Reg. No. :

Question Paper Code: 31236

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Third Semester

Computer Science and Engineering

01UCS306 - SOFTWARE ENGINEERING

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. What are the umbrella activities of a software process?

2. List the process maturity levels in SEIs CMM?

3. What are the various types of traceability in software engineering?

4. What are the elements of Analysis model?

5. What are the common activities in design process?

6. What is interface design? What is user interface design?

7. What are the common approaches in debugging?

8. How to compute the cyclomatic complexity?

9. What are the metrics computed during error tracking activity?

10. What is meant by software project scheduling?

PART - B (5 x 16 = 80 Marks)

11. (a) Discuss system engineering hierarchy and briefly explain each level in the hierarchy. (16)

Or

    (b) (i) What are the umbrella activities of a software process. (10)

       (ii) Which process model is best suited for risk management? State the advantages and disadvantages of the model. (6)

12. (a) What is Requirement Engineering? State its process and explain requirement elicitation problem. (16)

Or

    (b) Examine how a perfect prototyping approach can be selected by identifying the merits and demerits of each approach. (16)

13. (a) Enumerate data design concepts and principles in detail. (16)

Or

    (b) What is transform mapping? Explain about various design steps of transform mapping. Illustrate transform mapping with an example. (16)

14. (a) Explain about basis path testing and loop testing with suitable example. (16)

Or

    (b) How integration testing can be performed? Explain the different approaches to conduct integration testing. (16)

15. (a) Discuss about various steps involved in project planning. (16)

Or

    (b) (i) Explain about Tracking the schedule. (8)

       (ii) Explain in detail about Timeline charts. (8)

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