

## CAT 2022 Slot 2 Memory-based Questions

**Ques.** There were a total of 50 questions in a test. Each contains 1 mark. The student can attempt any question. There were 5 students including amit. It is known that exactly 3 students scored above 32. Amit scored the least no. Of marks. If the average marks of all the 5 students is 38. Then what can be the maximum difference in the lowest and highest mark that can be scored by Amit?

**Ques.** There were 4 candidates in an election. 80 % of the registered voters casted their votes. 1 candidate received 30% of the casted votes and the others 3 received in the ratio 1:2:3. The person who receives the highest no of votes has 2512 more votes than the second highest candidate. What was the total number of registered voters?

**Ques.**  $A + 2B = 6$ , what's the difference between the maximum and minimum values of  $A+B$ ?

**Ques.** If two polygons have no. of sides in the ratio of 1:2 and the internal angles at 3:4 then how many sides does the larger polygon have?

**Ques.** There were a total of 75 questions in a test. A person got 97 marks in a test. In this test there were 3 marks for each Correct ans, +1 for unattempted question, -1 for wrong ans. It is known that the number of unattempted questions are more than attempted questions. Then what can be the maximum number of questions he attempted correctly?

**Ques.** After the meeting, one boat goes South, and another West. 2 hrs after the distance between them is 60km. If one boat is 6 km/hr faster than the other, what is the speed of the slower boat?

**Ans.** 18 km/hr

**Ques.** If  $25000!$  is divisible by  $(n!)!$ , then what's the maximum value  $n$  can take?

**Ans.** 7

**Ques.** In triangle ABC, AD and BE altitudes are drawn. If angle BAC is  $45^\circ$ , angle ABC is  $x$ , what is the ratio of AD/BE?

**Ques.** A person invests  $\frac{1}{3}$  rd of the amount at 6% interest,  $\frac{1}{5}$ th at 10% interest, and the remaining at 1%. All the interest are simple interest. In how many years will the total simple interest equal to the investment (principal)?

**Ques.** There are two containers of equal volume. The first container is half-filled with alcohol. The second container is half- filled with milk. If 50% of the content of 1st container is transferred into the second container and then 50% of second is transferred into the 1st container. Now Again the 50% of the first is transferred into the 2nd container. Now what is the ratio of Alcohol to water in the second container?