3 SEM BCA (CBCS) SE 3·3

2024

(December)

COMPUTER APPLICATION

Paper : 3·3

(Software Engineering)

Full Marks : 60

Time : Three hours

The figures in the margin indicate full marks for the questions.

1. Answer the following questions : 1×10=10

   (a) Define Software Engineering.

   (b) Define Organic Project.

   (c) What is a Decision Tree?

   (d) What is fan-out?

   (e) Write *one* Coding Standard.

   (f) What is Verification ?

   (g) Define Unit Testing.

(h) What is the difference between fault and error ?

(i) What is adaptive maintenance ?

(j) Define Beta Testing.

2. Answer the following questions : 3×10=30

(a) What are the key differences between black-box testing and white-box testing, and in what scenarios would each type be most effective ?

(b) What is software myth in software engineering ? Explain different types of it.

(c) Write the advantages of Function Point Metric over LOC.

(d) Write the characteristics of good software.

(e) Define software process. State the important features of a process.

(f) Differentiate between Code Walk through and Code inspection.

(g) Differentiate verification and validation.

(h) What is known as SRS review ? How is it conducted ?

(i) What is Requirement, Technical and User documentation ?

(j) What is reverse engineering ?

3. Describe the Spiral Model, its advantages, disadvantages with proper diagram.   10

Or

What is dynamic testing ? Explain the characteristic of Dynamic Testing. Why do we need to perform Dynamic Testing ?

4. Describe the basic COCOMO model with Person-Month curve.   8+2=10

Or

Explain iterative waterfall and spiral model for software life cycle and discuss various activities in each phase.

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