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# **Question Paper Code: 33026**

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

# Third Semester

Computer Science and Engineering

# 01UCS306 - SOFTWARE ENGINEERING

(Regulation 2013)

Duration: Three hours

Answer ALL Questions

PART A -  $(10 \times 2 = 20 \text{ Marks})$ 

- 1. Mention the four layers of software engineering.
- 2. List the process maturity levels in SEIs CMM?
- 3. What do you meant by 'Non-Functional' requirements?
- 4. What are the elements of Analysis model?
- 5. What are the common activities in design process?
- 6. Specify any four software design quality attributes?
- 7. What are the common approaches in debugging?
- 8. How and where alpha testing is conducted?
- 9. What is RMMM?
- 10. What is meant by software project scheduling?

Maximum: 100 Marks

## PART - B ( $5 \times 16 = 80$ Marks)

11. (a) Discuss system engineering hierarchy and briefly explain each level in the hierarchy. (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) Identify the four high-level activities of requirements engineering process and describe how these activities are interleaved. (16)

#### 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) 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) With a neat block diagram, explain the various steps involved in the software debugging process. Also describe the various debugging strategies. (16)
- 15. (a) Discuss about various steps involved in project planning. (16)

## Or

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