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Seat No : \_\_\_\_\_

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Sardar Patel University  
External Examination

B. Sc. 5<sup>th</sup> Semester (Information & Technology)

US05CINT05 : System Analysis Design & Software Engineering

Wednesday, 20<sup>th</sup> November - 2019

Time : 10:00 am to 01:00 pm

Total Marks : 70

**Q.1 Select the correct answer for the following.**

10

1. \_\_\_\_\_ is defined as the activity that makes possible the transformation of input to output.  
(a) Input            (b) Process            (c) Output            (d) Goal
2. A subsystem at the lowest level is often not defined as to the process is termed as \_\_\_\_\_.  
(a) Boundary        (b) Subsystem        (c) Black box        (d) Interface
3. \_\_\_\_\_ system is an example of natural system.  
(a) Solar        (b) Computer        (c) Business Organization        (d) Education
4. The third step of SDLC is \_\_\_\_\_.  
(a) Problem Identification            (b) System Requirement Analysis  
(c) Implementation            (d) Evaluation of System
5. \_\_\_\_\_ means reports have many errors.  
(a) Problem of Accuracy            (b) Problem of Validity  
(c) Problem of Timeliness            (d) Problem of Capacity
6. Which of the following is not a component of system implementation?  
(a) Programming        (b) Testing        (c) Designing        (d) Conversion
7. \_\_\_\_\_ is considered as an input of the Configuring Hardware Study.  
(a) Physical Requirement            (b) Hardware  
(c) Packed Design            (d) Test Plan
8. \_\_\_\_\_ documentation describe the overall system design.  
(a) Design            (b) Program            (c) Training            (d) User Interface
9. \_\_\_\_\_ model reduce the first two limitations of Waterfall model.  
(a) Spiral            (b) Waterfall            (c) Prototype            (d) None of these
10. \_\_\_\_\_ part requires major efforts.  
(a) Testing            (b) Coding            (c) Design            (d) Maintenance

**Q.2 Answer in short. (Attempt any TEN)**

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1. List the basic components of education system.
2. Draw the general model of a system.
3. Define :- Boundary and Environment.
4. List stages of system design.
5. Write difference between open and close system.

(1)

(P.T.O)

6. List methods of feasibility study.
  7. List all methodology of SSADM.
  8. Explain hardware study.
  9. Explain system survey.
  10. Explain error distribution.
  11. List down characteristics of software process.
  12. Explain advantages of spiral model.
- Q.3** [a] What is System? Explain Characteristics of System. 5  
 [b] Who is system analyst? Explain role of system analyst. 5
- OR**
- Q.3** [a] Explain General Model of System with example. 5  
 [b] Define Subsystem. Explain subsystem and interface of computer system. 5
- Q.4** [a] Explain evaluation of the system. 5  
 [b] Explain Problem Identification & Feasibility study. 5
- OR**
- Q.4** [a] Explain system design specification and programming. 5  
 [b] Write difference between System Analysis and System Design. 5
- Q.5** [a] Explain structure analysis of SSADM. 5  
 [b] Write short note on documentation. 5
- OR**
- Q.5** [a] Explain need for structured analysis and design. 5  
 [b] Write difference between one time cost and recurring cost. 5
- Q.6** [a] What is Software engineering? Explain characteristics of software process. 5  
 [b] Explain prototype model. 5
- OR**
- Q.6** Explain Waterfall model in detail. Also write limitations of Waterfall model. 10

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