

Training Program on Aptitude Test and Coding

MCKV Institute of Engineering

Aptitude – 2 (Based on Capgemini)

Class Handout

Maximum time: 45 minutes

TOPIC: Puzzles (Selection)

Directions for questions 1 to 3: Study the information given below and answer the questions that follow.

Four teams have to be made by selecting players from among P, Q, R, S, T, U, V, W, X and Y. No team can have more than four players. No two teams can have the same number of players. R and V must be in the same team. P and U must be in the same team. X should be alone and is in one team. Q and T cannot be in the same team. U and T must be in different teams.

1. Which of the following can be a complete selection of a team?
 - A. P, U, R, V
 - B. Q, S, T, W
 - C. Q, U, P, V
 - D. P, R, U, W
2. If P, S, U and Y form a team, then the other two teams can be
 - A. R, V and Q, T, W
 - B. R, W and Q, T, V
 - C. T, W and Q, R, V
 - D. None of the above
3. If P and U are the only two members in a team, then which of the following can be the other two teams?
 - A. Q, S, T and R, V, W, Y
 - B. Q, R, S and T, V, W, Y
 - C. R, V, W and Q, S, T, Y
 - D. R, T, V and Q, S, W, Y

TOPIC: Puzzles (Distribution)

Directions for questions 4 to 6: Study the information given below and answer the questions that follow.

Each of the six employees working in XYZ company – Ajit, Binod, Chaitanya, Dhairya, Emon and Farooq, belong from a different city among Dhanbad, Bengaluru, Raipur, Bilaspur, Mysore and Visakhapatnam. Each of them can speak a different language among Hindi, Bengali, Gujarati, Marathi, Konkani and Telugu.

The following information is given about them.

- I. Dhairya does not belong from Raipur.
- II. The employee who belongs from Bilaspur cannot speak Telugu.
- III. Emon belongs from neither Bilaspur nor Raipur.
- IV. Ajit belongs from Dhanbad.

- V. Neither Chaitanya nor Dhairya can speak Bengali.
 - VI. The employee belonging from Mysore can speak Gujarati.
 - VII. Binod can speak Telegu.
 - VIII. Farooq, who belongs from Visakhapatnam, can speak neither Hindi nor Bengali.
 - IX. The employee belonging from Raipur can speak Konkani.
4. Which of the following employees can speak Marathi?
 - A. Ajit
 - B. Farooq
 - C. Dhairya
 - D. Chaitanya
 5. Binod belongs from which of the following cities?
 - A. Bengaluru
 - B. Raipur
 - C. Mysore
 - D. Cannot be determined
 6. Which of the following is a correct combination of employee, place from where he/she belongs, and the language he/she can speak, respectively?
 - A. Ajit, Bengali, Dhanbad
 - B. Chaitanya, Raipur, Hindi
 - C. Farooq, Visakhapatnam, Marathi
 - D. None of the above

TOPIC: Puzzles (Venn Diagrams)

Directions for questions 7 to 9: Study the information given below and answer the questions that follow.

In a survey conducted on 230 people, it was found that, 100 people preferred paying through Google Pay, 85 people preferred paying through PhonePe, while 115 people preferred paying through Paytm. It was also known that, the number of people who did not prefer paying through any of the three payment applications was equal to the number of people who preferred paying through all three of them. Also, the number of people who preferred paying through exactly two of the payment applications was 40% of those who preferred through exactly one of them.

7. If 25 people preferred paying through only Google Pay and Paytm, then how many people preferred paying through only PhonePe?
 - A. 30
 - B. 35
 - C. 40
 - D. Cannot be determined
8. If 60 people preferred paying through only Paytm, then how many people preferred paying through only Google Pay and PhonePe?
 - A. 10
 - B. 15
 - C. 20

D. Cannot be determined

9. If 20 people preferred paying through only PhonePe and Paytm, then how many people preferred paying through only Paytm?
- A. 45
 - B. 50
 - C. 55
 - D. Cannot be determined

TOPIC: Puzzles (Seating Arrangement)

Directions for questions 10 to 12: Study the information given below and answer the questions that follow.

Eight persons Alok, Bipul, Chinta, Dinku, Emanuel, Firoz, Ganesh and Harsh are sitting around a circular table facing the same direction.

- I. Emanuel is adjacent to Dinku, who is opposite to Chinta.
- II. Dinku is three places away to the left of Harsh.
- III. Alok sit between both Dinku and Ganesh.
- IV. Bipul is not opposite to Ganesh.

10. Who is opposite to Ganesh?

- A. Emanuel
- B. Dinku
- C. Alok
- D. Firoz

11. If Dinku is to the immediate left of Emanuel, then who is immediate left of Harsh?

- A. Dinku
- B. Firoz
- C. Ganesh
- D. Bipul

12. A maximum of how many persons sit between Alok and Emanuel when counted from left of Alok?

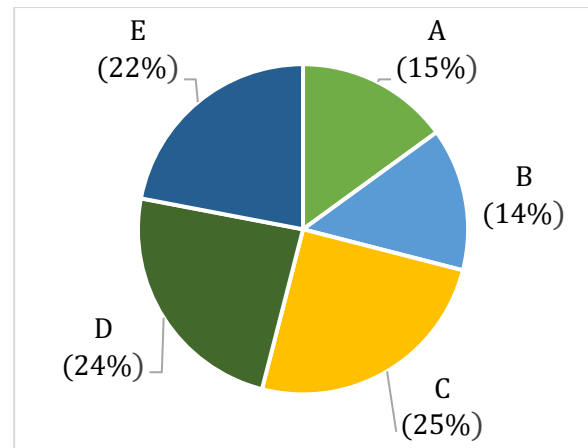
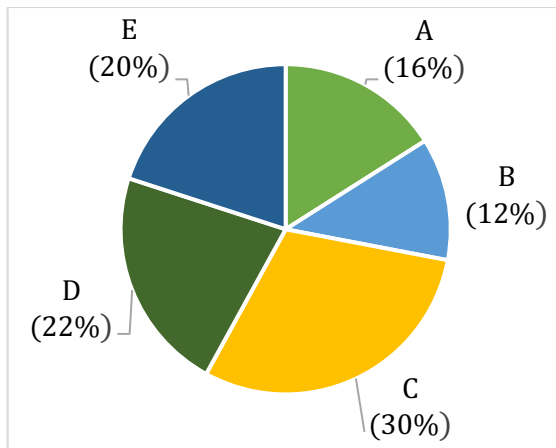
- A. 5
- B. 2
- C. 3
- D. 4

TOPIC: Data Interpretation (Pie Charts)

Directions for questions 13 to 16: Study the information given below and answer the questions that follow.

The following pie charts represent the percentage breakup of investments made by five different companies – A, B, C, D and E in a Retail startup company in 2022 and 2023.

2022	2023
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Total investment in 2022 = Rs. 85 lakhs
 Total investment in 2023 = Rs. 102 lakhs

13. The investments made by which of the following companies has increased by the highest percentage from 2022 to 2023?
 - A. E
 - B. B
 - C. A
 - D. D
14. For how many companies have their investments increased by more than 30% in 2023 when compared with that of 2022?
 - A. 1
 - B. 2
 - C. 3
 - D. 4
15. If, by mistake, the investment reports of companies A and B got interchanged while making the pie chart in 2023, then what would be the actual percentage increment in the investments made by company B in the Retail startup from 2022 to 2023?
 - A. 45%
 - B. 60%
 - C. 50%
 - D. 55%
16. Which of the following company's investments in the Retail startup increased by the minimum percentage from 2022 to 2023?
 - A. D
 - B. C
 - C. A
 - D. B

TOPIC: Coding-Decoding

Directions for questions 17 to 18: Study the information given below and answer the questions that follow.

In a certain code language,

“Indian coastal areas will face” is written as “I@3 O%3 N#3 A*2 R!2”

“Sea level rise due to” is written as “O&1 E©1 E\$3 Iφ2 U£1”

“Global warming and its” is written as “T#2 L€4 N!2 A@5”

“Reserve figure impact situation” is written as “I*3 I©4 M#4 Eφ4”

17. What is the code for the word “Supply”?

- A. P#6
- B. Uφ5
- C. L\$6
- D. U©5

18. What is the code for “Indian Government”?

- A. N#3 L&7
- B. N#3 O£7
- C. N#3 O€7
- D. D#3 O€7

TOPIC: Direction Sense

Direction for question 19 to 21: Study the information given below and answer the questions that follow.

Point B is 10 km to the east of point A and divides AC in the ratio 5:3. Point F is 8 km to the south of point B and the distance between point A and B is equal to the distance between points F and H. Points A and C lie on a straight line and point D is 8 km to the north of point C. Point G is 12 km to the south of point E. Point E is 9 km to the west of point D. Point H is to the south of point A and to the south west of point D.

Based on the given information, answer the questions that follow:

19. The shortest distance between points G and D is

- A. 13 km
- B. 15 km
- C. 17 km
- D. 21 km

20. Point A is approximately how far (in km) and in which direction from point G?

- A. 8, North-west
- B. 8, North-east
- C. 9, North
- D. 9, North-west

21. The ratio of the distance between points B and G to the distance between points F and G is

- A. 1 : 3
- B. 5 : 8
- C. 1 : 1
- D. 1 : 2

Topic: Blood Relations

Direction for question 22 to 24: Read the following information carefully and answer the five questions that follow.

In a family of eight persons there are three married couples. Each couple has at least one child. Q is the son of R. P is the grandson of W. S and T are sisters. Q is the only nephew of T. U is the brother-in-law of S. V is the mother-in-law of R.

22. How is W related to Q?

- A. Mother-in-law
- B. Father-in-law
- C. Grandmother
- D. Grandfather

23. How is T related to R?

- A. Sister -in-law
- B. Aunt
- C. Mother
- D. Grandmother

24. How is R related to U?

- A. Brother
- B. Brother-in-law
- C. Nephew
- D. Father

Topic: Ranking & Ordering

Directions for questions 25 to 27: Study the information given below and answer the questions that follow.

Six companies – A, B, C, D, G and H, were ranked according to the number of employees they recruited in the year 2024. No two companies recruited the same number of employees. We have the following information regarding their ranks.

- I. Company D has a better rank than at least two companies.
- II. Company G has a better rank than company B.
- III. The number of companies which were ranked better than A is the same as the number of companies which were ranked worse than C.
- IV. Company A has a better rank than company D.
- V. Only one company has a rank lying between the ranks of companies H and B.

25. If company H got the third rank then and only one company was ranked between the ranks of companies D and C, then which company is it?

- A. A
- B. G
- C. H
- D. B

26. Which company got the sixth rank if D got the third rank?

- A. C
- B. B
- C. H
- D. Cannot be determined

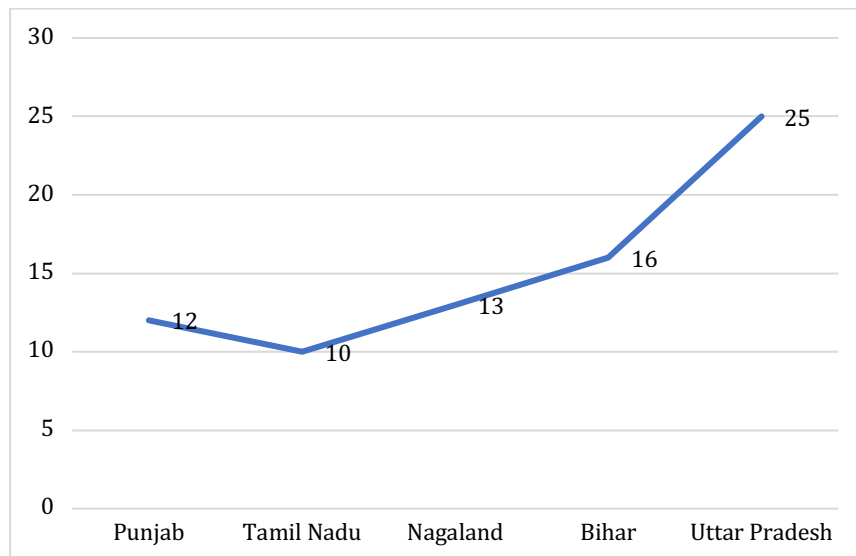
27. If company D got the second rank, then which company was ranked fifth?

- A. B
- B. C
- C. H
- D. Cannot be determined

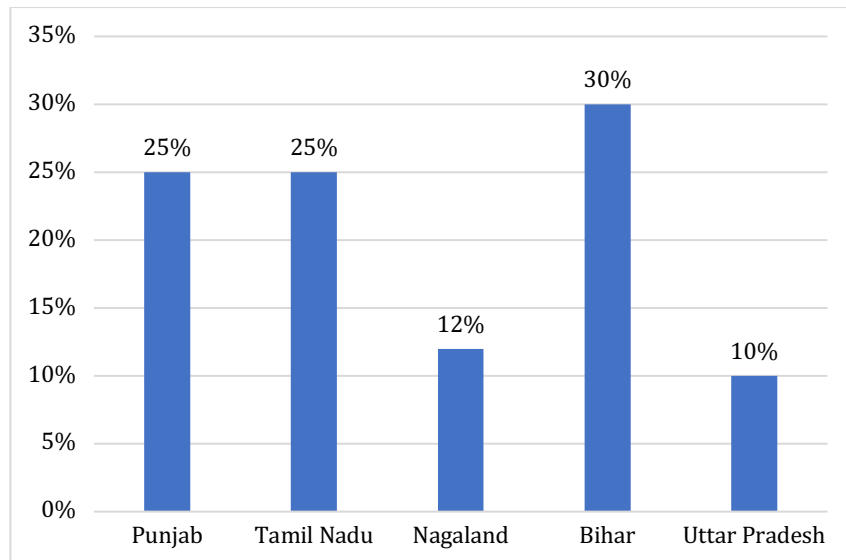
TOPIC: Data Interpretation (Mixed Charts)

Directions for questions 28 to 30: Study the information given below and answer the questions that follow.

The line chart gives the distribution of population (in crores) of five different states of India in 2005.



The bar chart given below gives the percentage increase in population of each of the states mentioned above from 2005 to 2006.



28. What is the average population (in cr.) of Nagaland, Bihar and Uttar Pradesh in the year 2006?
- A. 19.54
 - B. 20.95
 - C. 21.33
 - D. 22.47
29. The increase in population of Tamil Nadu from 2005 to 2006 makes what percentage of the increase in population of Uttar Pradesh from 2005 to 2006?
- A. 50%
 - B. 150%
 - C. 75%
 - D. 100%
30. If the population of Punjab increases by 20% from 2006 to 2007 and the population of Punjab and Tamil Nadu becomes equal in 2007 then, by what percentage the population of Tamil Nadu must have increased from 2006 to 2007?
- A. 32%
 - B. 15%
 - C. 48%
 - D. 40%