Unit IV

7. Explain top-down and bottom-up integration testing strategies.

8. Write notes on the following :

(a) Software Maintenance Characteristics

(b) Validation Testing.

E-211

B.C.A. EXAMINATION, May 2017

(Fifth Semester)

(B. Scheme) (Re-appear Only)

BCA-301-B

PRINCIPLES OF SOFTWARE ENGINEERING

Time : 3 *Hours*] [*Maximum Marks :* 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. Answer to the pont. Ensure that you have been supplied correct and complet question-paper, no complaint in this regard will be entertained after the completion of examination.

Unit I

1. Explain the Water-Fall Model for software development. Also list its advantages and disadvantages.

2. Explain software risk management in detail.

Unit II

3. Suppose the following requirements are given for a simple database for the National Hockey League (NHL) :

- The NHL has many items;
- Each team has a name, a city, a coach, a captain, and a set of players,
- Each player belongs to only one team,
- Each player has a name, apposition, (such as left wing or goalie), a skill level and a set of injury records
- A team captain is also a player,
- A game is played between two teams (referred to as host_team and guest_team) and has a date

(such as May 11th, 1999) and a score (such as 4 to 2.

Construct the ER diagram for the NHL database taking the suitable assumptions.

4. Write notes on the following :

(a) Classification of Cohesion

(b) Classification of Coupling.

Unit III

5. Consider a simple program to classify a triangle. Its inputs is a triple of positive integers (say x, y, z) and the date type for input parameters ensures that these will be integers greater than 0 and less than or equal to 100. The program output may be one of the following words : [Scalene, Isosceles, Equilateral, Not a triangle] Design the boundary value test cases.

6. Explain loop testing with the help of suitable example.