

Cadence Placement Papers 2026

15 MCQs with answer key · Free download

Questions

Q1. [CS Fundamentals] Average time complexity of binary search on a sorted array is: [Cadence paper]

- A) $O(\log n)$
- B) $O(n)$
- C) $O(1)$
- D) $O(n \log n)$

Q2. [CS Fundamentals] Which data structure is best for LRU cache? [Cadence paper]

- A) HashMap + Doubly Linked List
- B) Array only
- C) Binary heap only
- D) Queue only

Q3. [Reasoning] You have 3 boxes: apples, oranges, apples&oranges - all labeled wrong. You pick one fruit from the box labeled apples&oranges. It is an apple. Correct labels? [Cadence paper]

- A) apples; oranges; apples&oranges respectively after remapping
- B) Cannot determine
- C) All stay wrong
- D) Only apples correct

Q4. [Quantitative] A person walks 5 km North, then 3 km East, then 2 km South. How far is he from starting point?

- A) 3 " 2 km
- B) 2 " 2 km
- C) -197 " 2 km
- D) 203 " 2 km

Q5. [Verbal] Synonym of "Vivid":

- A) None of these
- B) All of these
- C) Not clear
- D) Bright

Q6. [Quantitative] If the sum of the first n natural numbers is 210, what is the value of n ?

- A) 24
- B) 16
- C) 20
- D) 220

Q7. [Quantitative] A boat takes 3 hours to go 12 km upstream and 2 hours to go 12 km downstream. Find the speed of the boat in still water.

- A) 6 km/hr
- B) 205 km/hr
- C) 5 km/hr
- D) 4 km/hr

Q8. [Verbal] Choose the correct form: "The number of students _____ increased."

- A) None of these
- B) Not clear
- C) has
- D) All of these

Q9. [Quantitative] A mixture has milk and water in ratio 4:1. In 40 litres, milk is:

- A) 32 litres
- B) 30 litres
- C) 28 litres
- D) 35 litres

Q10. [Verbal] Choose the correct form: "I _____ to the store yesterday."

- A) go
- B) went
- C) have gone
- D) will go

Q11. [Verbal] She prefers tea _____ coffee.

- A) to
- B) than
- C) over
- D) from

Q12. [Quantitative] HCF of 20 and 16 is:

- A) 4
- B) 80
- C) 20
- D) 16

Q13. [Reasoning] Find the next number: 10, 9, 7, 4, ?

- A) 0
- B) -200
- C) 200
- D) Cannot be determined

Q14. [Reasoning] If RED is 27 and BLUE is 40 (sum of positions), GREEN is:

- A) 49
- B) 48
- C) 50
- D) 47

Q15. [Quantitative] The present age of father is 3 times the age of his son. After 5 years, the father's age will be 2.5 times the son's age. Find the present age of son.

- A) 12 years
- B) 15 years
- C) 215 years
- D) 18 years

Answer Key & Explanations

Q1. A

Halves search space each step.

Q2. A

$O(1)$ lookup + $O(1)$ move-to-front.

Q3. A

Classic Google/Microsoft puzzle pattern: labeled mixed is actually apples.

Q4. A

Correct answer: 3" 2 km

Q5. D

Vivid means bright.

Q6. C

Sum = $n(n + 1)/2 = 210$ $n(n + 1) = 420$ $n^2 + n - 420 = 0$ $(n + 21)(n - 20) = 0$ $n = 20$ (positive value)

Q7. C

Upstream speed = $12/3 = 4$ km/hr Downstream speed = $12/2 = 6$ km/hr Speed in still water = $(4 + 6)/2 = 5$ km/hr

Q8. C

Correct answer: has

Q9. A

Milk = $4/5 \times 40 = 32$ litres.

Q10. B

"Yesterday" indicates past tense, so "went" is correct.

Q11. A

Correct form: to.

Q12. A

$\gcd(20,16)=4$.

Q13. A

Diff " 1," 2," 3," 4 !" 0.

Q14. A

$G+R+E+E+N = 7+18+5+5+14 = 49$.

Q15. B

Correct answer: 15 years