

**DIPLOMA – VIEP – COMPUTER SCIENCE AND
ENGINEERING (DCSVI)**

Term-End Examination

00534

December, 2017

BICS-032 : SYSTEM ANALYSIS AND DESIGN

Time : 2 hours

Maximum Marks : 70

Note : *Question no. 1 is compulsory. Attempt any four questions from the rest. All questions carry equal marks.*

1. Choose the correct answer for the following multiple choice questions : $7 \times 2 = 14$
- (a) The _____ determines whether the project should go forward.
- (i) System Evaluation
 - (ii) Feasibility Analysis
 - (iii) Project Specification
 - (iv) System Requirements
- (b) CASE stands for
- (i) Computer Aided System Evaluation
 - (ii) Computer Area Social Environment
 - (iii) Computer Analysis System Engineering
 - (iv) Computer Aided Software Engineering

- (c) ER stands for
 - (i) Entity Ready
 - (ii) Entity Relationship
 - (iii) Entry Relationship
 - (iv) Entity Read
- (d) A graph of instances that are compatible with a given class diagram is called a/an
 - (i) Class diagram
 - (ii) State diagram
 - (iii) Component diagram
 - (iv) Object diagram
- (e) The implementation of an operation is a
 - (i) Task
 - (ii) Job
 - (iii) Method
 - (iv) Constructor
- (f) Dividing a system into chunks or modules of a relatively uniform size is called
 - (i) Coupling
 - (ii) Prototype
 - (iii) Process
 - (iv) Modularity
- (g) The extent to which subsystems depend on each other is called
 - (i) Analysis
 - (ii) Cohesion
 - (iii) Coupling
 - (iv) Design

2. (a) Explain the key difference between process oriented and data oriented approaches to system development. 7
- (b) Explain the difference between data, data flow and processing logic with examples. 7
3. (a) Explain the characteristics and elements of a system. 7
- (b) Draw and explain the systems development life cycle. 7
4. (a) Differentiate between Traditional system development and CASE based development. 6
- (b) What is SRS ? Explain the properties of good SRS. 8
5. (a) Explain E-R diagram with suitable example. 7
- (b) What is Software Maintenance ? Explain the difference between corrective and adaptive maintenance. 7
6. (a) Describe the activities in use case modelling in the development life cycle with an example diagram. 7
- (b) Describe the concepts and principles underlying in the object oriented approach. 7

7. (a) What is a Systems Analyst ? What are the different skills required for a systems analyst ? 10
- (b) Explain the types of software maintenance. 4
8. Explain any *two* of the following with suitable examples : 2×7=14
- (a) Class Diagram
- (b) DFD
- (c) Four Pillars of RAD
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