## **CAT 2012 DILR Slot 2 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 following table shows the sales (in thousands) of four products over three months. What is the total sales of Product A across all months?

| Month | Product A | Product B | Product C |
|-------|-----------|-----------|-----------|
| Jan   | 50        | 30        | 20        |
| Feb   | 60        | 40        | 25        |
| Mar   | 55        | 35        | 30        |

- (1) 155
- (2) 160
- (3) 165
- (4) 170
- **2.** Using the same table, what is the percentage increase in sales of Product B from January to February?
- (1) 25%
- (2) 33.33%
- (3) 40%
- (4) 50%
- **3.** Five friends (A, B, C, D, E) sit in a row. A is to the left of B, and C is not at an end. How many arrangements are possible?
- (1)24
- (2)36
- (3)48
- (4)60
- **4.** A pie chart shows expenses: Rent (40%), Food (25%), Transport (20%), Others (15%). If total expenses are Rs. 20,000, what is the amount spent on Food?
- (1) Rs. 4,000
- (2) Rs. 5,000
- (3) Rs. 6,000

| ( | (4) | Rs.    | 7 | 0   | 0 | n |
|---|-----|--------|---|-----|---|---|
| ١ | т.  | 1 1/0. | • | • • | v | v |

| 5. Four teams (P, Q, R, S) play a tournament. Each team plays every other team once. P 2 matches, Q wins 1, R wins 0. How many matches did S win? |  |  |  |
|---|--|--|--|
|   |  |  |  |
| (2) 1   |  |  |  |
| (3) 2   |  |  |  |
| (4) 3   |  |  |  |
| <b>6.</b> A bar chart shows sales (in lakhs) of Company X: 2010 (50), 2011 (60), 2012 (70). What  |  |  |  |
| is the average sales over these years?  |  |  |  |
| (1) 55 lakhs  |  |  |  |
| (2) 60 lakhs  |  |  |  |
| (3) 65 lakhs  |  |  |  |
| (4) 70 lakhs  |  |  |  |
| 7. Six students (A, B, C, D, E, F) are seated in a circle. A is not adjacent to B, and C is   |  |  |  |
| adjacent to D. How many arrangements are possible?  |  |  |  |
| (1) 60  |  |  |  |
| (2) 120   |  |  |  |
| (3) 180   |  |  |  |
| (4) 240   |  |  |  |
| 8. A company's revenue (in crores) is: Q1 (20), Q2 (25), Q3 (30), Q4 (35). What is the  |  |  |  |
| percentage contribution of Q2 to total revenue?   |  |  |  |
| (1) 20%   |  |  |  |
| (2) 22.73%  |  |  |  |
| (3) 25%   |  |  |  |
| (4) 27.27%  |  |  |  |
|   |  |  |  |

| <b>9.</b> In a group of 5 people, each shakes hands with every other person exactly once. How        |  |  |  |  |
|--|--|--|--|--|
| many handshakes occur?   |  |  |  |  |
| (1) 10   |  |  |  |  |
| (2) 12   |  |  |  |  |
| (3) 15   |  |  |  |  |
| (4) 20   |  |  |  |  |
|  |  |  |  |  |
| 10. A table shows the number of students in three courses (A, B, C) across two years:                |  |  |  |  |
| Year   Course A   Course B   Course C  |  |  |  |  |
| 2020 100 150 200   |  |  |  |  |
| 2021 120 180 220   |  |  |  |  |
| What is the percentage increase in total students from 2020 to 2021?                                 |  |  |  |  |
| (1) 12%  |  |  |  |  |
| (2) 14.29%   |  |  |  |  |
| (3) 15%  |  |  |  |  |
| (4) 16.67%   |  |  |  |  |
|  |  |  |  |  |
| 11. Four friends (A, B, C, D) sit at a square table, one per side. A cannot sit opposite B. How      |  |  |  |  |
| many arrangements are possible?  |  |  |  |  |
| (1) 4  |  |  |  |  |
| (2) 6  |  |  |  |  |
| (3) 8  |  |  |  |  |
| (4) 12   |  |  |  |  |
|  |  |  |  |  |
| <b>12.</b> A company's profit (in lakhs) is: 2010 (40), 2011 (50), 2012 (60). What is the percentage |  |  |  |  |

growth from 2010 to 2012?

(1) 40%

(2) 50%

(3) 60%

(4) 70%

| 13. A, B          | , C, D are for | ur friends. A   | and B always sit together. How many ways can they sit in |
|-------------------|----------------|-----------------|--|
| a row?            |                |                 |  |
| (1) 12            |                |                 |  |
| (2) 24            |                |                 |  |
| (3) 36            |                |                 |  |
| (4) 48            |                |                 |  |
| <b>14.</b> A pie  | e chart shows  | s market shai   | re: Company A (30%), B (25%), C (20%), D (15%), E        |
| (10%). It         | f total marke  | t size is Rs. 3 | 50 crores, what is Company C's share?                    |
| (1) Rs. 8         | crores         |                 |  |
| (2) Rs. 1         | 0 crores       |                 |  |
| (3) Rs. 1         | 2 crores       |                 |  |
| (4) Rs. 1         | 5 crores       |                 |  |
|                   |                |                 |  |
| <b>15.</b> In a c | class, 60% st  | udents play     | cricket, 50% play football, and 30% play both. How many  |
| students          | play at least  | one sport?      |  |
| (1) 70%           |                |                 |  |
| (2) 80%           |                |                 |  |
| (3) 90%           |                |                 |  |
| (4) 100%          | )              |                 |  |
|                   |                |                 |  |
| <b>16.</b> A tab  | ole shows pro  | oduction (in    | units) of two factories:                                 |
| Month             | Factory X      | Factory Y       |  |
| Jan               | 200            | 300             |  |
| Feb               | 250            | 350             |  |
| Mar               | 300            | 400             |  |

What is the ratio of total production of Factory  $\boldsymbol{X}$  to Factory  $\boldsymbol{Y}$ ?

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

| (3) 4:5  |
|--|
| (4) 5:6  |
| 17. Three brothers (A, B, C) divide 12 chocolates. A gets twice as many as B, and B gets               |
| twice as many as C. How many does A get?   |
| (1) 4  |
| (2) 6  |
| (3) 8  |
| (4) 10   |
| 18. A bar chart shows sales (in thousands): Product A (2010: 50, 2011: 60), Product B                  |
| (2010: 40, 2011: 50). Which product has higher percentage growth?                                      |
| (1) Product A  |
| (2) Product B  |
| (3) Both equal   |
| (4) Cannot determine   |
| 19. In a survey, 70% like Tea, 60% like Coffee, 50% like both. What percentage like only               |
| Tea?   |
| (1) 10%  |
| (2) 20%  |
| (3) 30%  |
| (4) 40%  |
| <b>20.</b> Five books (P, Q, R, S, T) are arranged on a shelf. P is not at an end, and Q is next to R. |
| How many arrangements are possible?  |
| (1) 24   |
| (2) 36   |
| (3) 48   |
| (4) 60   |

| 21. A table shows expenses (in thousands): Rent (50), Food (30), Travel (20). What is the           |  |  |  |  |
|---|--|--|--|--|
| percentage of Rent in total expenses?   |  |  |  |  |
| (1) 45.45%  |  |  |  |  |
| (2) 50%   |  |  |  |  |
| (3) 55.55%  |  |  |  |  |
| (4) 60%   |  |  |  |  |
| 22. In a group of 6 people, 3 are selected for a team. How many ways can the team be                |  |  |  |  |
| formed?   |  |  |  |  |
| (1) 15  |  |  |  |  |
| (2) 20  |  |  |  |  |
| (3) 25  |  |  |  |  |
| (4) 30  |  |  |  |  |
| 23. A, B, C, D sit in a row. A is not next to B, and C is next to D. How many arrangements          |  |  |  |  |
| are possible?   |  |  |  |  |
| (1) 6   |  |  |  |  |
| (2) 12  |  |  |  |  |
| (3) 18  |  |  |  |  |
| (4) 24  |  |  |  |  |
| <b>24.</b> A table shows sales (in units): Product A (100, 120, 140), Product B (80, 100, 120) over |  |  |  |  |
| 3 years. What is Product A's average sales?   |  |  |  |  |
| (1) 110   |  |  |  |  |
| (2) 120   |  |  |  |  |
| (3) 130   |  |  |  |  |
| (4) 140   |  |  |  |  |
| <b>25.</b> In a survey, 80% like Product X, 70% like Product Y, 60% like both. What percentage      |  |  |  |  |
| like neither?   |  |  |  |  |
| (1) 10%   |  |  |  |  |

| (2) 15%  |  |  |  |
|--|--|--|--|
| (3) 20%  |  |  |  |
| (4) 25%  |  |  |  |
| <b>26.</b> A, B, C, D, E sit in a row. B is not at an end, and C is to the left of D. How many     |  |  |  |
| arrangements are possible?   |  |  |  |
| (1) 24   |  |  |  |
| (2) 36   |  |  |  |
| (3) 48   |  |  |  |
| (4) 60   |  |  |  |
| <b>27.</b> A table shows sales (in lakhs): Q1 (20), Q2 (25), Q3 (30), Q4 (35). What is the         |  |  |  |
| percentage increase from Q1 to Q4?   |  |  |  |
| (1) 50%  |  |  |  |
| (2) 60%  |  |  |  |
| (3) 75%  |  |  |  |
| (4) 80%  |  |  |  |
| <b>28.</b> In a class, 40 students take Math, 30 take Science, 20 take both. How many students are |  |  |  |
| in the class?  |  |  |  |
| (1) 40   |  |  |  |
| (2) 50   |  |  |  |
| (3) 60   |  |  |  |
| (4) 70   |  |  |  |
| <b>29.</b> A, B, C, D sit around a circular table. A is opposite B. How many arrangements are      |  |  |  |
| possible?  |  |  |  |
| (1) 2  |  |  |  |
| (2) 4  |  |  |  |
| (3) 6  |  |  |  |
| (4) 8  |  |  |  |

| <b>30.</b> A table shows production (in units): Factory A (200, 250, 300), Factory B (150, 200, |  |  |  |  |
|---|--|--|--|--|
| 250). What is Factory A's average production?   |  |  |  |  |
| (1) 230   |  |  |  |  |
| (2) 250   |  |  |  |  |
| (3) 270   |  |  |  |  |
| (4) 290   |  |  |  |  |
| 31. In a tournament, 5 teams play each other once. Total matches are won as: Team A (3), B      |  |  |  |  |
| (2), C (1), D (0). How many matches did Team E win?   |  |  |  |  |
| (1) 0   |  |  |  |  |
| (2) 1   |  |  |  |  |
| (3) 2   |  |  |  |  |
| (4) 3   |  |  |  |  |
| 32. A pie chart shows expenses: Salaries (50%), Rent (30%), Utilities (20%). If Salaries are    |  |  |  |  |
| Rs. 25,000, what is the total expense?  |  |  |  |  |
| (1) Rs. 40,000  |  |  |  |  |
| (2) Rs. 45,000  |  |  |  |  |
| (3) Rs. 50,000  |  |  |  |  |
| (4) Rs. 55,000  |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |