

## Homework 10: Distributed File Systems

**Correct answers are labeled red bold.**

Some necessary explanations are labelled blue.

Q1: In GFS (Google File System) files are divided in \_\_\_\_\_ chunks.

- A. Variable-size
- B. Fixed-size**
- C. Both fixed-size and variable-size
- D. None of the above

Q2: Which group of the following operations are supported by GFS architecture?

- A. Read, write, create, delete**
- B. Update, append, read, write
- C. Snapshot, append, update, delete
- D. None of the above

Q3: Which of the following is belonged to Clustered File System?

- A. Sun Network File System (NFS) (NFS is different from CFS.)
- B. Hadoop Distributed File System (HDFS)**
- C. Common Internet File System (CIFS) (CIFS stands for “Common Internet File System.” CIFS is a dialect of SMB. That is, CIFS is a particular implementation of the Server Message Block protocol, created by Microsoft. CIFS is not a clustered file system.)
- D. Google's Bigtable (Bigtable is a fully managed wide-column and key-value NoSQL database service for large analytical and operational workloads as part of the Google Cloud portfolio.)

Q4: Which of the following statement is correct about HDFS?

- A. HDFS needs to run on expensive commodity hardware and cannot deal with failures. (HDFS is expected to run on CHEAP (not expensive) commodity hardware.)
- B. HDFS is to handle large files and block size is 128 MB by default.** (HDFS is to handle large files and block size is 128 MB by default.)
- C. HDFS supports multi-users to write one file simultaneously. (No, HDFS does not support multi-user writes, which is different from GFS.)
- D. In HDFS, low latency is more important than high sustained bandwidth. (No, this statement is incorrect. Low latency is not prioritized in HDFS design.)