

- (b) Discuss the role of Normalization in database design. Explain various stages of Normalization in detail. [7]

#### UNIT-IV

8. (a) Explain the Architecture of CASE Environment using an elaborate diagram. [7]
- (b) What do you understand by software quality assurance ? Explain the activities conducted by SQA group. [8]
9. Write short notes on : [5x3=15]
- (a) Generalization and Specialization
- (b) Concepts of Object Oriented Programming.
- (c) Object Oriented Database

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## Question Paper Code : 6497

B.C.A. (Semester-VI) Examination, 2018

( New Syllabus )

### INFORMATION SYSTEM ANALYSIS DESIGN & IMPLEMENTATION

[ Second Paper ]

Time : Three Hours]

[Maximum Marks : 100

**Note :** Answer **five** questions in all. Question **No.1** is **compulsory**. Besides this, **one** question is to be attempted from each Unit.

1. Answer all questions in brief : [4x10=40]
- (a) Explain Information System and its types of brief.
- (b) Differentiate between the logical design and physical design of a system.
- (c) Discuss the role of information gathering techniques in system development.
- (d) What are CASE tools ? Discuss their significance in SDLC.

- (e) What are software markets ?
- (f) Discuss the importance and working of decision tables in system Analysis.
- (g) Discuss the role of CMM in software quality assurance.
- (h) Discuss the various metrics used in size estimation of a project.
- (i) Define software reliability. How does it affect the quality of a software ?
- (j) What do you understand by OOAD ?

#### UNIT-I

- 2. (a) Explain waterfall model of SDLC using a neat diagram. [8]
- (b) Explain the role of feasibility analysis in SDLC. Discuss its types in brief. [7]
- 3. (a) Discuss various information gathering techniques in detail. [8]
- (b) What is the significance of System Design ? Enlist the features of a good system design. [7]

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#### UNIT-II

- 4. (a) Discuss the role of Data Modelling, Function Modelling and Behavioural Modelling in System Analysis with suitable examples. [8]
- (b) Classify the projects into various categories according to COCOMO model-I. Also explain the features of each. [7]
- 5. (a) Differentiate between System Analysis and System Design. [7]
- (b) Explain the Entity Relationship Diagram along with all possible notation used in it. Also define cardinality and modality of a relationship. [8]

#### UNIT-III

- 6. (a) Explain Functional Independence of a system. How it is implemented ? [8]
- (b) What is a file ? Discuss different types of files used in any system. [7]
- 7. (a) Discuss the importance of Documentation in software development. Explain various categories of software documentation. [8]

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[P.T.O.]