CAT 2016 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

Logical Reasoning

1. In a family of six members—P, Q, R, S, T, and U—there are three males and three
females. P is married to Q, and they have two daughters, S and T. R is the only son of P. U is
the mother-in-law of Q. Who is the father-in-law of Q?

- (a) R
- (b) S
- (c) T
- (d) None of these
- 2. If 'A + B' means A is the brother of B, 'A B' means A is the sister of B, and 'A \times B' means A is the father of B, then which of the following means that M is the daughter of N?
- (a) $N \times M$
- (b) M N
- (c) N + M
- (d) $M \times N$
- **3.** Statements: All lawyers are educate(d) Some educated people are engineers.

Conclusions:

- I. Some lawyers are engineers.
- II. Some engineers are educate(d)
- (a) Only I follows
- (b) Only II follows
- (c) Both I and II follow
- (d) Neither I nor II follows

4. Five students—A, B, C, D, and E—are seated in a row facing north. B is second to the				
of (d) E is to the immediate right of (a) C is not at an en(d) Who is in the middle?				
(a) A				
(b) B				
(c) C				
(d) D				
5. If the day after tomorrow is Wednesday, what day is it today?				
(a) Monday				
(b) Tuesday				
(c) Sunday				
(d) Friday				
6. Pointing to a woman, Raj says, "She is the mother of my brother's wife." How is the				
woman related to Raj?				
(a) Sister				
(b) Mother				
(c) Wife				
(d) Mother-in-law				
7. Statements: Some books are novels. All novels are stories.				
Conclusions:				
I. Some stories are novels.				
II. Some books are stories.				
(a) Only I follows				
(b) Only II follows				
(c) Both I and II follow				
(d) Neither I nor II follows				

8. In a code, if APPLE is coded as BQQMF, how is BANANA coded?			
(a) CBQBPB			
(b) CAOBOB			
(c) CBNCPC			
(d) CBOCPD			
9. Four friends—A, B, C, D—are seated around a circular table. A is to the left of (b) C is			
opposite (d) Who is to the immediate right of A?			
(a) B			
(b) C			
(c) D			
(d) Cannot be determined			
10. If all roses are flowers, and some flowers are red, which of the following must be true?			
(a) Some roses are red			
(b) All flowers are roses			
(c) Some red things are roses			
(d) None of these			
Quantitative Techniques			
11. A shopkeeper sells an item at a 20% profit. If he reduces the cost price by 10% and sells			
it at Rs. 10 less, he still earns a 25% profit. What is the original cost price?			
(a) Rs. 100			
(b) Rs. 120			
(c) Rs. 150			

12. The table shows the percentage distribution of students in four departments:

Department	Percentage of Students
Physics	25%
Chemistry	30%
Mathematics	20%
Biology	25%

If there are 400 students, and 40% of Physics students are female, how many female students are in Physics?

(a) 4

(b) 50

(c) 60

(d) 80

13. A and B can complete a task in 12 days, B and C in 15 days, A and C in 20 days. How many days will A alone take?

- (a) 20
- (b) 30
- (c) 40
- (d) 60

14. A bag contains 4 red, 3 white, and 2 blue balls. Two balls are drawn. What is the probability both are red?

- (a) $\frac{1}{6}$
- (b) $\frac{1}{12}$
- (c) $\frac{1}{9}$
- (d) $\frac{2}{9}$

15. A car travels from A to B at 60 km/h and returns at 40 km/h. What is the average speed?

- (a) 48 km/h
- (b) 50 km/h
- (c) 52 km/h
- (d) 45 km/h

16. A man can row at 6 km/h in still water. If the river flows at 2 km/h and it takes him	n 1		
hour to row to a place and return, what is the distance to the place?			
(a) 2 km			
(b) 2.5 km			
(c) 3 km			
(d) 4 km			
17. The sum of ages of a father and son is 50 years. Five years ago, the father's age w	as four		
times the son's age. What is the father's current age?			
(a) 35			
(b) 40			
(c) 45			
(d) 50			
18. A rectangle has an area of 60 cm ² and a perimeter of 32 cm. What is the length if	it is		
greater than the width?			
(a) 10 cm			
(b) 12 cm			
(c) 14 cm			
(d) 16 cm			
19. A sum of Rs. 10,000 is invested at 5% per annum compound interest for 2 years.	What is		
the total amount?			
(a) Rs. 11,000			
(b) Rs. 11,025			
(c) Rs. 11,050			
(d) Rs. 11,100			
20. In a class, 60% of students are boys, and 40% are girls. If 30% of boys and 20% of	f girls		
passed an exam, what percentage of the class passed?			
(a) 26%			
(b) 28%			

- (c) 30%
- (d) 32%