

<b>Started on</b>	Thursday, 18 July 2024, 4:47 PM
<b>State</b>	Finished
<b>Completed on</b>	Thursday, 18 July 2024, 4:47 PM
<b>Time taken</b>	7 secs
<b>Marks</b>	0.00/6.00
<b>Grade</b>	<b>0.00</b> out of 100.00

## Question 1

Not answered

Marked out of 1.00

True/False: Dynamic Programming reduces asymptotic complexity by eliminating redundant computations.

Select one:

- ☐ True
- ☐ False

The correct answer is 'True'.

## Question 2

Not answered

Marked out of 1.00

True/False: Recursive routines cannot be used in Dynamic Programming algorithms?

Select one:

- ☐ True
- ☐ False

The correct answer is 'True'.

### Question 3

Not answered

Marked out of 1.00

Which of the following is NOT one of the main principles of dynamic programming algorithms?

Select one:

- ☐ a. Optimal substructure: optimal solutions to problems are built from optimal solutions to subproblems.
- ☐ b. "Shop around": to determine the best option, try them all and select the best one. Do not employ heuristics.
- ☐ c. Memorization: answers to subproblems are remembered to avoid repeated computation of the same thing.
- ☐ d. Recursion: implemented as a recursive routine to reduce overhead and improve computational efficiency.

The correct answer is: Recursion: implemented as a recursive routine to reduce overhead and improve computational efficiency.

### Question 4

Not answered

Marked out of 1.00

True/False: In a dynamic programming algorithm, we can use a table to store results of sub-problems and then refer to this table to ensure that we don't recompute those sub-problems.

Select one:

- ☐ True
- ☐ False

The correct answer is 'True'.

### Question 5

Not answered

Marked out of 1.00

True/False: Dynamic programming is a variation of the linear programming model in that it breaks the problem down into smaller problems that are solved using the simplex method?

Select one:

- ☐ True
- ☐ False

The correct answer is 'False'.

## Question 6

Not answered

Marked out of 1.00

True/False: Dynamic programming is less complex asymptotically but is substantially more complex from a programming perspective?

Select one:

- ☐ True
- ☐ False

The correct answer is 'False'.