1.(Single Answer) Which of the following cloud service model deals with providing storage, network, servers and virtualization of resources?  
     A.  Software As A Service (SaaS).  
     B.  Platform As A Service (PaaS)  
     C.  Infrastructure As A Service (IaaS).  
     D.  Storage As A Service (IaaS).  
   
 2.(Single Answer) Which of the following file system is most suitable for the storage of Big Data.  
     A.  NTFS  
     B.  EXT4  
     C.  HDFS  
     D.  BTRFS  
   
 3.(T or F) ICT is a technological field that combines information technology and communication technology.  
   
 4.(Multiple Answer) Select the correct statements that describes the properties of bus technology in ICT architecture.  
     A.  Bus is a communication system that transfers data between internal components and external components.  
     B.  Bus can be divided into internal bus and external bus.  
     C.  Bus technology are only available in serial form.  
     D.  The CPU needs to go through the memory to directly access the Bus.  
   
 5.(Single Answer) It provides connection between sets of nodes and allows the connected devices(nodes) to communicate with each other but it is not a device. Which of the following fits the above description?  
     A.  Host.  
     B.  Network.  
     C.  Storage Array.  
     D.  Switch.  
   
 6.(Single Answer) It is a device which manages the physical disk drives and presents them to the users as logical units. Which of the following device fits the above description?  
     A.  Host.  
     B.  Storage NIC.  
     C.  Storage Controller.  
     D.  Storage Cache.  
   
 7.(Single Answer) In a clustered NAS architecture, which of the following allows multiple file system to be consolidated and do not need to be managed separately?  
     A.  Global Namespace.  
     B.  Global Sharing.  
     C.  Global Cache.  
     D.  Global Concurrency.  
   
 8.(Single Answer) Which one of the following is a type of mechanical drive?  
     A.  SSD.  
     B.  SAS Drive.  
     C.  NVME Drive.  
     D.  Flash Drive.  
   
 9.(Multiple Answer) Which of the following are attached to the storage system serially?  
     A.  ATA Drive.  
     B.  SAS Drive.  
     C.  NL-SAS Drive.  
     D.  IDE Drive.  
   
 10.(Single Answer) Which of the following disks has the best performance in terms of speed?  
     A.  NL-SAS  
     B.  SAS  
     C.  SSD  
     D.  SATA  
   
 11.(Multiple Answer) Select the correct statements that describes Mean Time Between Failure(MTBF).  
     A.  MTBF can accurately pinpoint the time of  failures of the hard disks.  
     B.  The higher the MTBF, the hard disk will have shorter lifespan expectancy.  
     C.  MTBF is used to measure the reliability of hard disks.  
     D.   MTBF is the predicted elapsed time between inherent failures of hard disks.  
   
 12.(Multiple Answer) You are tasked to setup a SAN storage system that has the following requirements: (1) To minimize the workload on server resources. (2) Optimize the capabilities on storage system for deduplication. Select the following options that fits the scenario above.  
     A.  Use NIC instead of HBA cards to minimize the host resource consumption during I/O operations.  
     B.  Offload the storage processing tasks to the server to optimize the data deduplication.  
     C.  Usage of TCP/IP offload engine technology to do processing on HBA cards on the server to minimize the usage of server resources.  
     D.  Adding hardware acceleration module to the storage system to optimize the performance of data deduplication.  
   
 13.(T or F) SAN is a storage architecture that connects storage device and application servers through network.  
   
 14.(Single Answer) Which of the following represents the logical storage resource connected to the target in SAN?  
     A.  LUN.  
     B.  Volume.  
     C.  Tape Drive.  
     D.  Disk Drive.  
   
 15.(Single Answer) Which of the following protocol has the slowest performance.  
     A.  SAS.  
     B.  FC.  
     C.  SATA.  
     D.  InfiniBand.  
   
 16.(Single Answer) Which of the following storage protocol allows FC packets to be transmitted over Ethernet networks?  
     A.  iSCSI.  
     B.  Ethernet.  
     C.  FC.  
     D.  FCoE.  
   
 17.(T or F) When configuring NAS file share on Linux systems using NFS, the shared directory do not need to be mounted.  
   
 18.(Single Answer) Which of the following is not a common NAS protocol?  
     A.  FTP.  
     B.  CIFS.  
     C.  SSH.  
     D.  NFS.  
   
 19.(Single Answer) Which one of the measurement indicator for disaster recovery systems focuses on the amount of time required to restore services back to normal?  
     A.  RTO  
     B.  RPO  
     C.  RCO  
     D.  RDO  
   
 20.(Multiple Answer) When planning the disk domain for the storage systems, which of the following needs to be considered?  
     A.  Mass of the disks.  
     B.  Capacity of disks.  
     C.  Hot spare policy.  
     D.  Types of disks.  
  
Answers:  
/ 1  C    / 2  C    / 3  T    / 4  AB    / 5  B    / 6  C    / 7  A    / 8  B    / 9  BC    / 10  C    / 11  CD    / 12  CD    / 13  T    / 14  A    / 15  C    / 16  D    / 17  F    / 18  C    / 19  A    / 20  BCD