

Set Theory CAT Questions

Question 1: Set P comprises all multiples of 4 less than 500. Set Q comprises all odd multiples of 7 less than 500, Set R comprises all multiples of 6 less than 500. How many elements are present in $\{P \cup Q \cup R\}$?

- A. 202
- B. 243
- C. 228
- D. 18

Answer: A

Question 2: 95% of the students in a class have taken Marketing, 80% have chosen Finance, 84% have chosen operations (ops), and 90% have chosen Human Resources (HR). What is the maximum and minimum percentage of people who have chosen all of the four?

- A. 80% and 56%
- B. 95% and 53%
- C. 80% and 49%
- D. 80% and 51%

Answer: C

Question 3: Set A = $\{2, 3, 5, 6, 7\}$, Set B = $\{a, b, c\}$. How many onto functions can be defined from Set B to Set A?

- A. 2
- B. 3
- C. 4
- D. None of the above

Answer: D

Question 4: A class in college has 150 students numbered from 1 to 150, in which all the even numbered students are doing CA, whose number are

divisible by 5 are doing Actuarial and those whose numbers are divisible by 7 are preparing for MBA. How many of the students are doing nothing?

- A. 37
- B. 45
- C. 51
- D. 62

Answer: C

Question 5: In a survey conducted to know people's preference for android phones and I phones, 80 person preferred android phones while 60 person preferred I phones. There were 20 who liked both and may prefer any. If there was no one who didn't prefer at least one of the phones, then on how many people was the survey conducted?

- A. 120
- B. 40
- C. 80
- D. 60

Answer: A