Status	Finished
Started	Saturday, 3 January 2026, 19:46
Completed	Saturday, 3 January 2026, 19:47
Duration	45 secs
Marks	5.00/5.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1

Correct

Mark 1.00 out of 1.00

In cross-platform data processing we may use multiple systems for processing a single query for different reasons.
How do we call each of the following cross-platform cases?

The data is **stored in different systems**	Polystore cross-platform processing ✓
The system where the data is stored does not have a **desired functionality**	Mandatory cross-platform processing ✓
We want to **optimize performance**	Opportunistic cross-platform processing ✓

Your answer is correct.

The correct answer is:
The data is **stored in different systems** → Polystore cross-platform processing,

The system where the data is stored does not have a **desired functionality** → Mandatory cross-platform processing,

We want to **optimize performance** → Opportunistic cross-platform processing

Question 2

Correct

Mark 1.00 out of 1.00

What are the problems with a cost-based optimizer in a cross-platform setting?

- [x] a. It is very hard to define the different cost functions.
- [x] b. The cross-platform system may not have access to data statistics.
- [ ] c. Query optimization is very time consuming.
- [x] d. It is hard to fine-tune the coefficients of the cost functions.
- [x] e. The cost functions assume linear behaviour.
- [ ] f. Data movement is costly.

Your answer is correct.

The correct answers are:
The cross-platform system may not have access to data statistics.,

It is very hard to define the different cost functions.,

The cost functions assume linear behaviour.,

It is hard to fine-tune the coefficients of the cost functions.

Question 3

Correct

Mark 1.00 out of 1.00

Wayang allows you to write a pipeline once and run it on multiple execution engines without rewriting it.

- (•) a. True
- ( ) b. False

Your answer is correct.

The correct answer is:
True

Question 4

Correct

Mark 1.00 out of 1.00

In a cross-platform setting, what does “data movement” refer to?

- a. Moving data between different execution platforms during a workflow ✓
- b. Changing the type of the data
- c. Copying files from one location to another

Your answer is correct.

The correct answer is:
Moving data between different execution platforms during a workflow

Question 5

Correct

Mark 1.00 out of 1.00

Which scenario would likely trigger data movement in Wayang?

- a. Joining a PostgreSQL table with a CSV file on HDFS, then executing on Spark ✓
- b. Reading records from a table in Postgres, filtering the records, transforming them into numerical features, and training an ML model in Tensorflow ✓
- c. Printing a small number of records to the console
- d. Reading a text file and immediately writing it to the same folder

Your answer is correct.

The correct answers are:
Joining a PostgreSQL table with a CSV file on HDFS, then executing on Spark,

Reading records from a table in Postgres, filtering the records, transforming them into numerical features, and training an ML model in Tensorflow