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Question Paper Code: 33206

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

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. Give the difference between alpha and beta testing.
9. Define cyclomatic number.
10. Give the four process metrics.

PART - B (5 x 16 = 80 Marks)

11. (a) Illustrate the effort estimation using COCOMO with relevant metrics. (16)

Or

(b) With an example, illustrate the purpose and format of a timeline chart and resource table used in software project scheduling. (16)

12. (a) (i) List out the possible users of software requirements document and describe how they use it? (6)

(ii) How will you organize the information in software requirement document? Discuss in detail. (10)

Or

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

13. (a) How the design model can be viewed? Illustrate the different elements of the design model with an example. (16)

Or

(b) (i) List and describe the design steps of the transform mapping. (8)

(ii) How the interrupts are handled in real time system? Explain. (8)

14. (a) Define test case and analyze how the equivalence partitioning and boundary value analysis are defining initial test cases. (16)

Or

(b) With a neat block diagram, explain the various steps involved in the software debugging process. Also describe the various debugging strategies. (16)

15. (a) Give brief notes on:

(i) Software maintenance (8)

(ii) Task scheduling with an example (8)

Or

(b) Give the general structure of estimation models. Illustrate the COCOMO II estimation model with an example. (16)