B. Sc. (I.T.) (Sem. VI) Examination

March / April - 2016

CS-31 : MS SQL Server 2005 Database Administrations

Faculty Code : 003

Subject Code : 004602

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

1   Attempt following MCQ Question :   **20**

   (1)   Logical and Physical Database designing, Normalization,
         and De-normalization methods, Stored procedure design
         all are critical aspect of which DBA?
         (A)   Production DBA
         (B)   Architect DBA
         (C)   OLAP DBA
         (D)   EIT DBA

   (2)   _____ RAID level supports only Mirroring.
         (A)   0   (B)   1
         (C)   10   (D)   5

   (3)   An SQL SERVER 2005 Language that adds
         programming elements like parameters, variables, IF,
         WHILE Loops, and so forth, to the basic capabilities
         of SQL is called.
         (A)   COBOL
         (B)   TRANSACT SQL
         (C)   VB.NET
         (D)   Visual Basic

   (4)   With this type of Index, the bottom level of an index
         does not contain data, but rather it contains pointers
         to data.
         (A)   Clustered
         (B)   Non Clustered
         (C)   Primary
         (D)   Secondary

(5) In SQL SERVER. Which of the following backup type makes a copy of the changes that have been made to the database since the last complete backup ?

(A) Complete Backup

(B) Transaction Log

(C) Differential Backup

(D) None

(6) Which of the following, prevent "Dirty Reads"?

(A) Read Committed

(B) Repeatable Read

(C) Read Uncommitted

(D) Serializable

(7) The amount of time. for the desired sector of a disk to rotate under read–write head of the disk is called'?

(A) Rotation Latency

(B) Seek Time

(C) Transfer Time

(D) None of these

(8) RAID Stands for _____

(A) Redundant Array of Independent Disks

(B) Redundant Array of Important disks

(C) Random Access of Independent Disks

(D) Random Access of Important Disks

(9) Which of the following SQL query is correct for selecting the name of staffs from 'tblstaff table where salary is 15,000 or 25,000?

(A) SELECT sname from tblstaff WHERE salary IN (15000. 2,5000),

(B) SELECT sname from tblstaff WHERE salary BETWEEN 15000 AND 25000;

(C) Both (A) and (B)

(D) None of the above

(10) Which of the following DBCC command is used to see when was the last time the index rebuild?

    (A) DBCC SHOW_STATISTICS

    (B) DBCC SHOWCONFIG

    (C) DBCC DBREINDEX

    (D) None

(11) _____ method accomplished by placing first piece of data on the first disk, second piece of data on second disk and so on

    (A) Bits

    (B) Mirroring

    (C) Stripping

    (D) None of these

(12) _____ Fully form of OLAP.

    (A) Object Level-Analytical

    (B) Object Level Administrative protocols

    (C) Server side Query Language

    (D) Online Analytical Processing

(13) _____ introduce network of storage devices and connected by fiber channel.

    (A) SAN   (B) LAN

    (C) MAN   (D) WAN

(14) Which Edition is used for testing and development Purpose ?

    (A) Standard Edition

    (B) Enterprise Edition

    (C) Developer Edition

    (D) Mobile Edition

(15) What mode of authentication does SQL Server NOT provide?

(A) Windows-only security

(B) Both SQL. Server & Windows-only security

(C) Mixed security

(D) SQL Server only security

(16) The strictest transaction isolation level provided by SQL Server is called :

(A) REPETABLE READ

(B) SERIALIZABLE

(C) READ COMMITTED

(D) READ UNCOMMITTED

(17) _____ file stores all the changes or modifications that are made during Transactions.

(A) Primary File

(B) Secondary File

(C) Transaction log file

(D) none of these

(18) SQL Server automatically creates an Index on :

(A) Primary keys

(B) Not Null

(C) Unique keys

(D) Both Primary keys and Unique keys

(19) SQL SERVER 2005 NOT includes the following System Database.

(A) tempdb Database

(B) Model Database

(C) Master Database

(D) SQLDB Database

(20) In which phase, the recovery process opens the transaction log to identify uncommitted transaction and those uncommitted transaction are rolled back?

(A) Data copy Phase

(B) Redo Phase

(C) Undo Phase

(D) None of above

2   (a)   Attempt the following : (any **three**)   10

(1) Explain master, model and tempdb System Databases.

(2) Differentiate: OLTP and OLAP System

(3) List out the Editions of SQL SERVER. Explain any two of them.

(4) Discuss Exclusive Lock with suitable example.

(5) Give the Definitions: Rotational Latency. Average Seek Time and Transfer time.

(6) Explain DBCC DBREINDFX and DBCC. CIHECKDB.

(b)   Attempt the following : (any **three**)   9

(1) What is File Group? Explain the use of Primary file and Log file.

(2) What is Transaction ? Explain ACID Properties of Transaction.

(3) What is Backup ? Explain Differential Backup with an appropriate figure.

(4) Explain Row level lock. Fable level lock and Page level lock.

(5) What is Full-text Search Index in SQL SERVER?

(6) What is Database Snapshot ? How to create a Database Snapshot?

(c) Attempt the following : (any **two**)   10

    (1) Explain Index Architecture in detail.

    (2) Explain SAN with an appropriate figure.

    (3) Explain RAID 1 and RAID 5 with suitable example.

    (4) Explain Four Basic types of Isolation Levels in SQL SERVER.

    (5) Explain Database Mirroring with appropriate figure.

3 (a) Attempt the following : (any **three**)   6

    (1) Windows Authentication Mode.

    (2) Discuss Dirty Reads and Non Repeatable Read Problem.

    (3) Explain the Duties of Architect DBA and Developer DBA.

    (4) List out the Features of SQL SERVER 2005.

    (5) Explain the commands through which user can handle the Transactions manually.

    (6) List out the Data Types which are supported by SQL SERVER 2005.

(b) Attempt the following : (any **three**)   9

    (1) Explain Indexed View.

    (2) How to create a Database in SQL SERVER ?

    (3) Differentiate : Clustered Index and Non Clustered Index.

    (4) Explain Snapshot New Isolation Level.

    (5) Write a Short note on Log Shipping.

    (6) Explain Simple Recovery Model.

(c) Attempt the following : (any **two**)   **10**

    (1) What is Replication? Explain all three types of
        Replications..

    (2) Explain Fall Over Clustering in detail.

    (3) What is Restore? Explain Restore Phases.

    (4) Write down the steps of Installation of SQL SERVER
        2005.

    (5) What is Recovery? Explain Full and Bulk logging
        Recovery model.

———