Reg. No. : | | | | | | | | | | |

Question Paper Code: 31485

B.E. / B.Tech. DEGREE EXAMINATION, NOVEMBER 2015

Fourth Semester

Information Technology

01UIT405 - OBJECT ORIENTED SOFTWARE ENGINEERING METHODOLOGIES

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Define software engineering.
2. List out the umbrella activities of a software process.
3. Difference between functional and non-functional requirements.
4. Define data dictionary.
5. List out the elements of design model.
6. Name the commonly used architectural styles.
7. What are the testing principles the software engineer must apply while performing the software testing?
8. Verification differ from validation, justify.
9. Define COCOMO model.
10. Define risk management.

PART - B (5 x 16 = 80 Marks)

11. (a) Explain the process model that couples the iterative nature of prototyping with the controlled and systematic aspects of waterfall model? (16)

Or

(b) Explain in detail about COCOMO model. (16)

12. (a) Discuss in detail the requirement engineering process. What is the major difference between user requirements and system requirements? (16)

Or

(b) Briefly explain the functional and behavioral modeling with suitable example and discuss the software's reaction to external event? (16)

13. (a) Illustrate the characteristics of good design and calculate the performance evaluation? Describe different types of coupling and cohesion. (16)

Or

(b) (i) Explain in detail about the real time systems. (8)

(ii) Explain the design steps in transaction mapping. (8)

14. (a) How is cyclomatic complexity computed? Calculate cyclomatic complexity for the program to find the greatest of three numbers? (16)

Or

(b) Explain the integration testing. What are the steps for top-down integration and bottom-up integration? Compare and contrast top-down and bottom-up integration testing? (16)

15. (a) (i) Explain in detail about software cost estimation. (8)

(ii) Write short notes on project plan and its types. (8)

Or

(b) "Software project scheduling does not differ from scheduling of any other multitask engineering projects": Discuss. (16)

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