In the context of Data Science Big Data, generate 15 relatively straightforward random multiple choice questions on Spark that would suit a first year Data Science university student. Put the answers at the end.

Question 1: What is Apache Spark primarily used for?

A) Image editing

B) Game development

C) Large scale data processing

D) Web development

Question 2: Which programming languages can be used with Apache Spark?

A) Java

B) Python

C) Scala

D) All of the above

Question 3: What is the basic data structure in Spark?

A) DataFrame

B) RDD (Resilient Distributed Dataset)

C) Array

D) List

Question 4: What is the Spark Core?

A) The primary scheduler

B) The data processing engine

C) A library for machine learning

D) A library for graph processing

Question 5: What is Spark Streaming used for?

A) Real-time data processing

B) Batch data processing

C) Data storage

D) Data visualization

Question 6: Which of the following is a feature of Spark SQL?

A) Query data using SQL-like syntax

B) Run arbitrary Python code on data

C) Deploy Spark applications

D) Stream video data

Question 7: What is the purpose of the Spark driver program?

A) To distribute data across nodes

B) To run machine learning algorithms

C) To coordinate and manage Spark applications

D) To store metadata about data

Question 8: Which of the following is a component of the Spark architecture?

A) Worker node

B) Executor

C) Driver program

D) All of the above

Question 9: What is a Spark transformation operation?

A) An operation that produces a new RDD

B) An operation that returns a value

C) An operation that writes data to disk

D) An operation that reads data from disk

Question 10: What is a Spark action operation?

A) An operation that produces a new RDD

B) An operation that returns a value

C) An operation that writes data to disk

D) An operation that reads data from disk

Question 11: Which of the following is a benefit of using Spark?

A) Fault tolerance

B) Scalability

C) Speed

D) All of the above

Question 12: What is a Spark application?

A) A user-defined program using the Spark API

B) A built-in Spark feature

C) A standalone application that does not use Spark

D) A type of database

Question 13: What is the primary programming interface for Spark?

A) Spark API

B) Spark UI

C) Spark CLI

D) Spark IDE

Question 14: In Spark, what does "lazy evaluation" mean?

A) Computations are only executed when an action is called

B) Computations are executed immediately

C) Computations are executed in a non-deterministic order

D) Computations are executed in parallel

Question 15: Which of the following is a storage level option in Spark?

A) MEMORY\_ONLY

B) MEMORY\_AND\_DISK

C) DISK\_ONLY

D) All of the above

Answers:

1) C

2) D

3) B

4) B

5) A

6) A

7) C

8) D

9) A

10) B

11) D

12) A

13) A

14) A

15) D