

Roll No. ....

**97668**

**B.C.A. 2nd Semester**

**Examination-May, 2015**

**Structured System Analysis and Design**

**Paper-BCA-109**

**Time : 3 hours**

**Max. Marks : 80**

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Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

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**Note :** Attempt **five** questions in all. Question No. 1 is **compulsory** and attempt **four** more questions by selecting **one** question from each unit. All questions carry equal marks.

1. Answer the following questions:

(a) What is system planning?

(b) Differentiate between physical and abstract-system.

- (c) What do you mean by structured analysis?
- (d) Write the advantages of DFD.
- (e) List various input devices for feeding the raw data into the system.
- (f) List four guidelines for good form design.
- (g) Define alpha and beta testing.
- (h) What is audit trail?

### **Unit-I**

- 2. (a) What are the elements of a system? Explain in detail.
- (b) What are the multifaceted roles of a system analyst? Explain.
- 3. (a) Explain the following categories of information system:
  - (i) Transaction processing system
  - (ii) Decision support system

- (b) What fact finding techniques would you use for investigating the information requirements of a large organization?

### **Unit-II**

4. Explain data dictionary, decision tree, decision table and structured flowchart with example and suitable diagrams.
5. (a) Write short notes on the following:
- (i) Feasibility report
  - (ii) Oral presentation
- (b) "Since cost plays quite an important role in deciding the new system, it must be identified and estimated properly". With respect to this statement, explain the cost/benefit analysis and its classification.

### **Unit-III**

6. (a) What are the different types of system designs? Explain each with the help of an example.

- (b) What is modularization? Also explain the concept of coupling and cohesion.
7. (a) Explain the various approaches for online data entry.
- (b) What are the requirements of form design? Describe the layout consideration in form design.

#### **Unit-IV**

8. (a) Explain the various levels of testing. What types of fault are detected at each level?
- (b) Explain various types of system maintenance.
9. (a) What levels of quality assurance must a system meet? Explain.
- (b) Write short notes on the following:
- (i) Test plan
  - (ii) System implementation