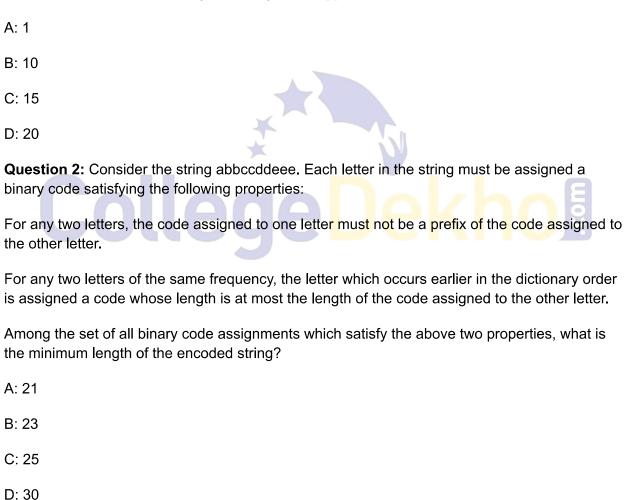


GATE 2024 CSE Daily Practice Questions

Question 1: How many comparisons are needed to sort an array of length 5 if a straight selection sort is used and array is already in the opposite order?



Question 3: Huffman tree is constructed for the following data:{A, B, C, D, E} with frequency {0.17, 0.11, 0.24, 0.33, and 0.15} respectively. 100 00 01101 is decoded as

A: BACE



B: CADE
C: BAD
D: CADD
Question 4: If a message of 100 characters over X is encoded using Huffman coding, then the expected length of the encoded message in bits is
A: 225
B: 115
C: 275
Question 5: Suppose P, Q, R, S, and T are sorted sequences having lengths 20, 24, 30, 35, and 50 respectively. They are to be merged into a single sequence by merging together two sequences at a time. The number of comparisons that will be needed in the worst case by the optimal algorithm for doing this is
A: 362
B: 358
C: 456
D: 320