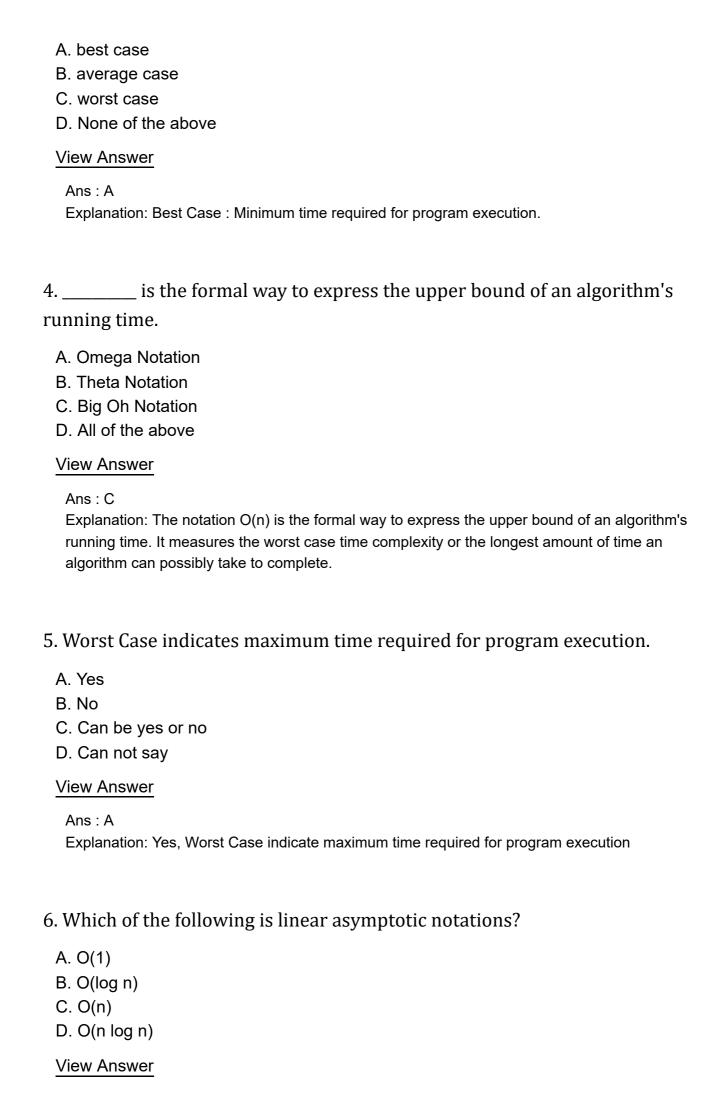
Asymptotic Analysis MCQ Questions & Answers

This section focuses on "Asymptotic Analysis" of Data Structures. These Multiple Choice Questions (MCQ) should be practiced to improve the Data Structure skills required for various interviews (campus interviews, walk-in interviews, company interviews), placements, entrance exams and other competitive examinations.

required for various interviews (campus interviews, walk-in interviews, compainterviews), placements, entrance exams and other competitive examinations
1 of an algorithm refers to defining the mathematical boundation/framing of its run-time performance.
A. Symptotic analysis B. Asymptotic analysis C. Posterior Analysis D. Priori Analysis
View Answer
Ans : B Explanation: Asymptotic analysis of an algorithm refers to defining the mathematical boundation/framing of its run-time performance.
2. Using asymptotic analysis, we can very well conclude the scenario of an algorithm.
A. best case B. average case C. worst case D. best case, average case, and worst case
View Answer
Ans : D Explanation: Using asymptotic analysis, we can very well conclude the best case, average case, and worst case scenario of an algorithm.

3. Which case indicate the minimum time required for program execution?



Ans : C Explanation: linear : O(n)
7. O(log n) is?
A. constant asymptotic notations B. logarithmic asymptotic notations C. polynomial asymptotic notations D. quadratic asymptotic notations
View Answer
Ans : B Explanation: logarithmic : O(log n)
8. Omega Notation is the formal way to express the lower bound of an algorithm's running time.
A. TRUE B. FALSE C. Can be true or false D. Can not say
View Answer
Ans : A Explanation: True, Omega Notation is the formal way to express the lower bound of an algorithm's running time.
9. The Theta notation is the formal way to express of an algorithm's running time.
A. upper boundB. lower boundC. lower bound and upper boundD. None of the above
View Answer

Explanation: The notation $\boldsymbol{\theta}(\boldsymbol{n})$ is the formal way to express both the lower bound and the

Ans : C

upper bound of an algorithm's running time.