1

Consider the following performance scenario:

"During the normal period, all periods except the enrolment period, a student accessing the Fénix system should finish a write transaction in less than 2 seconds."

Which of the following options is true?

✓ The environment is specified.

B The stimulus is stochastic.

C The response measure is jitter.

D The source of the stimulus is not specified.

2

Consider the design of YouTube where *Transcoding Server* is one of the software elements. What is the initial reason that justifies this software element?

A They are inferred from a scalability quality.

B They are inferred from an availability quality.

C They are inferred from a performance quality.

✓ They are inferred from the system functionalities.

3

Twitter process millions of tweets per second. Considering that the processing of each tweet can be done independently of the other tweets, which performance tactic should be applied?

A Maintain multiple copies of data.

✓ Maintain multiple copies of computation.

C Increase resources.

D Reduce computational overhead.

4 Consider a scenario for performance where the arrival of events is stochastic with a distribution where there are peeks of events but the arrival of events over a long period is uniform. What is the best tactic to apply in this situation?

A Prioritize events.

✓ Limit event response.

C Bound execution time.

D Manage work requests.

5 Consider the design of YouTube where *Metadata Cache* is one of the software elements. What is the initial reason that justifies this software element?

A They are inferred from a scalability quality.

✓ They are inferred from a performance quality for the watch video functionality.

C They are inferred from a performance quality for the upload video functionality.

D They are inferred from an availability quality.