Reg. No.										

MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

V SEMESTER B.TECH. (CSE) DEGREE
MAKEUP EXAMINATION-DEC 2018
SUBJECT: SOFTWARE ENGINEERING[CSE 3104]
REVISED CREDIT SYSTEM
(26/ 12 /2018)

Time: 3 Hours MAX. MARKS: 50

Instructions to Candidates:

- Answer **ALL** the questions.
- Missing data may be suitably assumed.

1A.	What are short term memories and long term memories? How do you use software engineering mechanisms, to overcome, the limitations?	3M
1B.	What is the significance of Incremental SDLC model? With a neat sketch, explain the incremental delivery process of a software project?	**3M**
1C.	Write four problems that an organization face without developing an SRS document. Write the three important parts of the SRS document. The functional requirements part discusses the functionalities required from the system and the system is considered to perform a set of high-level functions, write the diagram to show a view of a system performing a set of functions.	4M
2A.	With a neat flow diagram, explain the requirement process in achieving the SRS document. Explain the requirements gathering activities with respect to SRS document?	**4M**
2B.	Mention few plans, which should not be a part of the SRS document?	**3M**
2C.	Explain the different stages in software design with suitable illustrations?	**3M**
3A.	With the help of suitable examples briefly, explain the following use case diagram relationships. (i) Association (ii) Generalization (iii)include (iv)extend	4M
3B.	Distinguish between the following. (i) Activity diagram and State chart diagram (ii) Sequence diagram and Collaboration diagram (ii) Activity diagram and flowchart	3M

3C. Briefly explain the three types of User Interfaces. 3M

4A. What are the different types of software documentation? Explain with an example for each. 2M

4B. Discuss the four approaches that are adapted by the programmers for debugging. 4M

4C. 5C. Draw the control flow graph for the following code snippet and calculate the cyclomatic complexity for the same using all the three methods suggested by McCabe: 4M

```
1  void insert(int a[ ], int p[ ], int N){
2     int i, j, k;
3     for(i=0; i<=N: i++)
4        p[ i ]= i;
5     for(i=2; i<=N; i++) {
6        k=p[ i ];
7        j=i;
8        while(a[ p [ j -1 ] ]  >  a[ k ]){
9           p[ j ] = p [ j – 1];
10          j--;
11       }
12       p[ j ] = k;
13    }
14 }
```

5A. Briefly explain the working of three COCOMO Models. Differentiate between the three COCOMO Models. 5M

5B. Explain the three types of team structures with the help of relevant diagrams. 3M

5C. Write grant chart representation of the MIS problem and justify its relevance in the scheduling of events of MIS. 2M

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