DCA-2051   Seat No. _____

M. C. A. (Sem. II) Examination

July - 2022

MCA-2051 : System Analysis and Design

Time : **2.30** Hours]   [Total Marks : **70**

1   (a)   Answer the following: **4**

(1)   Give full form of SDLC.

(2)   Give full form of MIS.

(3)   In _____ phase of SDLC, the system is used experimentally to ensure that the software does not fail.

(4)   All definition of elements in the system is described in detail in a Data Dictionary. True or False?

(b)   Answer any one in brief: **2**

(1)   What is System?

(2)   What is subsystem?

(c)   Answer any one in detail: **3**

(1)   List and explain types of user.

(2)   Explain System Prototyping methods.

(d)   Answer any one: **5**

(1)   List and Explain all the phases of SDLC.

(2)   Explain categories of Information System.

2   (a)   Answer the following: **4**

(1)   Give full form of DFD.

(2)   A _____ is a matrix of rows and columns which shows conditions and actions.

(3)   _____ allows analyst to collect information about various aspects of a system from large number people.

(4)   _____ interviews use a questions and answers format when the analyst wants to get the general information about the system.

(b) Answer any one in brief: 2
   (1) What is Observation technique?
   (2) What is Record Review technique?
(c) Answer any one in detail: 3
   (1) Explain Decision Tree.
   (2) Explain Structured English.
(d) Answer any one: 5
   (1) Explain Data Flow Diagram.
   (2) Explain interview fact finding technique.

3 (a) Answer the following: 4
   (1) In _____ coding technique, code place separate entities, such as events, people or objects into distinct groups called classes.
   (2) In _____ coding technique, codes are either number or letters assigned in series.
   (3) List types of Output.
   (4) List types of designing printed output.
(b) Answer any one in brief: 2
   (1) What are the objectives of Output Design?
   (2) What are the objectives of Input Design?
(c) Answer any one in detail: 3
   (1) Explain types of presenting Information.
   (2) Explain methods of Data capture.
(d) Answer any one: 5
   (1) How to design a source document?
   (2) What is coding technique? List and explain any two coding techniques.

4 (a) Answer the following: 4
   (1) Give full form of HIPO.
   (2) _____ refers to the strength of the relationship between modules in a system.
   (3) Strength of relationship within a module is known as _____.
   (4) The _____ data model relates entities by superior/ subordinate or parent/child relationship.

(b) Answer any one in brief: 2
(1) What is data model?
(2) What is modularity and partition?

(c) Answer any one in detail: 3
(1) Explain structured flowcharts.
(2) Explain System development in a database environment.

(d) Answer any one: 5
(1) Write a note on HIPO.
(2) Explain Hierarchical and Network data model.

5 (a) Answer the following: 4
(1) What is Unit testing?
(2) _____ is a level of the software testing where complete and integrated software is tested.
(3) _____ testing is the system testing performed by the customer to determine whether to accept the delivery of the system.
(4) _____ testing is the system testing performed by a select group of friendly customers.

(b) Answer any one in brief: 2
(1) Describe peak load test.
(2) Describe storage test.

(c) Answer any one in detail: 3
(1) Explain recovery test.
(2) Explain Pilot approach of system implementation method.

(d) Answer any one: 5
(1) Explain Parallel and direct cut-over method.
(2) What is training? Explain training methods.

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