✓ **Congratulations! You passed!**

Grade received 100%   **Latest Submission Grade** 100%   **To pass** 80% or higher

[Go to next item]

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1. What does IaaS provide?

◯ Software On-Demand

◯ Computing Environment

⦿ Hardware Only

✓ **Correct**
See this video to review.

1 / 1 point

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2. What does PaaS provide?

◯ Software On-Demand

◯ Hardware Only

⦿ Computing Environment

✓ **Correct**
See this video to review.

1 / 1 point

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3. What does SaaS provide?

⦿ Software On-Demand

◯ Hardware Only

◯ Computing Environment

✓ **Correct**
See this video to review.

1 / 1 point

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4. What are the two key components of HDFS and what are they used for?

◯ FASTA for genome sequence and Rasters for geospatial data.

⦿ NameNode for metadata and DataNode for block storage.

◯ NameNode for block storage and Data Node for metadata.

✓ **Correct**
See this video to review.

1 / 1 point

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5. What is the job of the NameNode?

⦿ Coordinate operations and assigns tasks to Data Nodes

◯ Listens from DataNode for block creation, deletion, and replication.

◯ For gene sequencing calculations.

✓ **Correct**
See this video to review.

1 / 1 point

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6. What is the order of the three steps to Map Reduce?

◯ Shuffle and Sort -> Reduce -> Map

◯ Shuffle and Sort -> Map -> Reduce

⦿ Map -> Shuffle and Sort -> Reduce

1 / 1 point

○ Map -> Reduce -> Shuffle and Sort

✓ **Correct**
    See [this video](#) to review.

7. What is a benefit of using pre-built Hadoop images?   **1 / 1 point**

○ Guaranteed hardware support.

○ Quick prototyping, deploying, and guaranteed bug free.

○ Less software choices to choose from.

⦿ Quick prototyping, deploying, and validating of projects.

✓ **Correct**
    See [this video](#) to review.

8. What is an example of open-source tools built for Hadoop and what does it do?   **1 / 1 point**

⦿ Giraph, for processing large-scale graphs.

○ Giraph, for SQL-like queries.

○ Pig, for real-time and in-memory processing of big data.

○ Zookeeper, analyze social graphs.

✓ **Correct**
    See [this video](#) to review.

9. What is the difference between low level interfaces and high level interfaces?   **1 / 1 point**

⦿ Low level deals with storage and scheduling while high level deals with interactivity.

○ Low level deals with interactivity while high level deals with storage and scheduling.

✓ **Correct**
    See [this video](#) to review.

10. Which of the following are problems to look out for when integrating your project with Hadoop?   **1 / 1 point**

☑ Random Data Access

✓ **Correct**
    See [this video](#) to review.

☑ Infrastructure Replacement

✓ **Correct**
    See [this video](#) to review.

☑ Task Level Parallelism

✓ **Correct**
    See [this video](#) to review.

☐ Data Level Parallelism

☑ Advanced Alogrithms

✓ **Correct**
    See [this video](#) to review.

11. As covered in the slides, which of the following are the major goals of Hadoop?   **1 / 1 point**

☑ Handle Fault Tolerance

✓ **Correct**
    See [this video](#) to review.

See this video to review.

☑ Enable Scalability

✓ **Correct**
See this video to review.

☑ Provide Value for Data

✓ **Correct**
See this video to review.

☑ Facilitate a Shared Environment

✓ **Correct**
See this video to review.

☑ Optimized for a Variety of Data Types

✓ **Correct**
See this video to review.

☐ Latency Sensitive Tasks

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12. What is the purpose of YARN?

1 / 1 point

◉ Allows various applications to run on the same Hadoop cluster.

○ Enables large scale data across clusters.

○ Implementation of Map Reduce.

✓ **Correct**
See this video to review.

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13. What are the two main components for a data computation framework that were described in the slides?

1 / 1 point

○ Resource Manager and Container

○ Node Manager and Applications Master

◉ Resource Manager and Node Manager

○ Applications Master and Container

○ Node Manager and Container

✓ **Correct**
See this video to review.