BCA-304

B.C.A. (Third Year) EXAMINATION, 2018

SYSTEMS ANALYSIS AND DESIGN

Paper IV

Time allowed : Three Hours

Maximum Marks : 100

Part A (खण्ड 'अ')   [Marks : 20]

Answer all questions (50 words each).

All questions carry equal marks.

सभी प्रश्न अनिवार्य हैं । प्रत्येक प्रश्न का उत्तर 50 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

Part B (खण्ड 'ब')   [Marks : 50]

Answer five questions (250 words each),

selecting one question from each Unit.

All questions carry equal marks.

प्रत्येक इकाई से एक प्रश्न चुनते हुए कुल पाँच प्रश्न कीजिए । प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

Part C (खण्ड 'स')   [Marks : 30]

Answer any two questions (300 words each).

All questions carry equal marks.

कोई दो प्रश्न कीजिए । प्रत्येक प्रश्न का उत्तर 300 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

P.T.O.

Part A

Unit I

1.   (i)   Define Subsystem.

(ii)   What are the basic types of system ?

Unit II

(iii)   Define Linear Approach.

(iv)   What are the various phases of SDLC ?

Unit III

(v)   Define Decision Table.

(vi)   Differentiate between cohesion and coupling.

Unit IV

(vii)   Define Quality Assurance.

(viii)   What is the purpose of Project Scheduling ?

Unit V

(ix)   What is system security ?

(x)   Explain the purpose of Disaster Recovery Management.

Part B

Unit I

2.   What are the different elements of system ? Explain.

3. Write short notes on :

(a) Black Box System

(b) Abstract System.

Unit II

4. A system analyst is a change agent, motivator, an organizer, an architect and an intelligent sales person. Elucidate.

5. What are the limitations of SDLC ?

Unit III

6. (a) Explain the primary steps of interviewing. In what respect is interviewing an art ? Explain.

(b) What is a questionnaire ? Explain different types of questions used in a questionnaire.

7. Define File Organization and its various methods.

Unit IV

8. (a) The first step in System testing is to layout a test plan. Outline the activities that represents a test plan.

(b) What is the need of system testing ? Explain any *five* testing techniques and their basic objectives.

9. What is Quality assurance ? Briefly describe the factors that affect the quality of the system.

Unit V

10. What are the threats to system security ? Give an overview of Disaster/Recovery planning. How can system be protected from intruders ?

11. Write in brief about Ethics in system development.

Part C

12. Define System. What are the various types of systems ? Explain.

13. What are the various phases of SDLC ? Explain each phase with an example.

14. Draw a detailed DFD for Hospital Management.

15. (a) What is System implementation ? How does it differ from system conversion ?

    (b) Explain different types of software maintenance.

16. Write short notes on the following :

    (a) Hardware and Software selection

    (b) Disaster recovery management

    (c) Project Management.