

JEE MAIN PERMUTATIONS AND COMBINATIONS — DISTRIBUTION PROBLEMS AND NUMBER OF DIVISORS (JEE) — PYQS

Max. Marks: 20
Questions: 5

Section A (MCQ) — 4 questions

- Q.1** A person has three different bags and four different books. The number of ways, in which he can put these books in the bags so that no bag is empty, is :

[JEE Main 2026 (Online) 8th April Evening Shift]

- (1) 18 (2) 36 (3) 39 (4) 72

Scan or tap for the full solution



- Q.2** A building has ground floor and 10 more floors. Nine persons enter in a lift at the ground floor. The lift goes up to the 10th floor. The number of ways, in which any 4 persons exit at a floor and the remaining 5 persons exit at a different floor, if the lift does not stop at the first and the second floors, is equal to :

[JEE Main 2026 (Online) 6th April Evening Shift]

- (1) 2184 (2) 3064 (3) 7056 (4) 11340

Scan or tap for the full solution



- Q.3** Let $A = \{(a, b, c) : a, b, c \text{ are non-negative integers and } a + b + 2c = 22\}$. Then $n(A)$ is equal to :

[JEE Main 2026 (Online) 4th April Evening Shift]

- (1) 121 (2) 124 (3) 144 (4) 169

Scan or tap for the full solution



- Q.4** The number of ways, in which 16 oranges can be distributed to four children such that each child gets at least one orange, is

[JEE Main 2026 (Online) 23rd January Evening Shift]

- (1) 384 (2) 403 (3) 429 (4) 455

Scan or tap for the full solution



Section B (Numerical) — 1 question

- Q.5** The number of natural numbers, between 212 and 999, such that the sum of their digits is 15, is _____.

[JEE Main 2025 (Online) 28th January Evening Shift]

Scan or tap for the full solution



ANSWER KEY

Section A (MCQ) — 4 questions

Ques.	1	2	3	4															
Ans.	2	3	3	4															

Section B (Numerical) — 1 question

Ques.	5																		
Ans.	64																		