Directions (1-5): Study the following information carefully and answer the below questions.

Eight persons namely – A, B, C, D, E, F, G, and H are sitting around a square shape table in such a way that one person each sits on the middle of the edge and one person sits on each corner. The persons sitting on the middle of the edges are facing away from the center, and the persons sitting on the corner are facing the center.

B sits at the middle of the table. One person sits between B and E. A sits third to the right of E. Three persons sit between A and F. One person sits between F and G. H and G are immediate neighbours. C sits second to the right of H. C and D are not immediate neighbours.

1) What is the position of F with respect to H?
   a) Immediate left
   b) Second to the left
   c) Third to the right
   d) Second to the right
   e) None of these

2) How many persons are sitting between B and D, when counted to the left of D?
   a) Three
   b) As many between A and H when counted to the left of A.

3) Four of the five are related to each other in a certain way and thus form a group find the odd one out who doesn’t belong to the same group?
   a) F
   b) The one who sits third to the left of E.
   c) H
   d) The one who sits third to the left of C.
   e) G

4) If B is related to D, similarly E is related to F, then who among the following person is related to G?
   a) A
   b) D
   c) F
   d) H
   e) C

5) Which of the following statement is/are not true?
   I. Two persons are sitting between D and C when counted from right of D.
   II. H sits immediate right of A.
III. One person sits between E and C when counted to the right of E.

a) Both II and III
b) Only III
c) Only I
d) Both I and II
e) None of these

Directions (6-8): Study the following information carefully and answer the questions given below.

Eight persons viz. K, M, N, O, P, Q, R and S are from the same family with three generations with two couples. P is the only sister-in-law of O who is the brother of N. N is not the spouse of P but the mother of M. K is the father of only one child who is P whereas R is the father of Q who is a female member. Q has only one brother and doesn’t have any cousins. O is not married to P. S is married male person.

6. How is S related to M?
   a) Father
   b) Uncle
   c) Brother
   d) Cousin
   e) Cannot be determined

7. Who among the following is the brother-in-law of O?
   a) S
   b) K
   c) R
   d) Both B and C
   e) None of these

8. If L is the son of P, then how is L related to N?
   a) Nephew
   b) Son
   c) Brother
   d) Grandson
   e) None of these

Directions (9-13): Study the following information carefully and answer the below questions.

Six persons namely – A, B, C, D, E, and F launches six different drinking beverages viz.- Tea, Coffee, Filter, Juice, Dripper, and Soda at a shop during six different months viz.- January, April, May, June, July, and December. All the information is not necessary in the same order.

Coffee was launched in a month having 30 days. One person launches between the one who launches Coffee and F, which was not launched in a month having 31 days. Juice was launched in December. Two persons launches between A and the one who launches Tea, which was launched in one of the month having 31 days. A neither launches Juice nor Soda. Two persons launches between D and the one who launches Juice. Soda was launched just after the drink launched by D, who doesn’t launch Filter. Three persons launches between C and the one who launches Filter. Two persons launches between the one who launches Dripper and E.

9) Who among the following person launches Filter?
   a) E
b) The one who launches in May.
c) C
d) B
e) None of these

10) How many people launches before the launch of Dripper?
   a) Three
   b) Two
   c) More than three
   d) None
   e) Three

11) Four of the five are related to each other in a certain way and thus form a group, find the odd one out?
   a) A – Dripper
   b) B – Coffee
   c) E – Tea
   d) C – Soda
   e) F – Juice

12) Which of the following drinking beverages were launched in a month have 31 days?
   I. Filter
   II. Dripper
   III. Tea
   a) Only III
   b) Both I and III
   c) Both II and III
   d) Only I

13) Which of the following statement is/are not true?
   I. C launches Tea just after E.
   II. Three drinking beverages were launched after Soda.
   III. A launches just after Filter was launched.
   a) Both II and III
   b) Only III
   c) Only I
   d) Both I and II
   e) None of these

Directions (14-17): Below questions consist of three statements followed by two conclusion. Study the following information carefully and decide which of the following conclusion logically follows.

14. Statements:
   Only a few Pins are Diews
   Only a few Diews are Bins
   All bins are Toys

   Conclusion:
   I. All Diews are Toys is a Possibility
   II. Atleast some Toys are not Pins
   a) Only I follows
   b) Only II follows
   c) Either I or II follows
   d) Neither I nor II follows
   e) Both I and II follows

15. Statements:
All Cost are Percent
Only a few Percent are Dollar.
All Dollar are Coin.

**Conclusion:**
I. Some Cost can be Dollar
II. Some Coin are Percent

a) Only I follows
b) Only II follows
c) Either I or II follows
d) Neither I nor II follows
e) Both I and II follows

16. **Statements:**
No Income is Amount.
All Amount are Capital.
No Capital is Game.

**Conclusion:**
I. Some Amount are not Game
II. No Game is Income

a) Only I follows
b) Only II follows
c) Either I or II follows
d) Neither I nor II follows
e) Both I and II follows

17. **Statements:**
All Socks are glow.
Only a Few Glow is Hat.
No Hat is Foot.

**Conclusion:**
I. Some Socks are Hat
II. Some Glow are not Foot

a) Only I follows
b) Only II follows
c) Either I or II follows
d) Neither I nor II follows
e) Both I and II follows

18) **Directions (18-20):** Study the following information carefully and answer the below questions.
A certain number of persons are sitting in a row facing north. Three persons are sitting between A and G. T sits sixth to the right of G. The number of persons sitting between A and T is the same as the number of persons sitting between A and H. T sits third from one of the end. One person sits between D and J. J sits four places away from H and sits second from one of the end.

18) **How many persons are sitting in the row?**
a) 21
b) 24
c) 28
d) 23
e) None of these

19) **Who among the following person sits fifth to the right of D?**
I. The one who sits fourth to the right of H.
II. The one who sits seventh to the left of A.
III. The one who sits ninth to the left of G.

a) Both II and III
b) None of these
c) Only III
d) Both I and III
20) Which of the following statement is/are true?
(a) Four persons are sitting to the left of H.
(b) Three persons are sitting between H and the one who sits second from the left end.
(c) Two persons are sitting between the one who sits sixth to the left of G and A.
(d) The number of persons to the left of D is twice less than the number of persons to the right of the one who sits second to the right of G.
(e) More than one statements are true.

Directions (21-24): Study the following information carefully and answer the questions given below.
Six persons viz. A, B, C, D, E and F are having different amounts of milk with them, but not necessarily in the same order. B has more amount of milk than A, who has more amount of milk than C. F has more amount of milk than E but less amount of milk than D. E has more amount of milk than only two persons. The person with the second highest amount of milk has 41 litres whereas the person with the second least amount of milk has 27 litres. All the people have only odd numbered amount of milk with them. F has more amount of milk than B, who has more amount than E.
21. Who among the following person has the least amount of milk among them?
(a) F
(b) E
(c) B
(d) C
(e) None of these

22. If the sum of the amount of milk with F and B is 78 litres and that of A and D is 80 litres, then what is the sum of the amount of milk with B and D?
(a) 86 litres
(b) 90 litres
(c) 92 litres
(d) 88 litres
(e) None of these

23. If all the persons have increasing amount of milk with them in alphabetical order, then who among the following person has the 39 litres of milk with him?
(a) D
(b) C
(c) A
(d) E
(e) Cannot be determined

24. What is the position of F with respect to E based on the final arrangement?
(a) Three persons higher
(b) Two persons lower
(c) Two persons higher
(d) Immediately higher
(e) None of these
on two different dates viz.- 13 and 20 of the same year. Each person belongs to different cities viz. – Imphal, Mussoorie, Shimla, Gangtok, Shilong, and Manali. Only one person was born on each date. All the information is not necessarily in the same order. A was born on an odd date. Three persons were born between A and C, who belongs to Mussoorie. A and B were born in the same month. Two persons were born between B and the one who belongs to Manali. The one who belongs to Shilong was born just after the one who belongs to Shimla. Neither A nor D belongs to Shimla. Two persons were born between F and the one who belongs to Gangtok.

25) Who among the following person belongs to Imphal?
   a) E  
   b) B  
   c) D  
   d) A  
   e) None of these

26) Four of the five are related to each other in a certain way and thus form a group, find the odd one out?
   a) D  
   b) E  
   c) B  
   d) C  
   e) A

27) How many persons were born after the one who belongs to Shimla?
   a) One  
   b) Three  
   c) Two  
   d) More than three  
   e) None

28) What is the birth date of the one who belongs to Gangtok?
   a) 13 July  
   b) 20 May  
   c) 20 June  
   d) 13 May  
   e) 20 July

29) Which of the following statement is/are true?
   I. The one who belongs to Imphal was born on May 20.
   II. Three persons were born after the one who belongs to Manali.
   III. Two persons were born after the one who belongs to Gangtok.
   a) Both II and III  
   b) Only III  
   c) Only I  
   d) Both I and II  
   e) None of these

30) How many such pair of letters are there in the word “CARBONIZE” which have as many letters
between them as there are in the English alphabets (both forward and backward)?

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

Directions (31-35): Study the following information carefully and answer the below questions.

Nine persons namely – J, K, L, M, N, O, P, Q, and R visited three different departments viz.- IT, HR, and Production of an organization but not necessarily in the same order. At least two and not more than four persons visited the same department. Only L and Q visited the same department but not in the IT department. K and R visited the same department but not along with O. Neither O nor K visited the HR department. P and J visited in the same department but not in the IT department. N neither visited in the same department along with O nor M.

31) Who among the following person visited the IT department?
   I. RN  
   II. JM  
   III. KR  
   a) Only II  
   b) Both I and II  
   c) Only III  
   d) Both II and III  
   e) None of these

32) Who among the following person doesn't visit the HR department?
   I. O  
   II. Q  
   III. R  
   a) Only II  
   b) Both I and III  
   c) Only III  
   d) Both II and III  
   e) None of these.

33) Four of the five are related to each other in a certain way and thus form a group, find the odd one out?
   a) J  
   b) M  
   c) O  
   d) R  
   e) P

34) If J is related to M, similarly L is related to Q, then in the same way who among the following person is related to R?
   I. O  
   II. K  
   III. N  
   a) Only II  
   b) Both I and III  
   c) Only III
d) Only I

e) Both II and III

35) Which of the following statement is/are NOT true?
I. P and J have visited the same department.
II. R and N visited the production department.
III. Four persons visited the production department.

a) Both II and III
b) Only II
c) Only I
d) Both I and II
e) None of these

Directions (1-5):
1. Answer: C
2. Answer: B
3. Answer: C
4. Answer: E
5. Answer: A

Solution:

Directions (6-8):
6. Answer: B
7. Answer: C
8. Answer: A

Solution:

Directions (9-13):
9. Answer: D
10. Answer: B
11. Answer: E
12. Answer: E
13. Answer: D

Common Explanation:
We have:

- Coffee was launched in a month having 30 days.
- One person launches between the one who launches Coffee and F, which was not launched in a month having 31 days. That means, in case (1) F was launched in June, in case (2) F was launched in April.
- Juice was launched in December.
- Two persons launches between A and the one who launches Tea, which was launched in one of the month having 31 days.
- A neither launches Juice nor Soda. That means, in case (1) A launches coffee in April, in case (2) A launches coffee in June.

Based on the above-given information we have:

Again, we have:

- Two persons launches between D and the one who launches Juice.
- Soda was launched just after the drink launched by D, who doesn’t launch Filter. That means, in case (1) F launches Soda, case (2) is not valid.
- Three persons launches between C and the one who launches Filter.
- Two persons launches between the one who launches Dripper and E. That means, E launches Juice.

Based on the above-given information we have the final arrangement as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Case (1)</th>
<th>Case (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>B – Filter</td>
<td>Tea</td>
</tr>
<tr>
<td>April</td>
<td>A – Coffee</td>
<td>F</td>
</tr>
<tr>
<td>May</td>
<td>D – Dripper</td>
<td>D</td>
</tr>
<tr>
<td>June</td>
<td>F – Soda</td>
<td>A – Coffee</td>
</tr>
<tr>
<td>July</td>
<td>C – Tea</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>E - Juice</td>
<td>Juice</td>
</tr>
</tbody>
</table>
Case (2) is not valid as Soda was launched just after the drink launched by D.

14) Answer: A
Solution:

15) Answer: E
Solution:

16) Answer: A
Solution:

17) Answer: B
Solution:

Directions (18-20):

18. Answer: C
19. Answer: B
20. Answer: E

Common Explanation:

We have:

- Three persons are sitting between A and G. That means, in case (1) A sits fourth to the right of G, in case (2) A sits fourth to the left of G.
- T sits sixth to the right of G.
- T sits third from either end of the row.

Based on the above-given information we have:

Case (1): G __ __ A __ T __

Case (2): A __ __ G __ __ __ __ __ T __

Again, we have:

- The number of persons sitting between A and T is the same as the number of persons sitting between A and H.
- J sits four places away from H and sits second from either end. That means, in case (2) J sits second from the left end, case (1) is not valid.
- One person sits between D and J. That means, D sits second to the right of J.

Based on the above-given information we have the final arrangement as follows:

Case (1): __ J _ G _ H _ _ A _ T __
Case (2): __ J _ D _ H _______ A ___ G ___ T __
Case (1) is not valid as J sits second from either end.

Directions (21-24):
21. Answer: D
22. Answer: B
Explanation:
F + B = 41 + B = 78 => B = 37
A + D = 27 + D = 80 => D = 53
B + D = 37 + 53 = 90
Hence, option B is correct.
23. Answer: E
Explanation:
F > E (41) > D > C > B (27) > A
Either D or C will have 39 litres of milk.
Hence, option E is correct.
24. Answer: C
Solution:
From the given statements, the following order was formed.
D > F (41) > B > E > A (27) > C

Directions (25-29):
25. Answer: C
26. Answer: B
27. Answer: C
28. Answer: E
29. Answer: D

Common Explanation:

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Case (1)</th>
<th>Case (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>13</td>
<td>A</td>
<td>C - Mussoorie</td>
</tr>
<tr>
<td>May</td>
<td>20</td>
<td>B</td>
<td>D – Imphal</td>
</tr>
<tr>
<td>June</td>
<td>13</td>
<td>B</td>
<td>F – Manali</td>
</tr>
<tr>
<td>June</td>
<td>20</td>
<td>E</td>
<td>E – Shimla</td>
</tr>
<tr>
<td>July</td>
<td>13</td>
<td>C</td>
<td>A – Shilong</td>
</tr>
<tr>
<td>July</td>
<td>20</td>
<td>C - Mussoorie</td>
<td>B – Gangtok</td>
</tr>
</tbody>
</table>

We have:
- A was born on an odd date.
- Three persons were born between A and C, who belongs to Mussoorie.
  That means, in case (1) A was born on 13 May, in case (2) A was born on 13 July.
- A and B were born in the same month.
- Two persons were born between B and the one who belongs to Manali.
  That means, in case (2) the one who belongs to Manali was born on 13 June, case (1) is not valid.

Based on the above-given information we have:
Case (1) is not valid as two persons were born between B and the one who belongs to Manali. Again, we have:

- The one who belongs to Shilong was born just after the one who belongs to Shimla.
- Neither A nor D belongs to Shimla. That means, A belongs to Shilong.
- Two persons were born between F and the one who belongs to Gangtok. That means, B belongs to Gangtok.

Based on the above-given information we have the final arrangement as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Case (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>13</td>
<td>C - Mussoorie</td>
</tr>
<tr>
<td>May</td>
<td>20</td>
<td>D - Imphal</td>
</tr>
<tr>
<td>June</td>
<td>13</td>
<td>F - Manali</td>
</tr>
<tr>
<td>June</td>
<td>20</td>
<td>E - Shimla</td>
</tr>
<tr>
<td>July</td>
<td>13</td>
<td>A - Shilong</td>
</tr>
<tr>
<td>July</td>
<td>20</td>
<td>B - Gangtok</td>
</tr>
</tbody>
</table>

30) Answer: B
Explanation:

\[
\sqrt{\text{C A R B O N I Z E}}
\]

Hence, option B is correct.

Directions (31-35):
31. Answer: E
32. Answer: B
33. Answer: D
34. Answer: E

35. Answer: B
Common Explanation:

We have:

- Only L and Q visited the same department but not in the IT department.
  That means, in case (1) L and Q visited the HR department, in case (2) L and Q visited Production.
- K and R visited in the same department but not along with O.
- Neither O nor K visited the HR department.

Based on the above-given information we have:

<table>
<thead>
<tr>
<th>Month</th>
<th>Case (1)</th>
<th>Case (1a)</th>
<th>Case (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>O</td>
<td>KR</td>
<td>LQ</td>
</tr>
<tr>
<td>HR</td>
<td>LQ</td>
<td>LQ</td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>KR</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Case (2) is not valid as Neither O nor K visited the HR department.

Again, we have:

- P and J visited in the same department but not in the IT department.
- N neither visited in the same department along with O nor M.
  That means, N and R visited the same department.

Based on the above-given information we have the final arrangement as follows:
<table>
<thead>
<tr>
<th>Month</th>
<th>Case (1)</th>
<th>Case (1a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>PJOM</td>
<td>KRPJ</td>
</tr>
<tr>
<td>HR</td>
<td>LQ</td>
<td>LQ</td>
</tr>
<tr>
<td>IT</td>
<td>KRN</td>
<td>O</td>
</tr>
</tbody>
</table>

Case (2) is not valid as N neither visited the same department along with O nor M.