Bachelor in Information Technology (BIT)

Term-End Examination

December, 2007

CSI-02 : SYSTEMS ANALYSIS

Time : 3 Hours *Maximum Marks : 75*

Note : *Section A is **compulsory**. Questions 1 to 10 of Section A carry one mark each. Questions 11 to 14 carry 5 marks each. Answer any **three** questions from Section B. Each question of Section B carries 15 marks.*

SECTION A

1. _____ is a software engineering task that bridges the gap between system level requirements engineering and software design. *1*

(a) Coding
(b) Testing
(c) Maintenance
(d) Requirements Analysis

2. Software is built to process *1*

(a) data
(b) only programs
(c) anything
(d) 'C' language programs only

3. _____ represents the manner in which data and control change as each moves through a system. *1*

(a) Arrows
(b) Data flow
(c) Information flow
(d) Labels

4. _____ represents the internal organization of various data and control items. *1*

(a) Boxes
(b) Information structure
(c) Data flow
(d) Information flow

5. The _____ is the first technical representation of a system.

(a) Design model
(b) Analysis model
(c) Documentation
(d) Meta-data

6. _____ answers a set of specific questions that are relevant to any data processing application. 1

(a) Functional modeling
(b) Data modeling
(c) Any modeling
(d) Flow charts

7. _____ define(s) the properties of a data object. 1

(a) Table
(b) Attributes
(c) Variable
(d) Constant

8. The design should be traceable to the _____ model. 1

(a) Functional
(b) Data
(c) Analysis
(d) None of the above

9. _____ is a representation of the logical relationship among individual elements of data. 1

(a) Data structure
(b) Any software
(c) Flow chart
(d) DFD

10. _____ is a measure of interconnection among modules in a software structure. 1

(a) Cohesion

(b) Coupling

(c) Lines of code

(d) Size

11. Give any five examples of software development projects which are suitable to be developed using Spiral model. Justify your answer. 5

12. Draw an E – R diagram for a *Railway Reservation System*. Make assumptions wherever necessary. 5

13. Write at least two reasons why one activity should precede another activity before the second activity can begin. 5

14. Explain any two errors that may occur during Requirements analysis phase of a project. 5

SECTION B

*Answer any **three** of the following questions. Each question carries 15 marks.*

15. Draw detailed (at least upto 3 levels) Data Flow Diagrams for various processes involved in a *Pay-roll Processing System*. Make necessary assumptions. *15*

16. Write the problem definition of a software project which is amenable for development, using Spiral model. Justify your answer. *15*

17. Explain any five attributes of a Systems Analyst. *15*

18. Why do Systems Analysts use DFDs ? Write any three rules for drawing proper DFDs. *15*