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Total Pages : 2

PC-4644/M

U-3/2055

SOFTWARE ENGINEERING – 324

Semester–VI

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *five* questions in all. Select at least *one* question each from the Section A, B and C. Q. No. VII of Section-D is compulsory. Each question of Section A, B and C is of 15 marks while Section-D is of 20 marks in all.

SECTION – A

I. Elaborate in detail the Waterfall model of Software development. What are its advantages and limitations ?

II. What are Software metrics ? Discuss the various types of software metrics. Differentiate between Size-oriented and Function-oriented metrics.

SECTION – B

III. What do you mean by Data Flow Diagram (DFD) ? Discuss various symbols required to draw a DFD. Explain with suitable example.

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[P.T.O.]

- IV. (a) What are the principles of good design ?
(b) Define the term Modularization. Why a system design with high cohesion and low coupling is desired ?

SECTION - C

- V. What is Coding standard ? Write down *five* important coding standards. What is meant by a Code review ? Discuss *two* approaches used for Code review.
- VI. Differentiate between Software correctness and Software reliability. Discuss how reliability changes over the life time of a software product. Why is it difficult to measure the reliability of a software product ?

SECTION - D

(Compulsory Question)

- VII. Write short answers of the following :
- (a) What are the problems in the cost estimation of software ?
- (b) Discuss the Prototyping model of Software development.
- (c) Define Cyclomatic complexity.
- (d) What are the characteristics of Software Requirement Specification ?
- (e) What are the attributes of software quality ?
- (f) What are the features of a good code ?
- (g) Differentiate between Black-box testing and White-box testing.
- (h) Differentiate between Error, Fault and Failure.