

CAT 2015 DILR Slot 1 Question Paper

| | | |
|-----------------------|--------------------|----------------------|
| Time Allowed :3 Hours | Maximum Marks :300 | Total questions :100 |
|-----------------------|--------------------|----------------------|

General Instructions

Read the following instructions very carefully and strictly follow them:

- 1. Duration of Section:** 40 Minutes
- 2. Total Number of Questions:** 22 Questions (as per latest pattern, may vary slightly)
- 3. Section Covered:** Quantitative Aptitude (QA)
- 4. Type of Questions:**
 - Multiple Choice Questions (MCQs)
 - Type In The Answer (TITA) Questions – No options given, answer to be typed in
- 5. Marking Scheme:**
 - +3 marks for each correct answer
 - -1 mark for each incorrect MCQ
 - No negative marking for TITA questions
- 6. Syllabus Coverage:** Arithmetic, Algebra, Geometry, Number System, Modern Math, and Mensuration
- 7. Skills Tested:** Numerical ability, analytical thinking, and problem-solving

1. The table below shows the sales (in Rs. lakh) of four products A, B, C, and D across four quarters of 2015. What is the total sales of product A across all quarters?

| Product | Q1 | Q2 | Q3 | Q4 |
|---------|----|----|----|----|
| A | 20 | 25 | 30 | 35 |
| B | 15 | 20 | 25 | 30 |
| C | 10 | 15 | 20 | 25 |
| D | 25 | 30 | 35 | 40 |

- (1) 100
- (2) 110
- (3) 120
- (4) 130

2. Using the same table, which product has the highest average sales per quarter?

- (1) Product A
- (2) Product B
- (3) Product C
- (4) Product D

3. Using the same table, in which quarter is the total sales across all products the highest?

- (1) Q1
- (2) Q2
- (3) Q3
- (4) Q4

4. Using the same table, what is the percentage increase in sales of product C from Q1 to Q4?

- (1) 100%
- (2) 150%
- (3) 200%
- (4) 250%

5. A company's 2015 expenses are: Salaries 40%, Rent 20%, Utilities 15%, Marketing 15%, Miscellaneous 10%. If total expenses are Rs. 50 lakh, how much is spent on Salaries?

- (1) Rs. 15 lakh
- (2) Rs. 20 lakh
- (3) Rs. 25 lakh
- (4) Rs. 30 lakh

6. Using the same pie chart, what is the ratio of expenses on Rent to Miscellaneous?

- (1) 1:1
- (2) 2:1
- (3) 3:1
- (4) 4:1

7. Using the same pie chart, if Marketing expenses are reduced by 20%, how much is spent on Marketing?

- (1) Rs. 5 lakh
- (2) Rs. 6 lakh
- (3) Rs. 7 lakh
- (4) Rs. 8 lakh

8. Using the same pie chart, what is the combined expense of Utilities and Miscellaneous?

- (1) Rs. 10 lakh
- (2) Rs. 12.5 lakh
- (3) Rs. 15 lakh
- (4) Rs. 17.5 lakh

9. Five friends A, B, C, D, E sit in a row facing north. A is to the left of B, C is between A and B, D is not at an end, E is to the right of B. Who is in the middle?

- (1) A
- (2) B
- (3) C
- (4) D

10. Using the same seating arrangement, who is at the rightmost position?

- (1) B
- (2) D
- (3) E
- (4) C

11. Using the same seating arrangement, who is to the immediate left of B?

- (1) A
- (2) C
- (3) D
- (4) E

12. Using the same seating arrangement, who is to the immediate right of A?

- (1) B
- (2) C
- (3) D
- (4) E

13. The bar graph shows production (in thousand units) of products P, Q, R over 2013-2015. What is the total production of product P?

| Year | P | Q | R |
|------|----|----|----|
| 2013 | 10 | 15 | 20 |
| 2014 | 15 | 20 | 25 |
| 2015 | 20 | 25 | 30 |

- (1) 40
- (2) 45
- (3) 50
- (4) 55

14. Using the same bar graph, which product has the highest total production over 2013-2015?

- (1) Product P
- (2) Product Q
- (3) Product R
- (4) None

15. Using the same bar graph, what is the percentage increase in production of product Q from 2013 to 2015?

- (1) 50%
- (2) 66.67%
- (3) 75%
- (4) 100%

16. Using the same bar graph, what is the average production of product R over the three years?

- (1) 20
- (2) 25
- (3) 30
- (4) 35

17. Four people A, B, C, D form two teams of two. A and B cannot be together, C and D cannot be together. Who is in the same team as A?

- (1) B
- (2) C
- (3) D
- (4) None

18. Using the same team formation, who cannot be in the same team as B?

- (1) A
- (2) C
- (3) D
- (4) None

19. Using the same team formation, if C is with A, who is in the other team?

- (1) A and B
- (2) B and D
- (3) C and D
- (4) A and D

20. Using the same team formation, how many valid team arrangements are possible?

- (1) 1
- (2) 2
- (3) 3
- (4) 4

21. The line graph shows monthly closing stock prices (in Rs.) of Company X for Jan-Apr 2015: Jan = 100, Feb = 120, Mar = 110, Apr = 130. What is the percentage increase from Jan to Apr?

- (1) 20%
- (2) 25%
- (3) 30%
- (4) 35%

22. Using the same line graph, in which month was the stock price the lowest?

- (1) Jan
- (2) Feb
- (3) Mar
- (4) Apr

23. Using the same line graph, what is the average stock price over the four months?

- (1) 110
- (2) 115
- (3) 120
- (4) 125

24. Using the same line graph, what is the absolute difference between the highest and lowest stock prices?

- (1) 20
- (2) 25
- (3) 30
- (4) 35

25. Four tasks T1, T2, T3, T4 are scheduled in slots 1-4. T1 is before T3, T2 is not last, T4 is after T2. Which task is in slot 3?

- (1) T1
- (2) T2
- (3) T3
- (4) T4

26. Using the same scheduling puzzle, which task is in slot 4?

- (1) T1
- (2) T2
- (3) T3
- (4) T4

27. Using the same scheduling puzzle, which task is immediately before T3?

- (1) T1
- (2) T2
- (3) T4
- (4) None

28. Using the same scheduling puzzle, which task cannot be in slot 4?

- (1) T1
- (2) T2
- (3) T3
- (4) T4

29. A shop sells items A and B. Item A: cost price Rs. 100, sold at 20% profit. Item B: cost price Rs. 200, sold at 25% profit. Total profit from 10 items is Rs. 250. How many of item A were sold?

- (1) 4
- (2) 5
- (3) 6
- (4) 7

30. Using the same caselet, what is the total selling price of all 10 items?

- (1) Rs. 1700
- (2) Rs. 1850
- (3) Rs. 2000
- (4) Rs. 2150

31. Using the same caselet, what is the total cost price of all 10 items?

- (1) Rs. 1400
- (2) Rs. 1500
- (3) Rs. 1600
- (4) Rs. 1700

32. Using the same caselet, what is the average profit per item?

- (1) Rs. 25
- (2) Rs. 30
- (3) Rs. 35
- (4) Rs. 40

33. Using the same caselet from questions 29-32 (A shop sells items A and B. Item A: cost price Rs. 100, sold at 20% profit. Item B: cost price Rs. 200, sold at 25% profit. Total profit from 10 items is Rs. 350, with 5 items of A and 5 items of B sold), what is the percentage contribution of item A's profit to the total profit?

- (1) 20%
- (2) 28.57%
- (3) 33.33%
- (4) 40%

34. Using the same caselet, if the shop sells 10 more items (5 additional A and 5 additional B) under the same profit conditions, what will be the total profit from all 20 items?

- (1) Rs. 600
- (2) Rs. 650
- (3) Rs. 700
- (4) Rs. 750
