BCA Fifth Semester Examination, Dec. – 2019
FOURTH PAPER
Software Engineering
Paper Code:-42504

Time Allowed: Three Hours   **Maximum Marks: 70**

(1) No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(2)All the parts of one question should be answered at one place in the answer book.

*(*Attempt all six questions.*)*

Part I (Question No. 1& 2) is compulsory & Part II (Question No. 3, 4 , 5 & 6) has internal choice.

Part-I

1. **Answer any 10 questions. Each question carries 1 mark.**   **10x1= 10**
    (Words limit up to 20 words each)
    a)   What is Data Dictionary ?

    b)   Explain Software Metrics.

    c)   List the characteristics of good SRS.

    d)   Define Fourth Generation Techniques in Software.

    e)   Write the advantages of LOC based cost estimation.

    f)   Define Software Prototyping.

    g)   What are the goals of Software Designing?

    h)   Define Abstraction.

    i)   Write the importance of Software Architecture.

    j)   Differentiate White – Box & Black – Box Testing.

    k)   Define System Testing.

    l)   What is Test Case? Give one example for test case.

2. **Answer all the questions. Each question carries 5 marks.**   **4x5 = 20**
    (Words limit up to 50 words each)
    a)   Explain IEEE structure of SRS.

    b)   Write the pros and cons of COCOMO Model.

    c)   How do object oriented design and structured design differ?

    d)   What is Integration Testing? How is it different from System Testing?

Part-II
Unit-I

3. What is SDLC ? Discuss details of documentation of each phase in SDLC. **10**

OR

Design a system for an Insurance company. Draw DFD's for the system and also prepare the SRS document for the same. Clearly mention the assumption made if any. **10**

Unit-II

4. Explain Project Planning. Also describe Size Estimation & Cost Estimation with example. **10**

OR

Why Project Planning is required for Software? What are various decomposition techniques? **10**

Unit-III

5. What is an Object Oriented Design? Discuss its advantages in developing a software system. **10**

OR

What is the use of Software Design? Explain various coupling & cohesion methods used in software design. **10**

Unit-IV

6. What is Software Testing? Discuss various strategies & testing techniques. **10**

OR

Write short notes on : **10**
a) Validation and Verification
b) Fault finding techniques

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