NEW

2018

BCA

4th Semester Examination

SOFTWARE ENGINEERING

PAPER—2204

Full Marks : 100

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer any *five* questions.　　　　5×14

1. (a) What is software crisis ?

   (b) What is the difference between logical and physical DFD ?

(c) What is prototype? What is the advantage of constructing a prototype before developing the actual model?

(d) Write down the major phases in the spiral model of software development with explanation.   2+2+5+5

2. (a) What is ER diagram? Discuss its usage in data modeling?

(b) What is DFD? What are the symbols used in DFD? How is it different from ER diagram?   6+8

3. (a) Explain the various levels of software testing.

(b) Distinguish white box and black box testing.

(c) What is coupling? Is it true that in a good design, the modules should have low coupling?

(d) Describe the various types of cohesion that a module might exhibit.

4. (a) What is SRS? Write down the characteristics of SRS.

(b) What do you mean by risk in software development? Mention some common risk associated with software development.

(Continued)

(c) Differentiate between unit testing and system testing.   5+5+4

5. (a) Draw a DFD for a Library automation system.

(b) Explain the role of Data Dictionary. Construct the Data Dictionary for the above DFD.   8+6

6. (a) What are the differences between iterative and classical waterfall model ?

(b) Discuss on different COCOMO models.   4+10

7. Write short notes on :

(a) Software configuration management

(b) Write Box test

(c) Quality Standards   4+5+5

[Internal Assessment — 30 Marks]

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