2011

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

(Objective Type Questions)

Answer all questions.

1. Choose the correct answer of the following :

   \[2 \times 10 = 20\]

   (a) The problem statement should include all of the following EXCEPT :

   (i) Input
   (ii) Output

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(Turn over)
(iii) Processing
(iv) Storage

(b) It is necessary to carefully design data input to a computer based system because:
   (i) It is good to be careful
   (ii) The volume of handled data is large
   (iii) The volume of handled data is small
   (iv) Data entry operators are not good

(c) How many steps are in the System Development Life Cycle (SDLC)?
   (i) 4
   (ii) 5
   (iii) 6
   (iv) 10

(d) Most modern software applications enable you to customize and automate various features using small custom-built "miniprograms" called:
   (i) Macros
   (ii) Codes

JX – 23/3  (2)  Contd.
(iii) Routines

(iv) Subroutines

(e) How many steps are in the Program Development Life Cycle (PDLC)?

(i) 4
(ii) 5
(iii) 6
(iv) 10

(f) Actual programming of software code is done during the _____ step in the SDLC.

(i) Maintenance and Evaluation
(ii) Design
(iii) Analysis
(iv) Development and Documentation

(g) The _____ determines whether the project should go.

(i) Feasibility assessment
(ii) Opportunity identification
(iii) System evaluation
(iv) Program specification

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(h) Technical writers generally provide the ______ for the new system.
   (i) Programs
   (ii) Network
   (iii) Analysis
   (iv) Documentation

(i) ______ spend most of their time in the beginning stages of the SDLC, talking with end-users, gathering information, documenting system and proposing solutions.
   (i) System analysts
   (ii) Project managers
   (iii) Network engineers
   (iv) Database administrators

(j) A data element in a data flow:
   (i) May be an integer
   (ii) May be a real number
   (iii) May be a binary
   (iv) May be imaginary

JX - 23/3 (4) Contd.
Group – B

(Long-answer Type Questions)

Answer any four questions:  $15 \times 4 = 60$

2. Explain the role of system analyst. The system analyst is known as “An agent of change”, why? Discuss the concept of MIS and DSS. How they are related and differ?

3. What do you mean by SDLC? Describe the different phases of SDLC?

4. What is cost and benefit analysis? Explain the procedure of benefit/cost determination.

5. “Testing is vital to the success of the system.” Discuss.

6. What is a model? Describe the difference between the logical model and physical model. Why the data modelling is required? Discuss the usefulness of ER diagrams to represent data modelling.

JX – 23/3 (5) (Turn over)
7. Define the terms economic feasibility, technical feasibility, operational feasibility and schedule feasibility.

8. Why computer security audit is necessary?

9. Write short notes on the following:
   (a) Management Information System (MIS)
   (b) System users
   (c) Data flow diagrams
   (d) ER diagrams

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