# **Question Paper Code: 33206**

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

# Third Semester

Computer Science and Engineering

# 01UCS306 - SOFTWARE ENGINEERING

(Regulation 2013)

Duration: Three hours

Answer ALL Questions

Maximum: 100 Marks

PART A - (10 x 2 = 20 Marks)

- 1. What are the fundamental activities of a software process?
- 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 to compute the cyclomatic complexity?
- 9. What is RMMM?
- 10. What is meant by software project scheduling?

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

11. (a) Discuss in detail about any two evolutionary process models. (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) (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) 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) (i) What is COCOMO –II model? Explain in detail.(8)(ii) Explain about the basic principles for project scheduling.(8)
  - Or
  - (b) Give the general structure of estimation models. Illustrate the COCOMO II estimation model with an example. (16)