[70]

SARDAR PATEL UNIVERSITY
External Examination (CBCS) (NC)
B. Sc. - Vth Semester (Computer Science)
US05CCSC05 : System Analysis and Design
13th April, Friday-2018

Time : 02:00 pm to 05:00 pm

Total Marks :70

Q-1 Select an appropriate option. 10

1. The inter connections and interactions between the subsystems are termed as _____.
   (a) Interactions   (b) Interfaces   (c) Interval   (d) None of these

2. _____ is defined as the energizing or start-up components on which the system operates.
   (a) Input   (b) output   (c) both (a) & (b)   (d) None of above

3. The inputs and outputs of subsystem are known but not the actual transformation from one to the other is called _____.
   (a) Boundary   (b) Subsystem   (c) Interface   (d) Black box

4. The first step in SSADM is _____.
   (a) System survey   (b) Structured design
   (c) Maintenance   (d) Structured analysis

5. A _____ is an organized step by step tracing through of a design by a group of people.
   (a) Structure Walk Through   (b) Structured Walk talking
   (c) Structure Walking   (d) None of above

6. _____ involves the purchase of hardware, packaged software and software services.
   (a) Conversion   (b) Testing   (c) System Acquisition   (d) Programming

7. _____ is not the fact finding technique _____
   (a) Interviewing   (b) Questionnaires
   (c) Record inspection   (d) Data input

8. In _____, the data moves from the point of origin to the data processing centre.
   (a) Data Transmission   (b) Data Recording
   (c) Data Compression   (d) Data hiding

9. DFD stands for_____.
   (a) Data Flow Diagram   (b) Database Flow Diagram
   (c) Data Flow Design   (d) None of above

10. The DFDs that shows "What is going on" is known as _____DFDs.
    (a) Physical   (b) Logical   (c) Physiological   (d)None

C.P.T.O.)

Q-2 Answer the following questions. (Attempt any **TEN**)   20
1. Define System.
2. Draw the model of Business System.
3. Draw diagram of SDLC which shows all the steps of SDLC.
4. List different stages of SSADM.
5. Explain Maintenance.
6. What is Quality Costs and Benefits? Explain.
7. List the types of output.
8. Define Data Transmission and Sorting.
9. When Questionnaires are useful?
10. Explain any two weakness of CASE.
11. Draw the context level diagram for Railway Reservation System.
12. What do you mean by CASE Tools?

Q-3
(a) List and explain the characteristics of the System.   5
(b) Write short note on Problem Identification for the SDLC method.   5

OR

Q-3
(a) Discuss in brief the major System Concepts.   5
(b) Explain in detail the role of a System Analyst.   5

Q-4
(a) List and explain the limitations of SDLC.   5
(b) Explain Structured Design in brief   5
OR

Q-4
(a) List and explain the advantages of SSADM.   5
(b) Write short note on constructing the System and Implementation stage in   5
SSADM.

Q-5
(a) What is Data Capture? List and explain basic steps of Data Capture.   5
(b) Write note on Interviewing fact gathering technique.   5

OR

Q-5
(a) Why fact gathering techniques are used? Write brief note on Observation   5
technique.
(b) Explain design principles of output.   5

Q-6 Discuss: (i) CASE components (ii) Benefits of CASE   10

OR

Q-6 What is DFDs? Differentiate between Physical and Logical DFDs. List the   10
symbols used in DFDs and also the rules of constructing a DFD.

————X————