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10 / X / H

2010

Time : 3 hours

Full Marks : 80

*Candidates are required to give their answers in
their own words as far as practicable.*

The figures in the margin indicate full marks.

Answer from both the Groups as directed.

Group – A

(Compulsory)

1. Choose the correct answer of the following :

2×10 = 20

(a) Errors occur more often when :

- (i) Data is entered by user
- (ii) Data is entered by operators
- (iii) When data is handwritten by users and
entered by an operator
- (iv) The key board design is bad

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(Turn over)

(b) A test in which modules are tested independently is known as :

- (i) Unit Testing
- (ii) Integration Testing
- (iii) Maintenance
- (iv) Overview

(c) By metadata we mean :

- (i) Very large data
- (ii) Data about data
- (iii) Data dictionary
- (iv) Meaningful data

(d) DFD (Data Flow Diagram) shows :

- (i) Data Flow
- (ii) Control Flow
- (iii) Information access
- (iv) Processing

(e) Branches in decision tree represent :

- (i) Condition
- (ii) Situation
- (iii) Analysis
- (iv) Design

(f) A data dictionary has consolidated list of data contained in :

- (i) Data flows
- (ii) Data stores
- (iii) Data outputs
- (iv) Processes

(g) System test plan is specified :

- (i) When the final specifications are drawn up
- (ii) During feasibility study
- (iii) During the requirements specifications stage
- (iv) During system study stage

(h) Initial requirements specification is :

- (i) Not changed till the end of the project
- (ii) Continuously changed during project implementation
- (iii) Only a rough indication of the requirement
- (iv) Changed and finalized after feasibility study

- (i) Requirement specification is carried out :
- (i) After requirements are determined
 - (ii) Before requirements are determined
 - (iii) Simultaneously with requirements determination
 - (iv) Independent of requirements determination
- (j) Which step of SDLC performs cost / benefit analysis ?
- (i) Feasibility Study
 - (ii) Analysis
 - (iii) Design
 - (iv) None of the above

Group – B

Answer any **four** questions : 15×4 = 60

2. Describe the type of system. What are the characteristics of a system ? What are the elements of system ? Explain in detail.
3. Discuss the concept of MIS and DSS. How they are related and different ?

4. What do you mean by SDLC ? Describe the different phases of SDLC.
5. Define the various tools of structured analysis. How is DFD different from flow chart ?
6. Differentiate between Unit Testing and Program Testing.
7. Discuss Sequential and Index – Sequential file organization. Also, explain advantages and disadvantages of both file organizations.
8. Write short notes on any **five** of the following :
 - (a) Decision Tree
 - (b) Decision Table
 - (c) Structured English
 - (d) Modular Coupling
 - (e) Quality Assurance
 - (f) Data Dictionary
9. What do you mean by feasibility study ? Define various types of feasibility study.
10. What is Testing ? Explain various types of Testing in detail.