003-003301

B. C. A. (Sem. III) (CBCS) Examination

December – 2011

CS-13 : Sys. Ada. & Design, S/W Eng. & MS-Access

Faculty Code : 003

Subject Code : 003301

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

Instructions : (1) Figures to the right indicate full marks of the question.

(2) Mark and state necessary assumption.

(3) Draw diagram wherever necessary.

(4) Write answers of all questions in main answer sheet.

1 Attempt all MCQ answer : **20**

(1) The Command Center of Access File that appears when you create or open the MS Access Database File.

(A) Database Window

(B) Query Window

(C) Design View Window

(D) Switchboard

(2) In a Database Table, the category of Information is called_____

(A) Tuple

(B) Field

(C) Record

(D) All of above

(3) This key uniquely identifies each record.

(A) Primary Key

(B) Key Record

(C) Unique Key

(D) Field Name

(4) It is an Association established between common

(A) Line

(B) Relationship

(C) Primary Key

(D) Records

(5) Microsoft Access is A

(A) RDBMS

(B) OODBMS

(C) ORDBMS

(D) Network Database Model

(6) DCL provides commands to perform actions like

(A) Change the structure of tables

(B) Insert, Update or Delete Records and Data Values

(C) Authorizing Access and other control over database

(D) None of above

(7) What is the Maximum Length a Text Field can be ?

(A) 120 (B) 255

(C) 265 (D) 75

(8) Which of the following is not a database object ?

(A) Tables (B) Queries

(C) Relationships (D) Reports

(9) What are the columns in a Microsoft Access Table called?

(A) Rows

(B) Records

(C) Fields

(D) Columns

(10) Which of the following is not a type of Microsoft Access Database Object ?

(A) Table

(B) Form

(C) Worksheets

(D) Modules

(11) Information is :

(A) Data

(B) Processed Data

(C) Manipulated input

(D) Computer output

(12) Data by itself is not useful unless

(A) It is massive

(B) It is processed to obtain information

(C) It is collected from diverse sources

(D) It is properly stated

(13) For taking decisions data must be

(A) Very accurate

(B) Massive

(C) Processed correctly

(D) Collected from diverse sources

(14) By metadata we mean

(A) very large data

(B) Data about data

(C) Data dictionary

(D) Meaningful data

(15) A data dictionary is usually developed

(A) At requirements specification phase

(B) During feasibility analysis

(C) When DFD is developed

(D) When a database is designed

(16) The main objective of feasibility study is

(A) To assess whether it is possible to meet the requirements specifications

(B) To assess if it is possible to meet the requirements specified subject to constraints of budget, human resource and hardware

(C) To assist the management in implementing the desired system

(D) To remove bottlenecks in implementing the desired system

(17) The main objective of system evaluation is

(A) to see whether the system met specification

(B) to improve the system based on operational experience for a period

(C) to remove bugs in the programs

(D) to assess the efficiency of the system.

(18) The most important attribute of a systems analyst is

(A) excellent programming skills

(B) very good hardware designing skills

(C) very good technical management skills

(D) very good writing skills

(19) Managers in organizations should not design their own systems as

(A) systems have to interact with other systems

(B) They do not have the special skills necessary to design systems

(C) It is not their job

(D) They are always very busy

(20) Systems analyst should use software tools in their work as

(A) all analysts use them

(B) They assist in systematic design of systems

(C) They are inexpensive

(D) They are easily available

2 (a) Attempt any three : 6

(i) What is DFD ? Explain with an example.

(ii) What is UML ? Explain Active diagram.

(iii) What is macro ?

(iv) What is SQA ?

(v) Explain Types of reports.

(vi) Explain Input Validation Methods.

(b) Attempt any three : 9

(i) Explain types of testing.

(ii) List and explain the various fact finding techniques.

(iii) Discuss Software Failures.

(iv) What is SDLC ? Explain the phases of SDLC in detail.

(v) List and explain the various coding techniques.

(vi) List and explain the various levels of testing to be performed on new programs.

(c) Attempt any two : 10

(i) What are the different system development strategies ? Explain prototype method in detail.

(ii) List and explain the role of a system analyst.

(iii) Discuss the Evolution of Software Engineering Discipline (with diagram)

(iv) What is SDLC ? Explain the phases of SDLC in detail.

(v) Explain primary keys, foreign key, composite key and candidate key.

3 (a) Attempt any three : 6

(i) Explain Decision tree.

(ii) Explain Decision Table.

(iii) List and explain various Data Gathering techniques.

(iv) Differentiate between Logical design and Physical Design.

(v) Explain Object Naming Rules.

(vi) Explain Switch Board.

(b) Attempt any three : 9

(i) Explain Data Dictionary

(ii) Explain Static Page and Dynamic page

(iii) Explain Macro Error.

(iv) Describe the role of system administrator.

(v) What is difference between system analysis and system design explains ?

(vi) What is mean by scope of a system ? Explain with an example.

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

(i) Explain SE Process Model

(ii) Explain system, subsystem, business system, information system

(iii) Explain 4 P's and w^5 HH principle

(iv) Explain E.F. Codd rules.

(v) Describe MS Access Data Types.
