⅔
(b) 466 ⅓
(c) 466 ⅔
(d) 476 ⅔
(e) 464⅔

Q63. What is the difference between number of employees recruited in company C in 2017 & 2018 together and number of employees recruited in company B in 2019 & 2020 together?
2017 और 2018 में एक साथ कंपनी C में भर्ती हुए कर्मचारियों की संख्या और 2019 और 2020 में एक साथ कंपनी B में भर्ती किए गए कर्मचारियों की संख्या के बीच का अंतर कितना है?
(a) 580
(b) 680
(c) 520
(d) 560
(e) 540

Q64. Train A having length 150 meter crosses a pole in 30 seconds. If the length of train B is $33\frac{1}{3}\%$ more than train A and it crosses the same pole in 50 second, then find the ratio of speed of train A to that of train B?
150 मीटर लंबी ट्रेन A एक खम्भे को 30 सेकंड में पार करती है। यदि ट्रेन B की लंबाई ट्रेन A से $33\frac{1}{3}\%$ अधिक है, और वह उसी पोल को 50 सेकंड में पार करती है, तो ट्रेन A की गति का ट्रेन B की गति से अनुपात ज्ञात कीजिये?
(a) 5:4
(b) 5:6
(c) 6:5
(d) 4:5
(e) 1:3

Q65. A man took a loan of Rs.20000 from a bank at the rate of X% p.a. on simple interest. If after three years he had to pay Rs.7200 as interest, then find the value of X?
एक व्यक्ति ने साधारण ब्याज पर X% प्रतिवर्ष की दर से एक बैंक से 20000 रुपये का ऋण लिया। यदि तीन वर्ष बाद उसे ब्याज के रूप में 7200 रुपये चुकाने पड़े, तो X का मान ज्ञात कीजिए?
(a) 8%
(b) 10%
(c) 20%
(d) 15%
(e) 12%

Q66. P buys an old bike for Rs.7200 and spends Rs.1200 on its repairing. If P sells the bike at Rs.12000, then find the (approx.) profit % he earned?
P एक पुरानी बाइक को 7200 रुपये में खरीदता है, और इसकी मरम्मत पर 1200 रुपये खर्च करता है। यदि P बाइक को 12000 रुपये में बेचता है, तो उसके द्वारा अर्जित लाभ% (लगभग) ज्ञात कीजिए?
(a) 40%
(b) 28%
(c) 36%
(d) 43%
(e) 48%

Q67. Pipe A, pipe B and pipe C alone can fill a tank in 2 hours, 4 hours and 5 hours respectively. If all the pipes are open together in the tank, then in how much time all three pipes will take to fill the tank?
पाइप A, पाइप B और पाइप C अकेले एक टैंक को क्रमशः 2 घंटे, 4 घंटे और 5 घंटे में भर सकते हैं। यदि टैंक में सभी पाइप एक साथ खुले हैं, तो तीनों पाइप टैंक को भरने में कितना समय लेंगे?
(a) 19 hours / 19 घंटे
(b) $2\frac{1}{19}$ *hours* / $2\frac{1}{19}$ घंटे
(c) 40/19 hours/ 40/19 घंटे
(d) 20/19 hours / 20/19 घंटे
(e) 1 hours / 1 घंटा

Q68. The present age of A and B is the in ratio of 5:6 respectively. Ten years hence, the ratio of ages of A to B will be 7:8. Find the present age of A?
A और B की वर्तमान आयु क्रमशः 5 : 6 के अनुपात में है। दस वर्ष बाद, A का B की आयु से अनुपात 7 : 8 होगा। A की वर्तमान आयु ज्ञात कीजिए?
(a) 45 years / 45 वर्ष
(b) 15 years / 15 वर्ष
(c) 25 years / 25 वर्ष
(d) 35 years / 35 वर्ष
(e) 30 years / 30 वर्ष

Q69. Vessel A contains 150 liters mixture of milk and water in the ratio 7:8 respectively, while vessel B contains 50 liters of mixture of water and milk in the ratio 3:7 respectively. If vessel A and B mixed in an empty vessel C, then find the quantity of water in vessel C?
बर्तन A में 150 लीटर दूध और पानी का मिश्रण क्रमशः 7 : 8 के अनुपात में है, जबकि बर्तन B के 50 लीटर मिश्रण में पानी और दूध का मिश्रण क्रमशः: 3 : 7 के अनुपात में है। यदि बर्तन A और B को एक खाली बर्तन C में मिलाया जाता है, तो बर्तन C में पानी की मात्रा ज्ञात कीजिये?
(a) 95 liters / 95 लीटर
(b) 85 liters / 85 लीटर
(c) 105 liters / 105 लीटर
(d) 75 liters / 75 लीटर
(e) 115 liters / 115 लीटर

Q70. Circumference of a circle is 44 cm and breadth of a rectangle 100/7 % more than radius of the circle. If Perimeter of rectangle is 96 cm, then find the area of rectangle?
एक वृत्त की परिधि 44 सेमी है, और एक आयत की चौड़ाई वृत्त की त्रिज्या से 100/7 % अधिक है। यदि आयत का परिमाप 96 सेमी है, तो आयत का क्षेत्रफल ज्ञात कीजिए?
(a) 320 cm^2 / 320 $सेमी^2$
(b) 270 cm^2 / 270 $सेमी^2$
(c) 300 cm^2 / 300 $सेमी^2$
(d) 360 cm^2 / 360 $सेमी^2$
(e) 480 cm^2 / 480 $सेमी^2$

Directions (71-75): Each question consists of two equations I & II. You have to solve each equation and mark answer as per instructions.
प्रत्येक प्रश्न में दो समीकरण, I और II हैं। आपको प्रत्येक समीकरण को हल करना है, और निर्देशों के अनुसार उत्तर को चिह्नित करना है।

Q71.
I. $x^2 + 5x + 6 = 0$
II. $y^2 + 7y + 12 = 0$
(a) x > y
(b) x ≤ y
(c) x = y or no relation can be established / या कोई संबंध स्थापित नहीं किया जा सकता है,
(d) x < y
(e) x ≥ y

Q72.
I. $2x^2 + 5x - 3 = 0$
II. $3y^2 - 2y - 1 = 0$
(a) x > y
(b) x ≤ y
(c) x = y or no relation can be established / या कोई संबंध स्थापित नहीं किया जा सकता है,
(d) x < y
(e) x ≥ y

Q73.

I. $2x + 3y = 7$

II. $4x - 3y = 5$

(a) x > y

(b) x ≤ y

(c) x = y or no relation can be established / या कोई संबंध स्थापित नहीं किया जा सकता है,

(d) x < y

(e) x ≥ y

Q74.

I. $x^2 - 13x + 42 = 0$

II. $y^2 - 17y + 72 = 0$

(a) x > y

(b) x ≤ y

(c) x = y or no relation can be established / या कोई संबंध स्थापित नहीं किया जा सकता है,

(d) x < y

(e) x ≥ y

Q75.

I. $x^2 + 6x + 8 = 0$

II. $y^2 + 10y + 24 = 0$

(a) x > y

(b) x ≤ y

(c) x = y or no relation can be established / या कोई संबंध स्थापित नहीं किया जा सकता है,

(d) x < y

(e) x ≥ y

Q76. P and Q started a business. P invest Rs.5000 for whole year and Q invested Rs.8000 for some time. If at the end of the year profit share of P is Rs.10000 out of total profit of Rs. 22000, then find for how many months Q invested?

P और Q ने एक व्यवसाय शुरू किया। P ने पूरे वर्ष के लिए 5000 रुपये का निवेश किया और Q ने कुछ समय के लिए 8000 रुपये का निवेश किया। यदि वर्ष के अंत में 22000 रुपये के कुल लाभ में से P का लाभ हिस्सा 10000 रुपये है, तो ज्ञात कीजिए कि Q ने कितने महीनों के लिए निवेश किया?

(a) 12

(b) 6

(c) 9

(d) 7

(e) 8

Q77. A alone can finish a work in 90 days and B is 20% less efficient than A. Find in how many days A and B working together can finish the same work?
A अकेला एक कार्य को 90 दिनों में पूरा कर सकता है, और B, A से 20% कम कुशल है। ज्ञात कीजिए कि A और B एक साथ काम करके उसी कार्य को कितने दिनों में पूरा कर सकते हैं?
(a) 10
(b) 40
(c) 62
(d) 72
(e) 50

Q78. The ratio of speed of boat in still water to speed of stream is 7:4. If boat travelled 156 km in upstream in 26 hours, then find the difference between speed of boat in still water and speed of stream?
शांत जल में नाव की गति का धारा की गति से अनुपात 7 : 4 है। यदि नाव 26 घंटे में धारा के प्रतिकूल 156 किमी की यात्रा करती है, तो शांत जल में नाव की गति और धारा की गति के बीच का अंतर ज्ञात कीजिये?
(a) 3 km/h / 3 किमी/घंटा
(b) 2 km/h / 2 किमी/घंटा
(c) 4 km/h / 4 किमी/घंटा
(d) 6 km/h / 6 किमी/घंटा
(e) 8 km/h / 8 किमी/घंटा

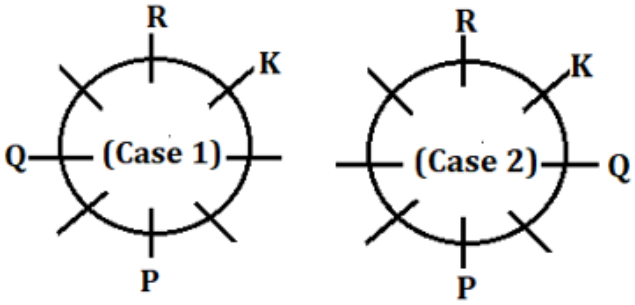
Q79. There are ten students in a tuition and the average age of all the students is 25 years. When the age of teacher is included, then the average age increased by 2 years. Find the age of teacher?
एक ट्यूशन में दस छात्र हैं, और सभी छात्रों की औसत आयु 25 वर्ष है। जब शिक्षक की आयु को शामिल किया जाता है, तो औसत आयु में 2 वर्ष की वृद्धि होती है। शिक्षक की आयु ज्ञात कीजिए?
(a) 47 years / 47 वर्ष
(b) 45 years / 45 वर्ष
(c) 37 years / 37 वर्ष
(d) 42 years / 42 वर्ष
(e) 44 years / 44 वर्ष

Q80. The income of a man increased by Rs.8000 each month. If his income in June is Rs.15000 and he spend 70% of his income in September, then find the saving of man in September?
एक आदमी की आय में हर महीने 8000 रुपये की वृद्धि हुई। यदि जून में उसकी आय 15000 रुपये है, और वह सितंबर में अपनी आय का 70% खर्च करता है, तो सितंबर में आदमी की बचत ज्ञात कीजिए?
(a) Rs. 8100 / 8100 रुपये
(b) Rs. 11700 / 11700 रुपये
(c) Rs. 5500 / 5500 रुपये
(d) Rs. 12600 / 12600 रुपये
(e) Rs. 15200 / 15200 रुपये

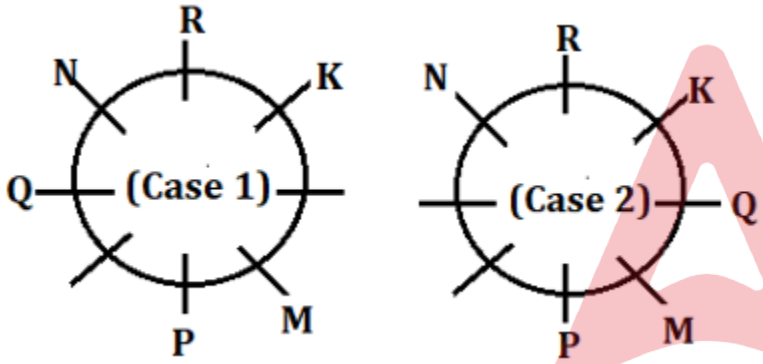
Solutions

S1. Ans.(b)

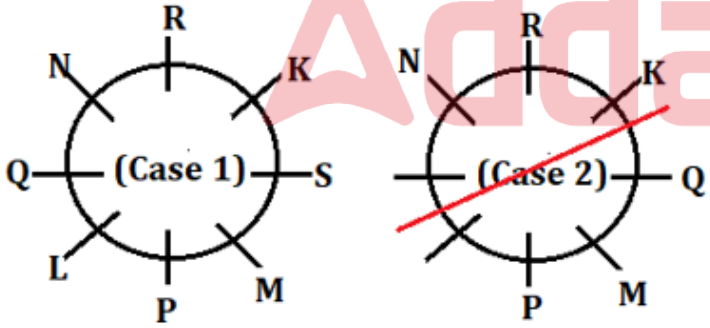
Sol. Three persons sit between P and R who sits immediate right of K. Q neither sits adjacent to R nor adjacent to P. There are two possible cases as: -



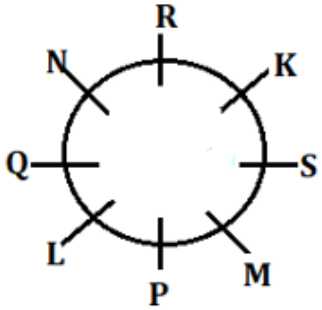
N faces M who doesn't sit adjacent to R. So, N will sit immediate right of R as there are no two opposite places left for placing N and M according to the given condition.



L sits 3rd to the left of S. Here, Case 2 is eliminated as there is no place left for placing L and S as per the given condition.



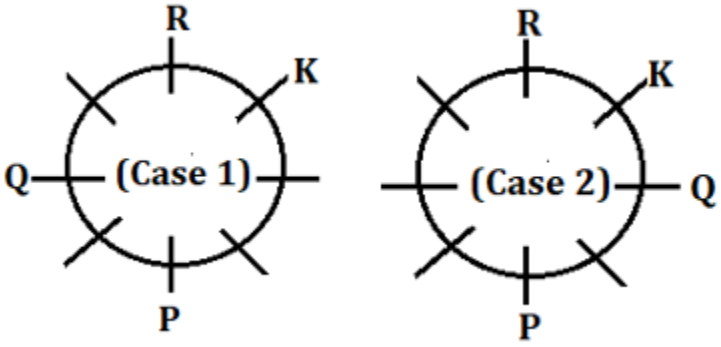
Thus, the final arrangement is: -



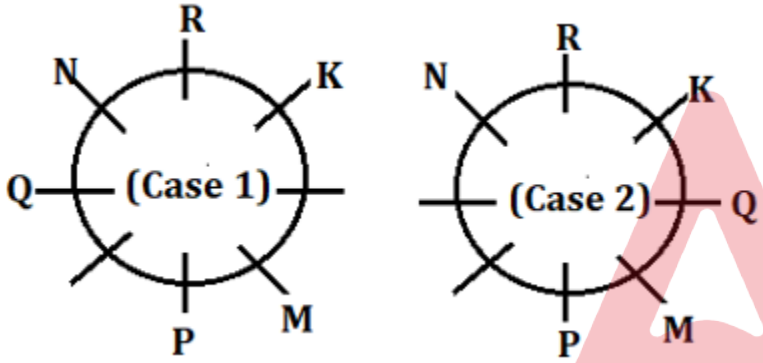
Q sits immediate left of L.

S2. Ans.(d)

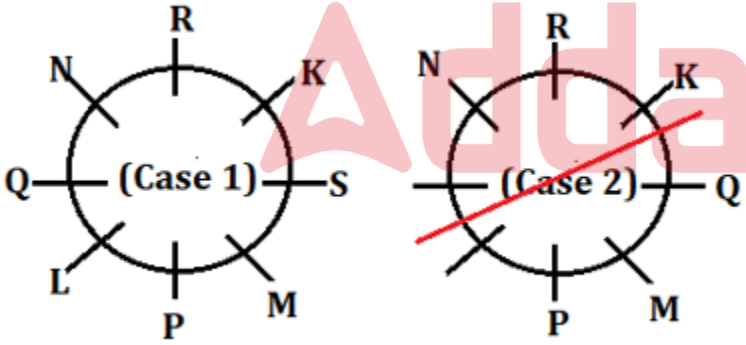
Sol. Three persons sit between P and R who sits immediate right of K. Q neither sits adjacent to R nor adjacent to P. There are two possible cases as: -



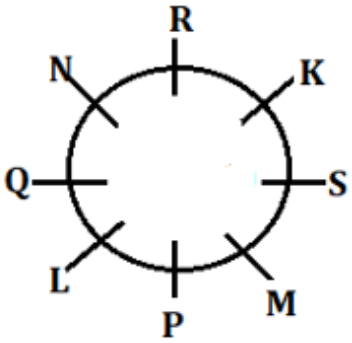
N faces M who doesn't sit adjacent to R. So, N will sit immediate right of R as there are no two opposite places left for placing N and M according to the given condition.



L sits 3rd to the left of S. Here, Case 2 is eliminated as there is no place left for placing L and S as per the given condition.



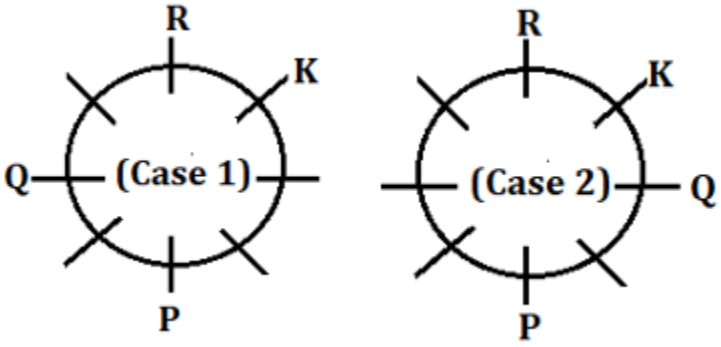
Thus, the final arrangement is: -



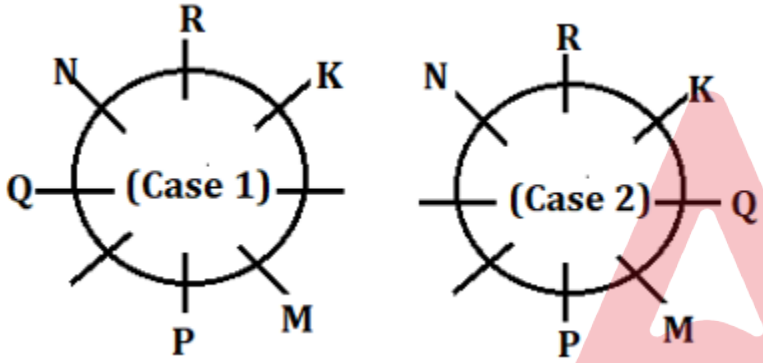
Four persons sit between Q and M when counted from right of M.

S3. Ans.(c)

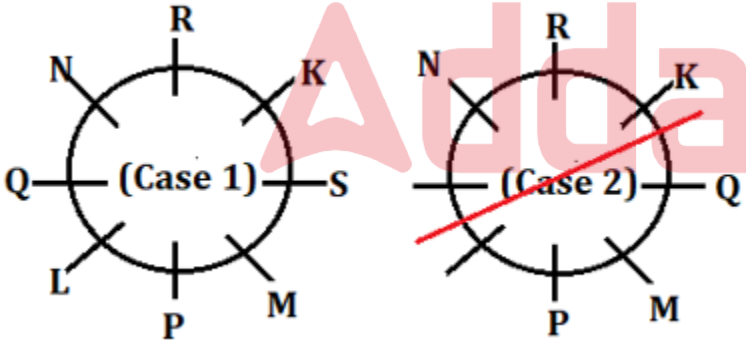
Sol. Three persons sit between P and R who sits immediate right of K. Q neither sits adjacent to R nor adjacent to P. There are two possible cases as: -



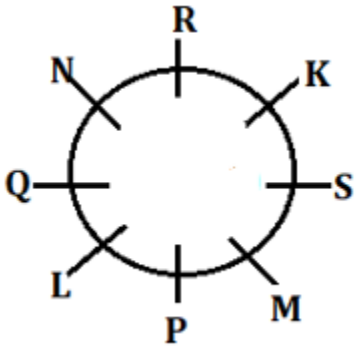
N faces M who doesn't sit adjacent to R. So, N will sit immediate right of R as there are no two opposite places left for placing N and M according to the given condition.



L sits 3rd to the left of S. Here, Case 2 is eliminated as there is no place left for placing L and S as per the given condition.



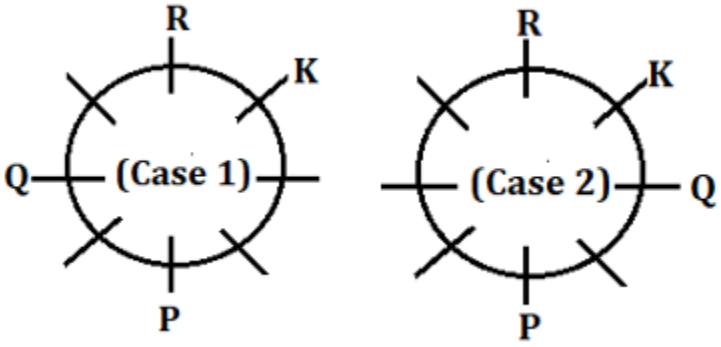
Thus, the final arrangement is: -



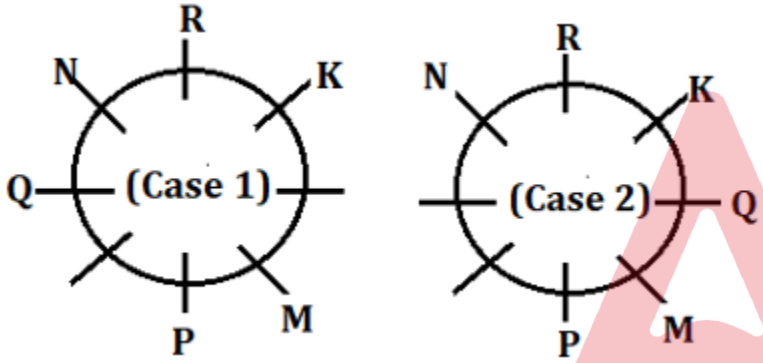
L faces K.

S4. Ans.(b)

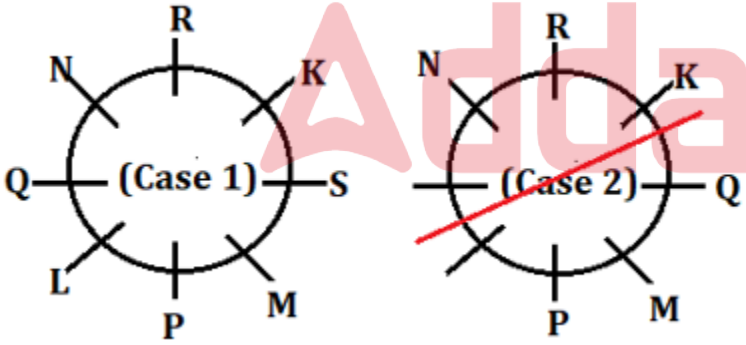
Sol. Three persons sit between P and R who sits immediate right of K. Q neither sits adjacent to R nor adjacent to P. There are two possible cases as: -



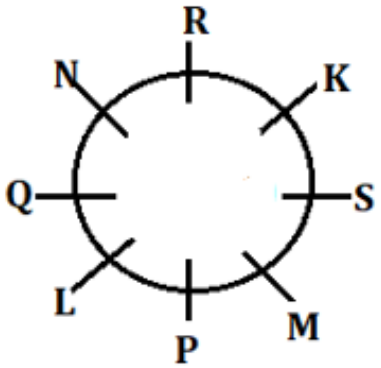
N faces M who doesn't sit adjacent to R. So, N will sit immediate right of R as there are no two opposite places left for placing N and M according to the given condition.

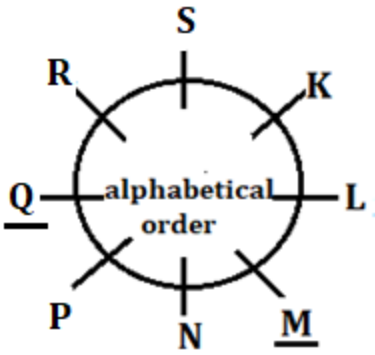


L sits 3rd to the left of S. Here, Case 2 is eliminated as there is no place left for placing L and S as per the given condition.



Thus, the final arrangement is: -

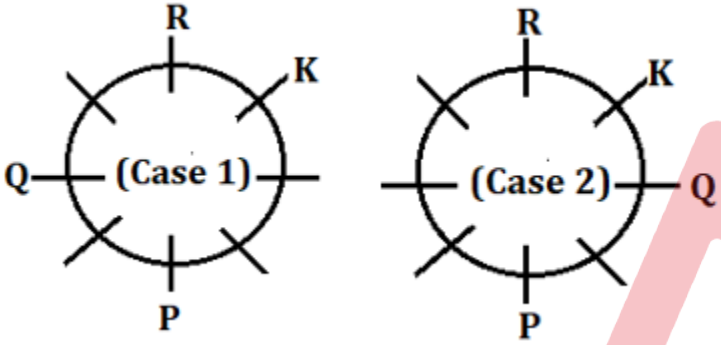




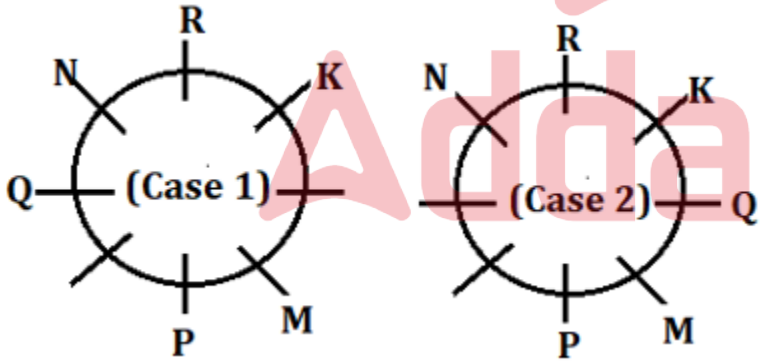
Two persons i.e., M and Q remain at same position.

S5. Ans.(e)

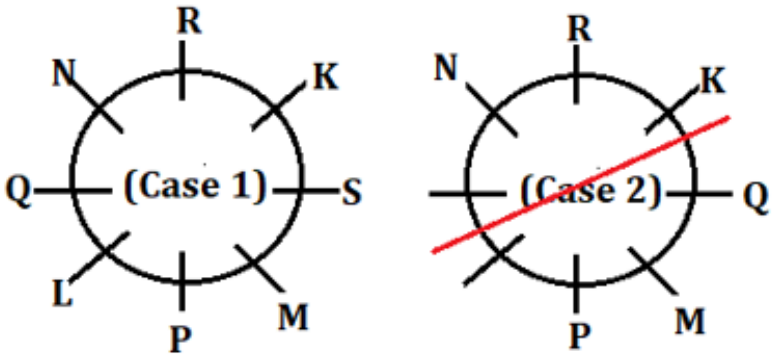
Sol. Three persons sit between P and R who sits immediate right of K. Q neither sits adjacent to R nor adjacent to P. There are two possible cases as: -



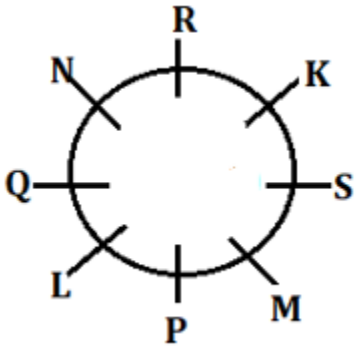
N faces M who doesn't sit adjacent to R. So, N will sit immediate right of R as there are no two opposite places left for placing N and M according to the given condition.



L sits 3rd to the left of S. Here, Case 2 is eliminated as there is no place left for placing L and S as per the given condition.



Thus, the final arrangement is: -



M sits 3rd to the right of Q.

S6. Ans.(d)

Sol. Four persons live between M and R who lives on an even numbered floor. There are three possible cases as: -

Floors	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
8		R	
7	M		
6			R
5			
4			
3		M	
2	R		
1			M

One person lives between M and N. Here, one more possibility comes from case 2. T lives just below P and above Q.T doesn't live on even numbered floor. Here Case2 is ruled out as no place left for T according to the given condition.

Floors	Persons (Case 1)	~~Persons (Case 2)~~	Persons (Case 3)	Persons (Case 2a)
8		~~R~~	P	R
7	M		T	
6			R	P
5	N	~~N~~	Q/	T
4	P		Q/	Q/
3	T	~~M~~	N	M
2	R		Q/	Q/
1	Q		M	N

Number of persons live between S and P is same as live between S and O. Here, Case 2a is eliminated as there is no place left to place O and S according to the given condition. At least two persons live above P, so Case 3 is also eliminated as not satisfying the given condition.

Floors	Persons (Case 1)	~~Persons (Case 3)~~	~~Persons (Case 2a)~~
8	O	~~P~~	~~R~~
7	M	~~T~~	
6	S	~~R~~	~~P~~
5	N	~~S~~	~~T~~
4	P	~~Q~~	~~/Q~~
3	T	~~N~~	~~M~~
2	R	~~O~~	~~/Q~~
1	Q	~~M~~	~~N~~

Thus, the final arrangement is: -

Floors	Persons
8	O
7	M
6	S
5	N
4	P
3	T
2	R
1	Q

S lives on 6th floor.

S7. Ans.(e)

Sol. Four persons live between M and R who lives on an even numbered floor. There are three possible cases as: -

Floors	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
8		R	
7	M		
6			R
5			
4			
3		M	
2	R		
1			M

One person lives between M and N. Here, one more possibility comes from case 2. T lives just below P and above Q.T doesn't live on even numbered floor. Here Case2 is ruled out as no place left for T according to the given condition.

Floors	Persons (Case 1)	~~Persons (Case 2)~~	Persons (Case 3)	Persons (Case 2a)
8		~~R~~	P	R
7	M		T	
6			R	P
5	N	~~N~~	Q/	T
4	P		Q/	Q/
3	T	~~M~~	N	M
2	R		Q/	Q/
1	Q		M	N

Number of persons live between S and P is same as live between S and O. Here, Case 2a is eliminated as there is no place left to place O and S according to the given condition. At least two persons live above P, so Case 3 is also eliminated as not satisfying the given condition.

Floors	Persons (Case 1)	~~Persons (Case 3)~~	~~Persons (Case 2a)~~
8	O	~~P~~	~~R~~
7	M	~~T~~	
6	S	~~R~~	~~P~~
5	N	~~S~~	~~T~~
4	P	~~Q~~	~~/Q~~
3	T	~~N~~	~~M~~
2	R	~~O~~	~~/Q~~
1	Q	~~M~~	~~N~~

Thus, the final arrangement is: -

Floors	Persons
8	O
7	M
6	S
5	N
4	P
3	T
2	R
1	Q

Four persons (M, S, N, P) live between O and T.

S8. Ans.(a)

Sol. Four persons live between M and R who lives on an even numbered floor. There are three possible cases as: -

Floors	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
8		R	
7	M		
6			R
5			
4			
3		M	
2	R		
1			M

One person lives between M and N. Here, one more possibility comes from case 2. T lives just below P and above Q.T doesn't live on even numbered floor. Here Case2 is ruled out as no place left for T according to the given condition.

Floors	Persons (Case 1)	~~Persons (Case 2)~~	Persons (Case 3)	Persons (Case 2a)
8		~~R~~	P	R
7	M		T	
6			R	P
5	N	~~N~~	Q/	T
4	P		Q/	Q/
3	T	~~M~~	N	M
2	R		Q/	Q/
1	Q		M	N

Number of persons live between S and P is same as live between S and O. Here, Case 2a is eliminated as there is no place left to place O and S according to the given condition. At least two persons live above P, so Case 3 is also eliminated as not satisfying the given condition.

Floors	Persons (Case 1)	~~Persons (Case 3)~~	~~Persons (Case 2a)~~
8	O	~~P~~	~~R~~
7	M	~~T~~	
6	S	~~R~~	~~P~~
5	N	~~S~~	~~T~~
4	P	~~Q~~	~~/Q~~
3	T	~~N~~	~~M~~
2	R	~~O~~	~~/Q~~
1	Q	~~M~~	~~N~~

Thus, the final arrangement is: -

Floors	Persons
8	O
7	M
6	S
5	N
4	P
3	T
2	R
1	Q

O lives on the topmost floor.

S9. Ans.(c)

Sol. Four persons live between M and R who lives on an even numbered floor. There are three possible cases as: -

Floors	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
8		R	
7	M		
6			R
5			
4			
3		M	
2	R		
1			M

One person lives between M and N. Here, one more possibility comes from case 2. T lives just below P and above Q.T doesn't live on even numbered floor. Here Case2 is ruled out as no place left for T according to the given condition.

Floors	Persons (Case 1)	~~Persons (Case 2)~~	Persons (Case 3)	Persons (Case 2a)
8		~~R~~	P	R
7	M		T	
6			R	P
5	N	~~N~~	Q/	T
4	P		Q/	Q/
3	T	~~M~~	N	M
2	R		Q/	Q/
1	Q		M	N

Number of persons live between S and P is same as live between S and O. Here, Case 2a is eliminated as there is no place left to place O and S according to the given condition. At least two persons live above P, so Case 3 is also eliminated as not satisfying the given condition.

Floors	Persons (Case 1)	~~Persons (Case 3)~~	~~Persons (Case 2a)~~
8	O	~~P~~	~~R~~
7	M	~~T~~	
6	S	~~R~~	~~P~~
5	N	~~S~~	~~T~~
4	P	~~Q~~	~~/Q~~
3	T	~~N~~	~~M~~
2	R	~~O~~	~~/Q~~
1	Q	~~M~~	~~N~~

Thus, the final arrangement is: -

Floors	Persons
8	O
7	M
6	S
5	N
4	P
3	T
2	R
1	Q

P lives exactly between Q and M.

S10. Ans.(e)

Sol. Four persons live between M and R who lives on an even numbered floor. There are three possible cases as: -

Floors	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
8		R	
7	M		
6			R
5			
4			
3		M	
2	R		
1			M

One person lives between M and N. Here, one more possibility comes from case 2. T lives just below P and above Q.T doesn't live on even numbered floor. Here Case2 is ruled out as no place left for T according to the given condition.

Floors	Persons (Case 1)	~~Persons (Case 2)~~	Persons (Case 3)	Persons (Case 2a)
8		~~R~~	P	R
7	M		T	
6			R	P
5	N	~~N~~	Q/	T
4	P		Q/	Q/
3	T	~~M~~	N	M
2	R		Q/	Q/
1	Q		M	N

Number of persons live between S and P is same as live between S and O. Here, Case 2a is eliminated as there is no place left to place O and S according to the given condition. At least two persons live above P, so Case 3 is also eliminated as not satisfying the given condition.

Floors	Persons (Case 1)	~~Persons (Case 3)~~	~~Persons (Case 2a)~~
8	O	~~P~~	~~R~~
7	M	~~T~~	
6	S	~~R~~	~~P~~
5	N	~~S~~	~~T~~
4	P	~~Q~~	~~/Q~~
3	T	~~N~~	~~M~~
2	R	~~O~~	~~/Q~~
1	Q	~~M~~	~~N~~

Thus, the final arrangement is: -

Floors	Persons
8	O
7	M
6	S
5	N
4	P
3	T
2	R
1	Q

All the persons given in the options live on an even numbered floor except Q who lives on an odd numbered floor.

S11. Ans.(c)
Sol. There are six numbers (2**4**%, 8**2**#, 4**7***, 4**2**&, 2**8**@, 6**4**!).

S12. Ans.(a)
Sol. 5th element from the left end = %
and 10th element to the right of % = 2

S13. Ans.(b)
Sol. Number which is 8th from the left end = 9
And the number which is 6th from the right end = 6
Thus, the sum of 9 + 6 = 15

S14. Ans.(d)
Sol. There are two even number (**4**7, **4**9)

S15. Ans.(d)
Sol. There are five 4s in the series.

S16. Ans.(c)
Sol.

Words	Symbols
Daily	li
Walk	ka
Is	im
Good	Og
Exercise	Sx
Long	gl

S17. Ans.(b)
Sol.

Words	Symbols
Daily	li
Walk	ka
Is	im
Good	Og
Exercise	Sx
Long	gl

S18. Ans.(e)
Sol.

Words	Symbols
Daily	li
Walk	ka
Is	im
Good	Og
Exercise	Sx
Long	gl

S19. Ans.(e)
Sol.

Words	Symbols
Daily	li
Walk	ka
Is	im
Good	Og
Exercise	Sx
Long	gl

S20. Ans.(a)
Sol.

Words	Symbols
Daily	li
Walk	ka
Is	im
Good	Og
Exercise	Sx
Long	gl

S21. Ans.(d)
Sol. 3rd, 6th, 8th, 9th and 12th letters are L, I, N, S and P respectively.
Thus, no meaningful word can be formed.

S22. Ans.(a)
Sol. C goes to market one of the days after Wednesday. Two persons go between C and G who goes just after B. There are three Possible cases as: -

Days	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
Sunday	B		
Monday	G	B	
Tuesday		G	B
Wednesday			G
Thursday	C		
Friday		C	
Saturday			C

One person goes between E and F. Here, Case 3 is ruled out as no place left for E and F according to the given conditions, so: -

Days	Persons (Case 1)	Persons (Case 2)	~~Persons (Case 3)~~
Sunday	B		
Monday	G	B	
Tuesday		G	~~B~~
Wednesday	E/F		~~G~~
Thursday	C	E/F	
Friday	E/F	C	
Saturday		E/F	~~G~~

Number of persons goes after F is same as number of persons goes before D. Here, Case 1 is ruled out as there is no place left for D as per the given condition. Hence, D will go on Sunday in Case 2: -

Days	~~Persons (Case 1)~~	Persons (Case 2)
Sunday	~~B~~	D
Monday	~~G~~	B
Tuesday		G
Wednesday	~~E/F~~	
Thursday	~~C~~	E
Friday	~~E/F~~	C
Saturday		F

We know A is one of the persons and only one place is left thus the final arrangement is: -

Days	Persons
Sunday	D
Monday	B
Tuesday	G
Wednesday	A
Thursday	E
Friday	C
Saturday	F

B goes market on Monday.

S23. Ans.(e)

Sol. C goes to market one of the days after Wednesday. Two persons go between C and G who goes just after B. There are three Possible cases as: -

Days	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
Sunday	B		
Monday	G	B	
Tuesday		G	B
Wednesday			G
Thursday	C		
Friday		C	
Saturday			C

One person goes between E and F. Here, Case 3 is ruled out as no place left for E and F according to the given conditions, so: -

Days	Persons (Case 1)	Persons (Case 2)	~~Persons (Case 3)~~
Sunday	B		
Monday	G	B	
Tuesday		G	~~B~~
Wednesday	E/F		~~G~~
Thursday	C	E/F	
Friday	E/F	C	
Saturday		E/F	~~C~~

Number of persons goes after F is same as number of persons goes before D. Here, Case 1 is ruled out as there is no place left for D as per the given condition. Hence, D will go on Sunday in Case 2: -

Days	~~Persons (Case 1)~~	Persons (Case 2)
Sunday	~~B~~	D
Monday	~~G~~	B
Tuesday		G
Wednesday	~~E/F~~	
Thursday	~~C~~	E
Friday	~~E/F~~	C
Saturday		F

We know A is one of the persons and only one place is left thus the final arrangement is: -

Days	Persons
Sunday	D
Monday	B
Tuesday	G
Wednesday	A
Thursday	E
Friday	C
Saturday	F

Four persons go between D and C.

S24. Ans.(c)

Sol. C goes to market one of the days after Wednesday. Two persons go between C and G who goes just after B. There are three Possible cases as: -

Days	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
Sunday	B		
Monday	G	B	
Tuesday		G	B
Wednesday			G
Thursday	C		
Friday		C	
Saturday			C

One person goes between E and F. Here, Case 3 is ruled out as no place left for E and F according to the given conditions, so: -

Days	Persons (Case 1)	Persons (Case 2)	~~Persons (Case 3)~~
Sunday	B		
Monday	G	B	
Tuesday		G	~~B~~
Wednesday	E/F		~~G~~
Thursday	C	E/F	
Friday	E/F	C	
Saturday		E/F	~~C~~

Number of persons goes after F is same as number of persons goes before D. Here, Case 1 is ruled out as there is no place left for D as per the given condition. Hence, D will go on Sunday in Case 2: -

Days	~~Persons (Case 1)~~	Persons (Case 2)
Sunday	~~B~~	D
Monday	~~G~~	B
Tuesday		G
Wednesday	~~E/F~~	
Thursday	~~C~~	E
Friday	~~E/F~~	C
Saturday		F

We know A is one of the persons and only one place is left thus the final arrangement is: -

Days	Persons
Sunday	D
Monday	B
Tuesday	G
Wednesday	A
Thursday	E
Friday	C
Saturday	F

A- Wednesday is correct combination.

S25. Ans.(e)

Sol. C goes to market one of the days after Wednesday. Two persons go between C and G who goes just after B. There are three Possible cases as: -

Days	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
Sunday	B		
Monday	G	B	
Tuesday		G	B
Wednesday			G
Thursday	C		
Friday		C	
Saturday			C

One person goes between E and F. Here, Case 3 is ruled out as no place left for E and F according to the given conditions, so: -

Days	Persons (Case 1)	Persons (Case 2)	~~Persons (Case 3)~~
Sunday	B		
Monday	G	B	
Tuesday		G	~~B~~
Wednesday	E/F		~~G~~
Thursday	C	E/F	
Friday	E/F	C	
Saturday		E/F	~~C~~

Number of persons goes after F is same as number of persons goes before D. Here, Case 1 is ruled out as there is no place left for D as per the given condition. Hence, D will go on Sunday in Case 2: -

Days	~~Persons (Case 1)~~	Persons (Case 2)
Sunday	~~B~~	D
Monday	~~G~~	B
Tuesday		G
Wednesday	~~E/F~~	
Thursday	~~C~~	E
Friday	~~E/F~~	C
Saturday		F

We know A is one of the persons and only one place is left thus the final arrangement is: -

Days	Persons
Sunday	D
Monday	B
Tuesday	G
Wednesday	A
Thursday	E
Friday	C
Saturday	F

G goes market on Tuesday.

S26. Ans.(b)

Sol. C goes to market one of the days after Wednesday. Two persons go between C and G who goes just after B. There are three Possible cases as: -

Days	Persons (Case 1)	Persons (Case 2)	Persons (Case 3)
Sunday	B		
Monday	G	B	
Tuesday		G	B
Wednesday			G
Thursday	C		
Friday		C	
Saturday			C

One person goes between E and F. Here, Case 3 is ruled out as no place left for E and F according to the given conditions, so: -

Days	Persons (Case 1)	Persons (Case 2)	~~Persons (Case 3)~~
Sunday	B		
Monday	G	B	
Tuesday		G	~~B~~
Wednesday	E/F		~~G~~
Thursday	C	E/F	
Friday	E/F	C	
Saturday		E/F	~~C~~

Number of persons goes after F is same as number of persons goes before D. Here, Case 1 is ruled out as there is no place left for D as per the given condition. Hence, D will go on Sunday in Case 2: -

Days	~~Persons (Case 1)~~	Persons (Case 2)
Sunday	~~B~~	D
Monday	~~G~~	B
Tuesday		G
Wednesday	~~E/F~~	
Thursday	~~C~~	E
Friday	~~E/F~~	C
Saturday		F

We know A is one of the persons and only one place is left thus the final arrangement is: -

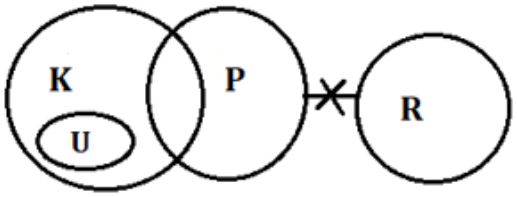
Days	Persons
Sunday	D
Monday	B
Tuesday	G
Wednesday	A
Thursday	E
Friday	C
Saturday	F

Position of two persons remains Unchanged.

Days	Persons	Alphabetical Order
Sunday	D	A
Monday	B	**B**
Tuesday	G	C
Wednesday	A	D
Thursday	E	**E**
Friday	C	F
Saturday	F	G

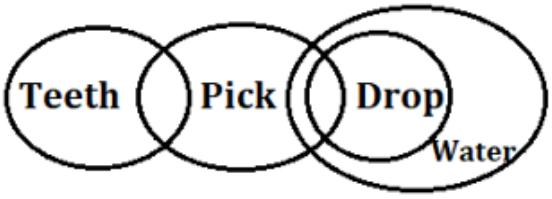
S27. Ans.(e)

Sol. I. Follows – Because U is only related to K, so relation of U with any other elements is not possible.
II. Follows- No P is R and Some K are P thus the part of P which is K cannot be R.



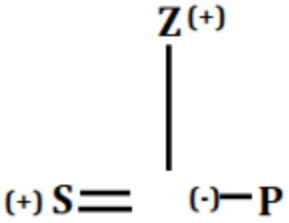
S28. Ans.(a)

Sol. I. Follows- Because Some Drop are Pick and all Drops are Water so it is clear that some Pick are Water.
II. Not Follows- Because it is given that Only a few Teeth are Pick, so all Teeth cannot be Pick even in possibilities.

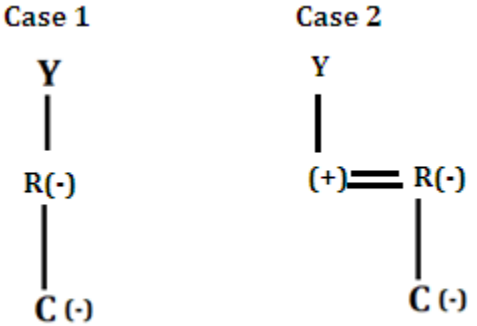


S29. Ans.(b)
Sol. There are three pairs,

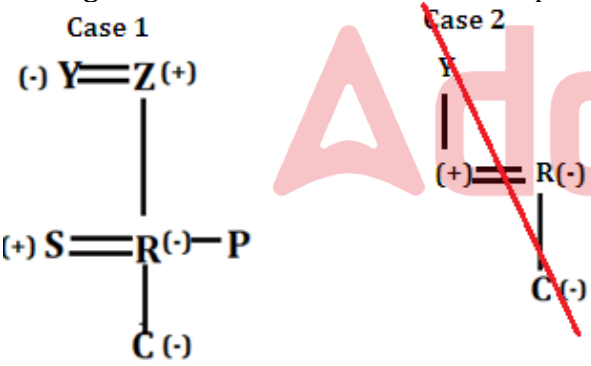
S30. Ans.(d)
Sol. S is son-in-law of Z who is father of P. P is unmarried member of the family.



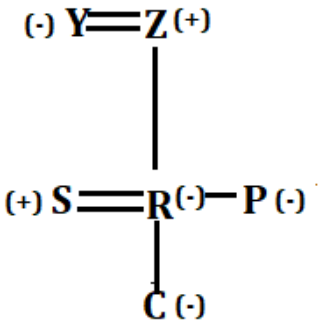
R is mother of C who is granddaughter of Y. So, here we have two cases:



After combining the above diagrams Y will be wife of Z and R will be the daughter of Z as the family is of three generation with two married couple. So, case 2 gets eliminated here.



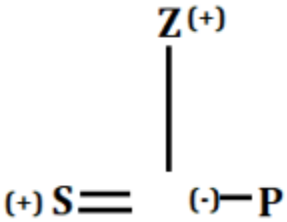
Number of females are more than male members, so P will be a female member thus the final arrangement is: -



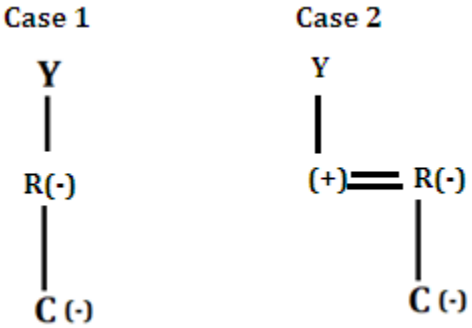
P is aunt of C.

S31. Ans.(a)

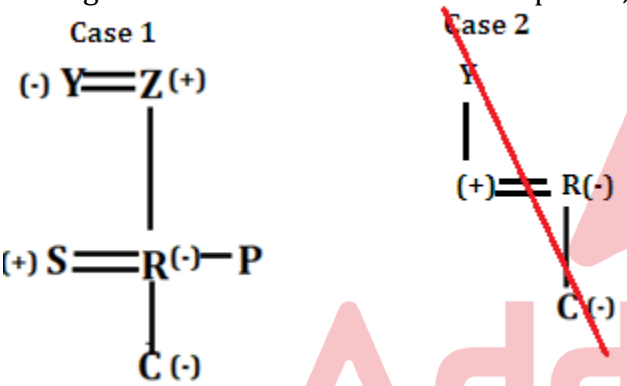
Sol. S is son-in-law of Z who is father of P. P is unmarried member of the family.



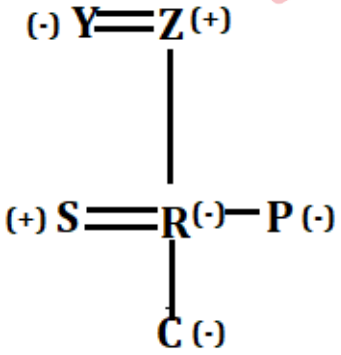
R is mother of C who is granddaughter of Y. So, here we have two cases:



After combining the above diagrams Y will be wife of Z and R will be the daughter of Z as the family is of three generation with two married couple. So, case 2 gets eliminated here.



Number of females are more than male members, so P will be a female member thus the final arrangement is: -



Y is Mother-in-law of S.

S32. Ans.(a)

Sol. Given Number- **5389264863**

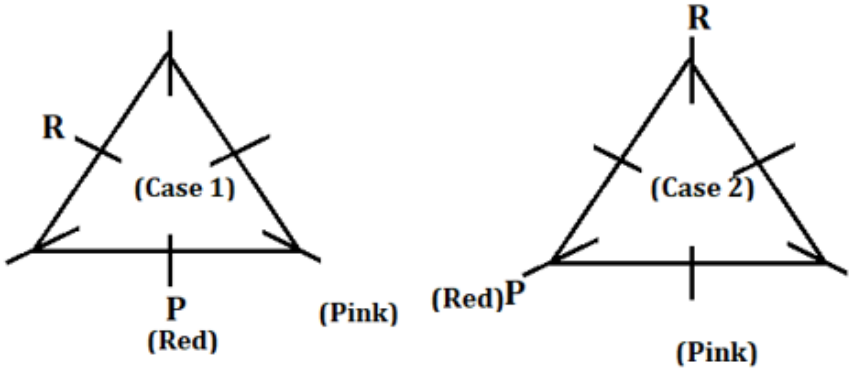
Number after arranged in descending order from left to right = 9886654332

5th digit from left end = 6 and 4th digit from right end = 4

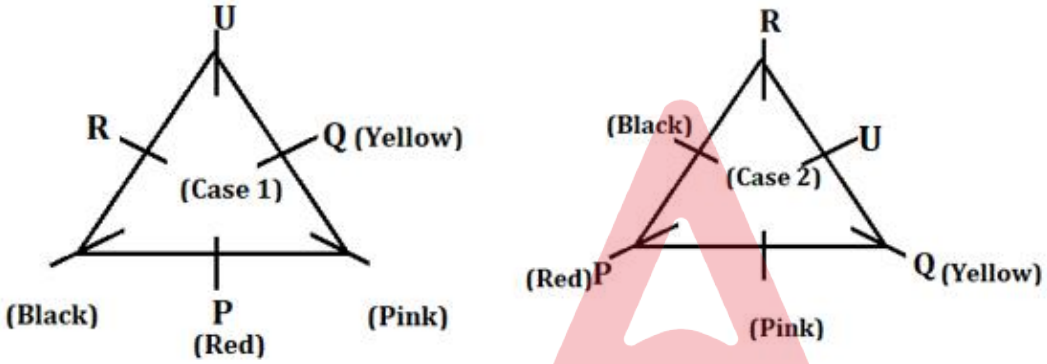
Thus, the sum of 6 + 4 = 10.

S33. Ans.(c)

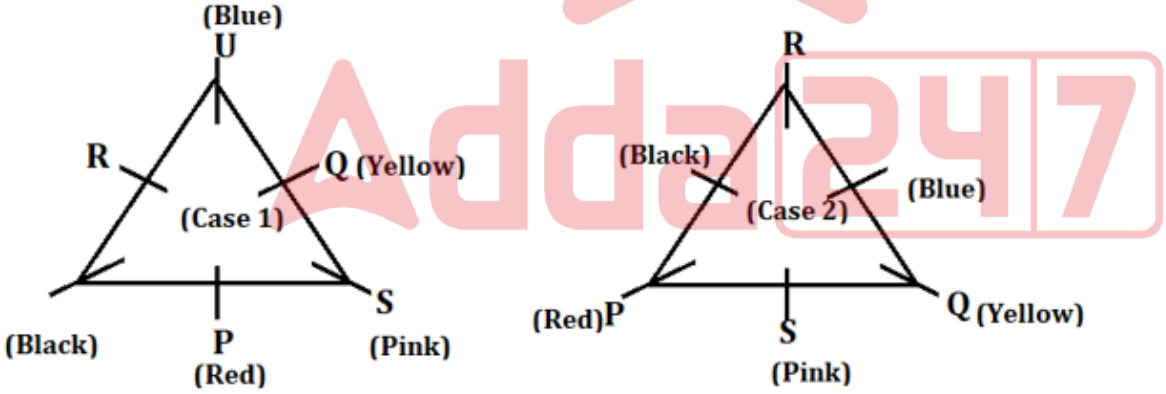
Sol. R sits 2nd to the left of P who likes Red. The one who likes pink faces R. There are two possible cases as P may sit at the middle of the side of the table or at the corner of the table: -



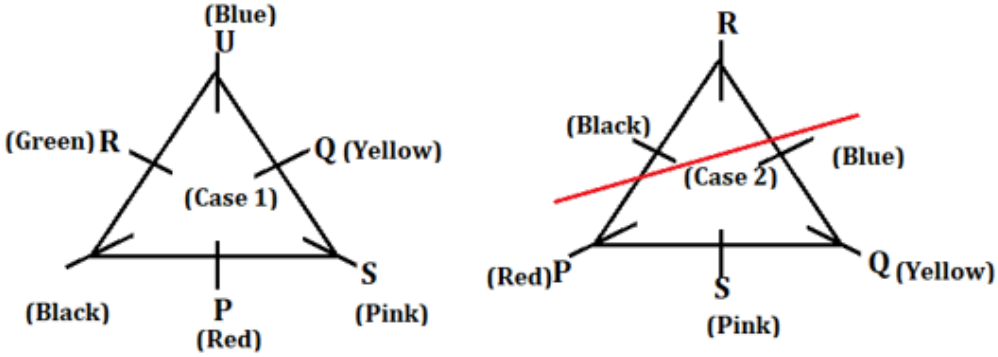
Q sits neither adjacent to P nor adjacent to R. The one who likes Black faces the one who likes Yellow. U sits immediate right of one who likes Yellow.



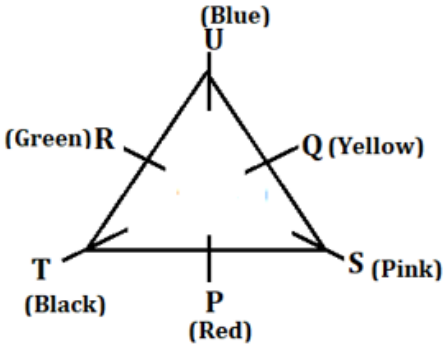
The one who likes blue sits 2nd to the right of S.



The one who likes Green doesn't sit at the corner of the table, so case 2 is ruled out as there is no place left at the middle of the side of the table for the one who likes Green.



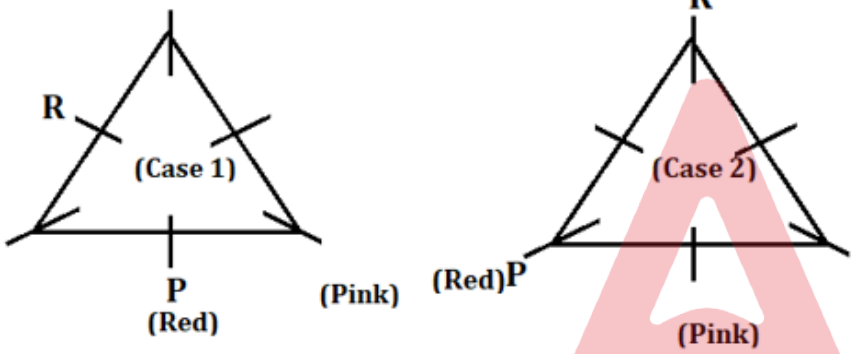
T is one of the persons, so the final arrangement is: -



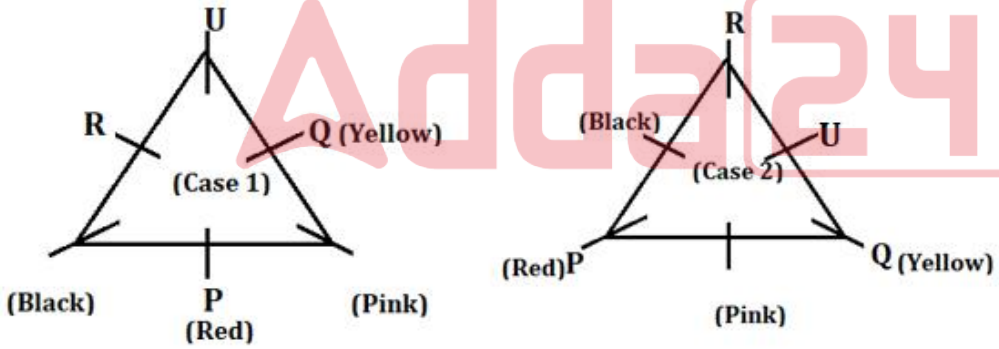
P faces the one who likes Blue.

S34. Ans.(a)

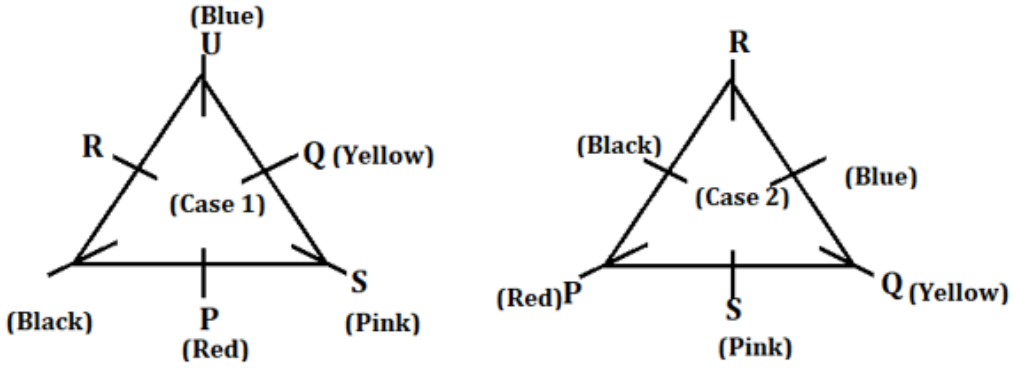
Sol. R sits 2nd to the left of P who likes Red. The one who likes pink faces R. There are two possible cases as P may sit at the middle of the side of the table or at the corner of the table: -



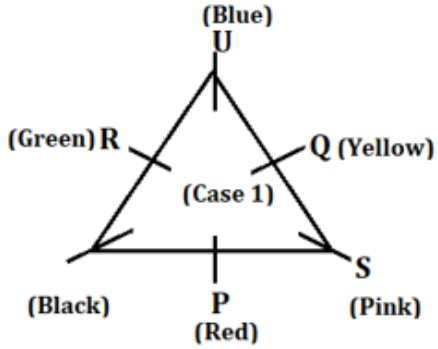
Q sits neither adjacent to P nor adjacent to R. The one who likes Black faces the one who likes Yellow. U sits immediate right of one who likes Yellow.

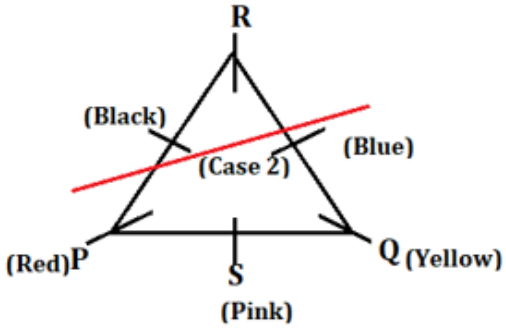


The one who likes blue sits 2nd to the right of S.

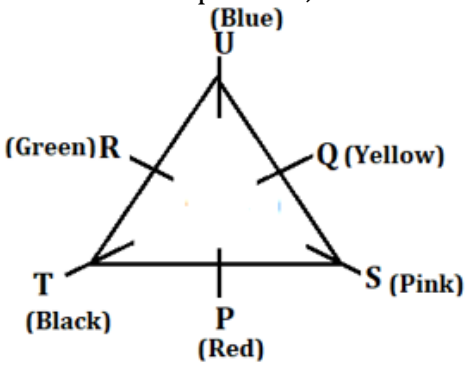


The one who likes Green doesn't sit at the corner of the table, so case 2 is ruled out as there is no place left at the middle of the side of the table for the one who likes Green.





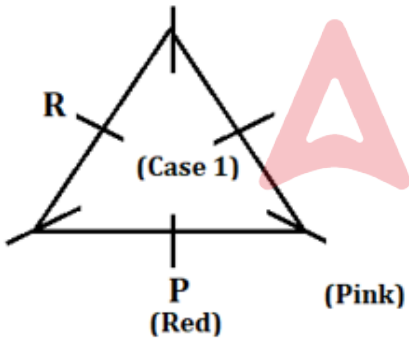
T is one of the persons, so the final arrangement is: -

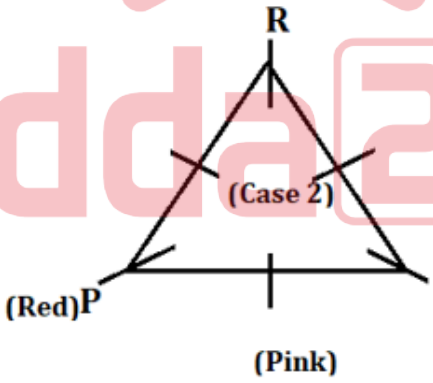


T likes Black color.

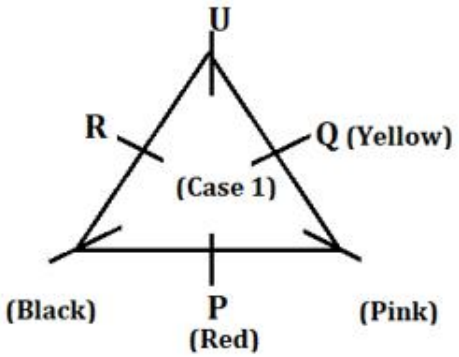
S35. Ans.(e)

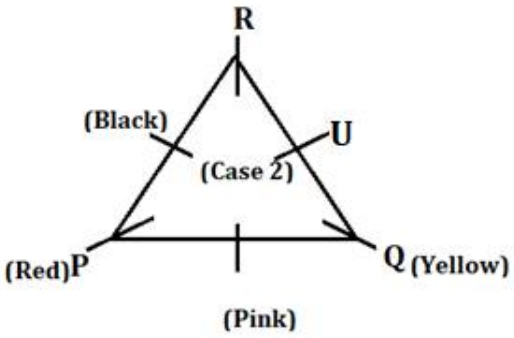
Sol. R sits 2nd to the left of P who likes Red. The one who likes pink faces R. There are two possible cases as P may sit at the middle of the side of the table or at the corner of the table: -



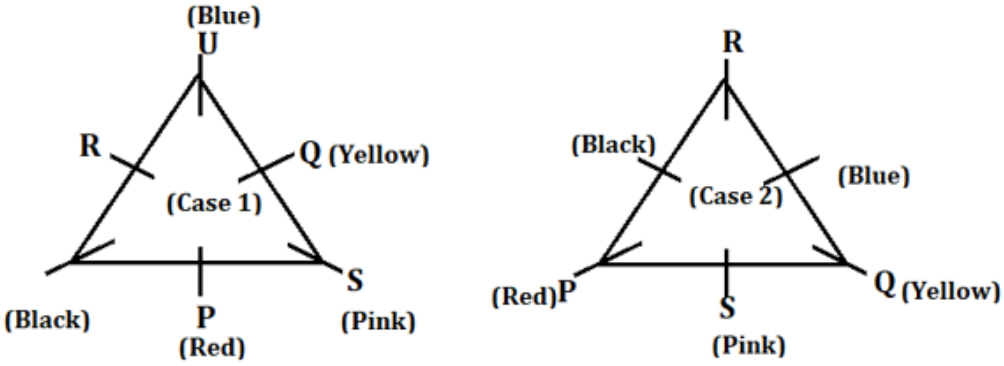


Q sits neither adjacent to P nor adjacent to R. The one who likes Black faces the one who likes Yellow. U sits immediate right of one who likes Yellow.

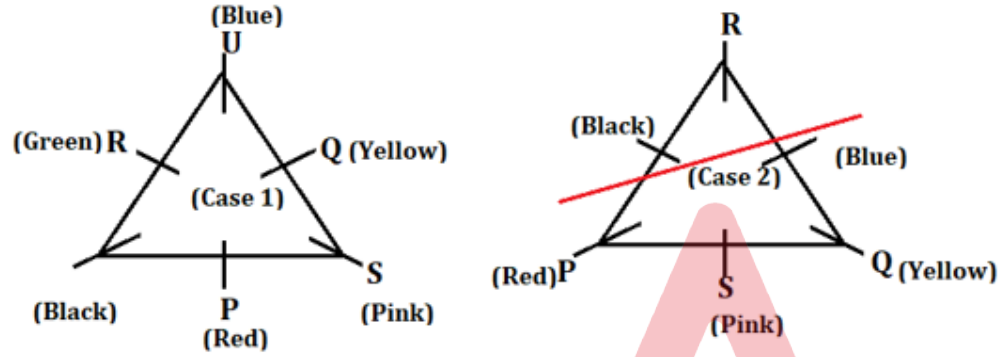




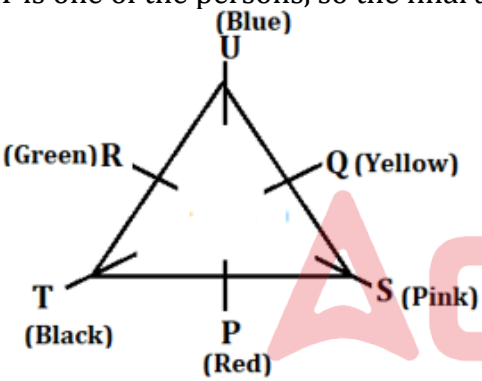
The one who likes blue sits 2nd to the right of S.



The one who likes Green doesn't sit at the corner of the table, so case 2 is ruled out as there is no place left at the middle of the side of the table for the one who likes Green.



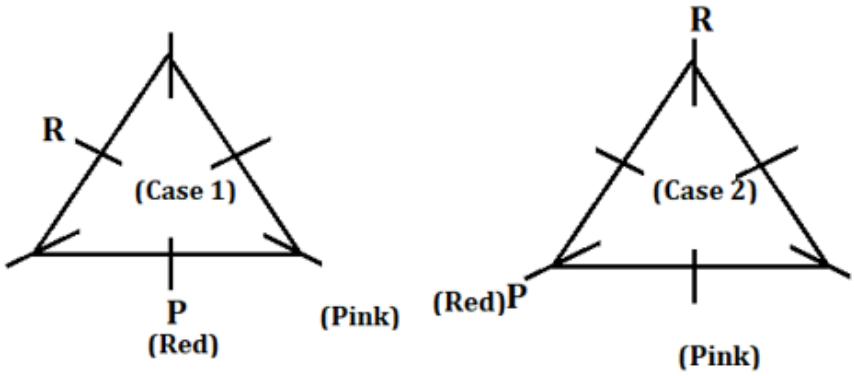
T is one of the persons, so the final arrangement is: -



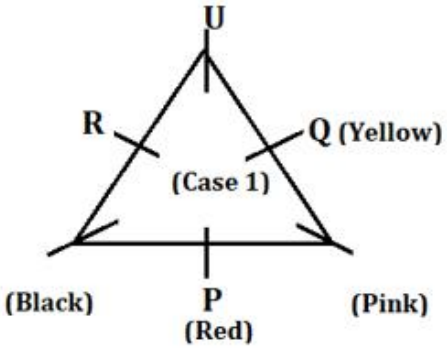
T sits 2nd to the left of S.

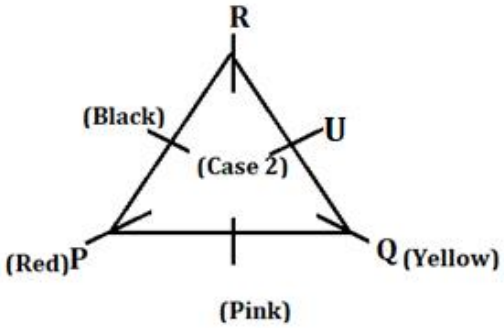
S36. Ans.(c)

Sol. R sits 2nd to the left of P who likes Red. The one who likes pink faces R. There are two possible cases as P may sit at the middle of the side of the table or at the corner of the table: -

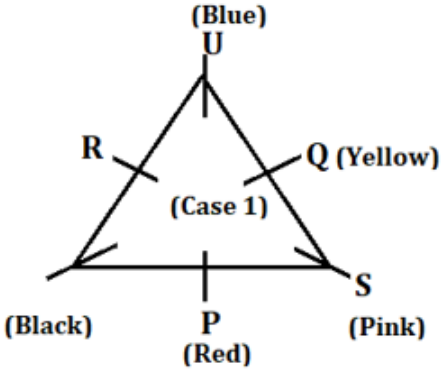


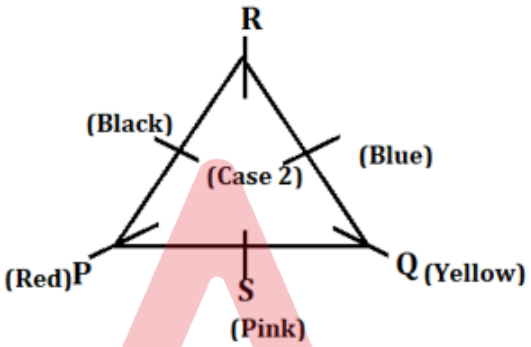
Q sits neither adjacent to P nor adjacent to R. The one who likes Black faces the one who likes Yellow. U sits immediate right of one who likes Yellow.



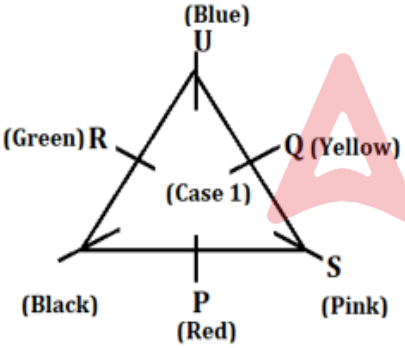


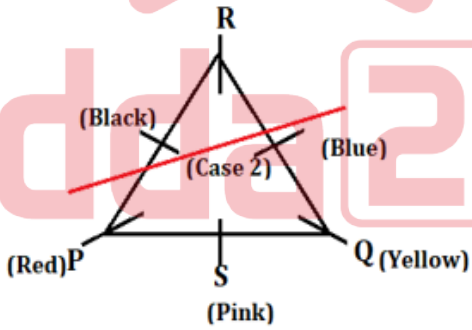
The one who likes blue sits 2nd to the right of S.



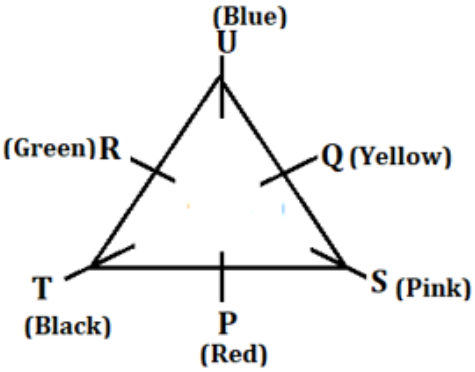


The one who likes Green doesn't sit at the corner of the table, so case 2 is ruled out as there is no place left at the middle of the side of the table for the one who likes Green.





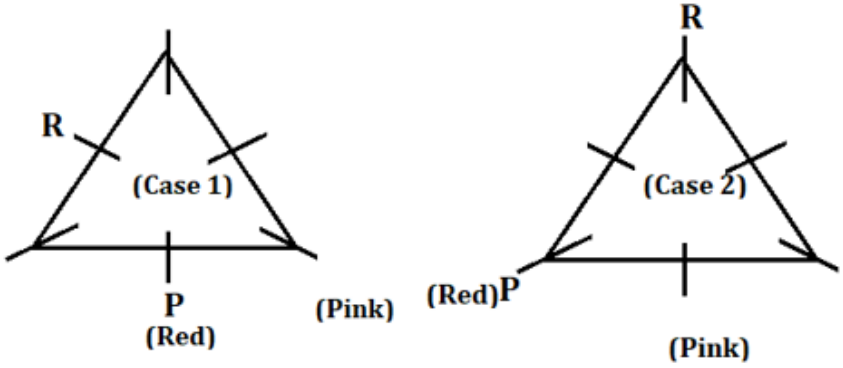
T is one of the persons, so the final arrangement is: -



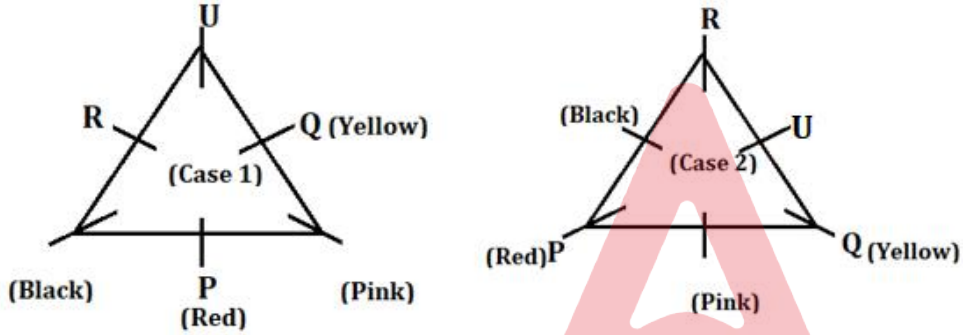
U likes blue color.

S37. Ans.(c)

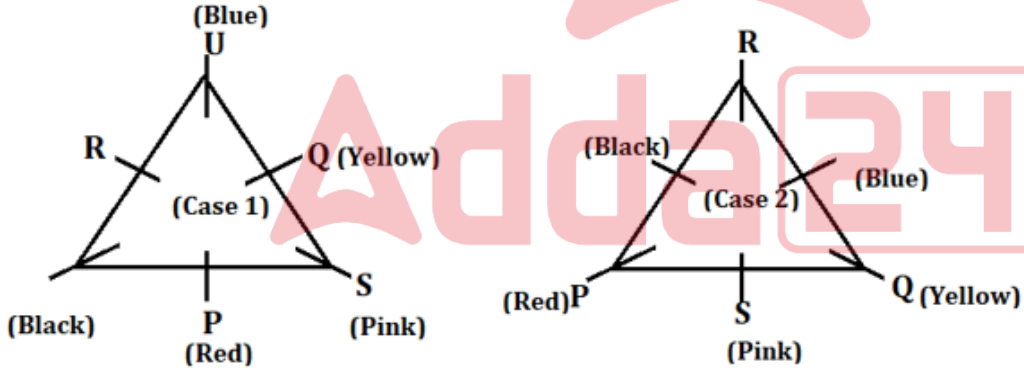
Sol. R sits 2nd to the left of P who likes Red. The one who likes pink faces R. There are two possible cases as P may sit at the middle of the side of the table or at the corner of the table: -



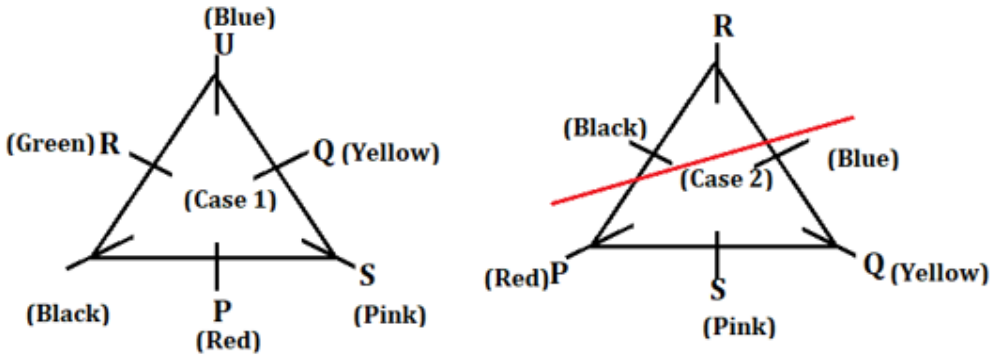
Q sits neither adjacent to P nor adjacent to R. The one who likes Black faces the one who likes Yellow. U sits immediate right of one who likes Yellow.



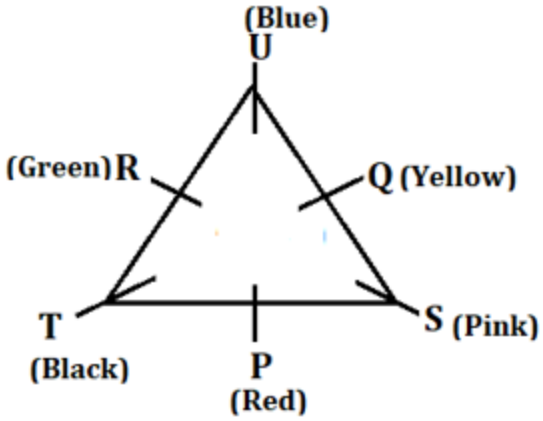
The one who likes blue sits 2nd to the right of S.



The one who likes Green doesn't sit at the corner of the table, so case 2 is ruled out as there is no place left at the middle of the side of the table for the one who likes Green.



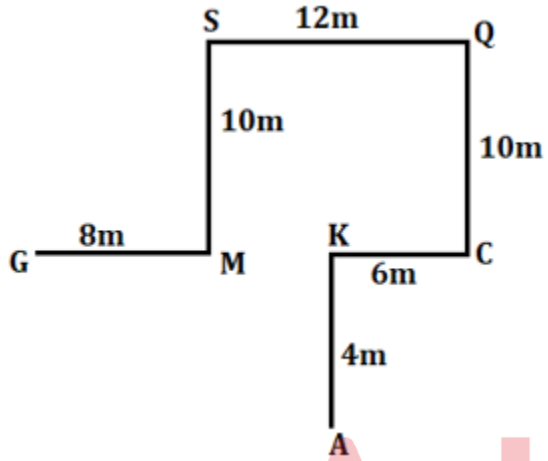
T is one of the persons, so the final arrangement is: -



Two persons sit between S and R when counted from right of S.

S38. Ans.(b)

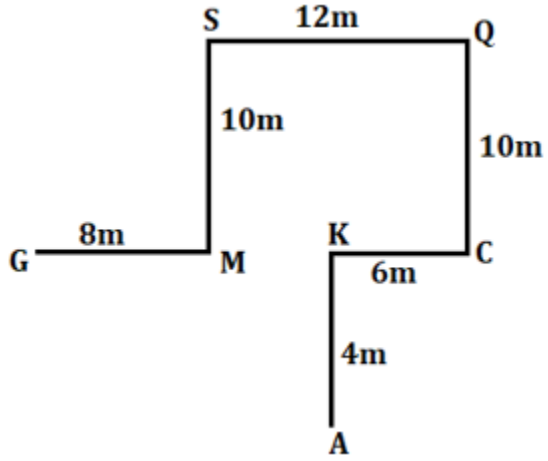
Sol.



Point A is in South-East of Point G.

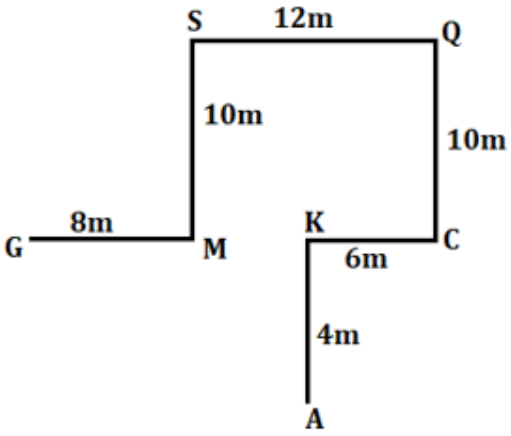
S39. Ans.(e)

Sol.



Total distance covered by him from Point Q to Point A is 20m (10m + 6m + 4m).

S40. Ans.(a)
Sol.



The 1st Point in the given question is in North-East of 2nd Point, thus Point C is related to Point A.

S41. Ans.(b)
Sol. Pattern of series –
32×0.5=16
16×1=16
16×2=32
?= 32×4=128
128×8=1024

S42. Ans.(a)
Sol. Pattern of series –
144×2=288
288×3=864
?= 864×4=3456
3456×5=17280
17280×6=103680

S43. Ans.(d)
Sol. Pattern of series –
120+5=125
125-10=115
115+15=130
? = 130-20=110
110+25=135

S44. Ans.(c)
Sol. Pattern of series –
$223 + 2^2 = 227$
$227 + 3^2 = 236$
$236 + 4^2 = 252$
$252 + 5^2 = 277$
$? = 277 + 6^2 = \mathbf{313}$

S45. Ans.(e)

Sol. Pattern of series –

60+11=71

71+22=93

93+33=126

?=126+44=**170**

170+55=225

S46. Ans.(b)

Sol.

$9 + 2^3 = 17$

$?= 17 + 3^3 = \mathbf{44}$

$44 + 4^3 = 108$

$108 + 5^3 = 233$

$233 + 6^3 = 449$

S47. Ans.(e)

Sol. 270-125=?

?=145

S48. Ans.(c)

Sol.

$\frac{117}{5} \times \frac{50}{100} \times 200 = ?$

$2340 = ?$

S49. Ans.(d)

Sol. 4.9+3.6=?

?=8.5

S50. Ans.(b)

Sol.

$\frac{18}{7} \times \frac{21}{18} = ? - 1$

$3 + 1 = ?$

$4 = ?$

S51. Ans.(a)

Sol.

$\frac{25}{100} \times \frac{?}{100} \times 80 = 560$

$? = 2800$

S52. Ans.(a)
Sol.
$\frac{3}{8} \times 240 + \frac{1}{7} \times 1400 = ?$
$? = 90 + 200$
$? = 290$

S53. Ans.(b)
Sol.
$330 - 80 = ?^2 \times 10$
$250 = ?^2 \times 10$
$?=5$

S54. Ans.(c)
Sol. 11+31-25+?=105
88 =?

S55. Ans.(e)
Sol.
$\frac{80}{100} \times \frac{2}{5} \times 300 = ?^2 - 4$
$96 + 4 = ?^2$
$?^2 = 100$
$? = 10$

S56. Ans.(d)
Sol.
$\frac{125}{100} \times \frac{4}{7} \times 2800 = ?$
$2000 = ?$

S57. Ans.(d)
Sol. 8 – 2.2 + 2.2 = ?
?=8

S58. Ans.(b)
Sol. 55.5 + 5 =?
? = 60.5

S59. Ans.(d)
Sol. Required ratio = 500 :500 =1 :1

S60. Ans.(a)
Sol.
Required percentage $= \frac{700}{140} \times 100 = 500\%$

S61. Ans.(d)
Sol. Required sum = (500+200+850+140)=1690

S62. Ans.(c)
Sol.

Required average = $\frac{500+400+500}{3} = 466\frac{2}{3}$

S63. Ans.(a)
Sol. Required difference = (500+700)-(500+120)=580

S64. Ans.(a)
Sol.

Length of train B = $\frac{4}{3} \times 150 = 200\ meters$

Required ratio = $\frac{150}{30} : \frac{200}{50} = 5:4$

S65. Ans.(e)
Sol.

ATQ,

$7200 = \frac{20000 \times X \times 3}{100}$

$\frac{7200 \times 100}{20000 \times 3} = X$

$X = 12\%$

S66. Ans.(d)
Sol.

Total cost price of bike for P = Rs. (7200+1200) = Rs.8400

Given, selling price of bike = 12000 Rs.

Profit = 12000−8400 = Rs. 3600

Profit% = $\frac{3600}{8400} \times 100 = 42.85\% \approx 43\%$

S67. Ans.(d)
Sol.

Total capacity of a tank = L.C.M. (2, 4, 5)= 20 unit

Efficiency of pipe A = $\frac{20}{2} = 10\ unit/hour$

Efficiency of pipe B = $\frac{20}{4} = 5\ unit/hour$

Efficiency of pipe C = $\frac{20}{5} = 4\ unit/hour$

Required time = $\frac{20}{10+5+4} = \frac{20}{19}\ hours$

S68. Ans.(c)

Sol.

Let the present age of A and B is 5x and 6x respectively.

Then

$\frac{5x+10}{6x+10}=\frac{7}{8}$

40x + 80 = 42x + 70

2x = 10

x = 5

Present age of A = 5 × 5 =25 years

S69. Ans.(a)

Sol.

Quantity of milk in vessel A = $150 \times \frac{7}{15} = 70\ liters$

Quantity of water in vessel A = $150 - 70 = 80\ liters$

Quantity of milk in vessel B = $50 \times \frac{7}{10} = 35\ liter$

Quantity of water in vessel B = $50 - 35 = 15\ liters$

Quantity of water in mixture C = 80 + 15 = 95 liters

S70. Ans.(a)

Sol.

Let radius of the circle is r cm.

2πr=44

$2\times \frac{22}{7} \times r = 44$

r = 7 cm

Breadth of rectangle = $\frac{8}{7} \times 7 = 8$ cm

Let the length of rectangle is l cm

ATQ,

2(length + Breadth) = 96

l + 8 = 48

L = 40cm

Area of rectangle = $40 \times 8 = 320\ cm^2$

S71. Ans.(e)

Sol.

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

(x + 2) (x + 3) = 0

x = -3, -2

II. $y^2 + 4y + 3y + 12 = 0$

(y + 4) (y + 3)= 0

y = -4, -3

clearly, x ≥ y

S72. Ans.(c)
Sol.
I. $2x^2 + 6x - x - 3 = 0$
$(2x - 1)(x + 3) = 0$
$x = -3, \frac{1}{2}$
II. $3y^2 - 3y + y - 1 = 0$
$(3y + 1)(y - 1) = 0$
$y = -\frac{1}{3}, 1$
clearly, no relation

S73. Ans.(a)
Sol. from I & II
$x = 2$
$y = 1$
clearly, $x > y$

S74. Ans.(d)
Sol.
I. $x^2 - 7x - 6x + 42 = 0$
$(x - 7)(x - 6) = 0$
$x = 6, 7$
II. $y^2 - 9y - 8y + 72 = 0$
$(y - 9)(y - 8) = 0$
$y = 8, 9$
clearly, $x < y$

S75. Ans.(e)
Sol.
I. $x^2 + 6x + 8 = 0$
$x^2 + 2x + 4x + 8 = 0$
$(x + 4)(x + 2) = 0$
$x = -2, -4$
II. $y^2 + 10y + 24 = 0$
$y^2 + 6y + 4y + 24 = 0$
$(y + 4)(y + 6) = 0$
$y = -4, -6$
$So, x \geq y.$

S76. Ans.(c)
Sol.
Let the amount invested by Q for "X" months
Ratio of profit sharing of P to Q = $5000 \times 12 : 8000 \times X$
$15 : 2X$
ATQ.
$$\frac{15}{2X} = \frac{10000}{22000 - 10000}$$
$X = 9$

S77. Ans.(e)

Sol.

Let the efficiency of A = 5 units/ day

So, efficiency of B = $5 \times \frac{80}{100} = 4\ units\ /day$

Required days = $\frac{90\times5}{5+4} = 50\ days$

S78. Ans.(d)

Sol. Let the speed of boat in still water & speed of stream be 7x km/hr & 4x km/hr respectively.

ATQ

$\frac{156}{7x-4x} = 26$

$x = 2$

Required difference = $(7 \times 2 - 4 \times 2) = 14 - 8 = 6\ km/hr$

S79. Ans.(a)

Sol. Total age of all ten students= 25×10=250 years

Let age of teacher be X years

250+X=(25+2)×11

X=47 years

S80. Ans.(b)

Sol. ATQ

Income in September = $15000 + 8000 \times 3 = 15000 + 24000 = Rs.39000$

Saving of a man= $39000 \times \frac{(100-70)}{100} = Rs.11700$