8.Embedding structure in Mongodb is the same as an index in RDBMS

○ True

○ **False**

9.Resource pooling is the process where:

☐ **a. The provider's computing resources are pooled to serve multiple consumers using a multi-tenant model.**

☐ **b. Different physical and virtual resources dynamically assigned and reassigned according to consumer demand.**

☐ c. Heterogeneous access is performed

☐ d. A deployment model is performed

10.Hadoop execution layer monitors the execution of each task

○ **True**

○ False

11.HDFS includes many name nodes and one data-node

○ True

○ **False**

12.NoSql databases scale horizontally only

○ True

○ **False**

13.Wide-column stores store data in tables, rows, and dynamic columns

○ **True**

○ False

14.Partition Tolerance in CAP theorem is defined as the system continues to operate in the presence of network failure

○ True

○ **False**

15.$merge is the same as:

○ a. An index

○ b. An aggregate pipeline

○ c. $sort

○ **d. On-demand materialized view**

16.Commodity hardware does not ever fail

○ True

○ **False**

17. If a task fails:

☐ a. Job tracker detects the failure

☐ **b. Map or reduce sends a message to the job tracker**

☐ **c. Job tracker reschedules the task**

☐ d. Name node replicates the user data

18.Fault Tolerance refers to:

○ a. Software as a service

○ **b. The way in which an operating system (OS) responds to a hardware or software failure**

○ c. Pay-as-you-go model

○ d. Everything as a service

19.Every task in Hadoop is a map only

○ True

○ **False**

20.Problems with data sharding in Mongodb include:

☐ **a. Determining the architecture of a data routing layer**

☐ **b. Determining the architecture of the partition mapping**

☐ c. Deciding the workload of the application

☐ d. Using them on the level of data replicas

21.Network security and bandwidth are two main advantages of horizontal scaling

○ True

○ **False**

22.Vertical scalability involves:

☐ a. Massively parallel architectures

☐ **b. Large main memories**

☐ c. Commodity machines

☐ d. Synchronization

23.Queries in NoSQL databases typically do not require joins, so the queries are very slow

○ True

○ **False**

24.when you use MongoDB is data that is accessed together should be stored together

○ **True**

○ False

25.One can provide Healthcare as a service as long it defines a specific deployment model of the cloud

○ True

○ **False**

26.In sharded cluster, if you do *not* use the _id as the shard key, then your application must ensure

○ **a. The uniqueness of the values in the _id field to prevent errors**

○ b. The uniqueness of the values

○ c. The uniqueness of the values in the _id field to prevent joins

○ d. Allow joins

27.The volatility of the data is defined as:

○ a. How the data is stored

○ **b. How often does the data change**

○ c. How can we do data replicas

○ d. Data sharding

28.In Mongodb, all writes are atomic only on the level of a single document

○ **True**

○ False

29. Cloud Computing trend requires:

☐ **a. Dynamic resource management**

☐ b. Frequent update operations

☐ **c. Flexible database schema**

☐ d. Data models to be in the relational model only

30.The CAP theorem proves that it is
○ a. Impossible to guarantee strict Consistency and Availability while being able to tolerate network programming

○ **b. Impossible to guarantee strict Consistency and Availability while being able to tolerate network partitions**

○ c. Impossible to guarantee strict Consistency

○ d. Impossible to guarantee strict Availability

31.Partial failure handling is one of the main problems that arise with horizontal scaling
○ **True**

○ False

32.The Hadoop stack MUST have the following components:
○ a. A storage (DFS) and a computation (MapReduce)

○ b. A Mapreduce and EDW

○ **c. A storage (HDFS) and a computation (MapReduce)**

○ d. A report and a Dashboard

33.The data model you choose depends on
○ a. Indexes you use

○ b. Data partitioning

○ **c. The application and workload**

○ d. The workload only

34.We prefer referencing data model in Mongodb for:
○ a. Integrity on one-to-many relations

○ b. Integrity on one-to-one relations

○ c. Data that is deleted

○ **d. Integrity on many-to-many relations**

35.Consistency in ACID theory is defined as each transaction subject consists of a set of rules
○ **True**

○ False

36. Hadoop data model deals with the following:

○ a. A lock-in vendor

○ **b. Flexible schema**

○ c. Static schema

○ d. Distributed database

37.Viability is defined as:

○ a. Data security

○ **b. is the data relevant to the use case at hand**

○ c. Data partitioning

○ d. Data volume