Reg. No. :

Question Paper Code: 31026

B.E. / B.Tech. DEGREE EXAMINATION, OCTOBER 2014.

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. Mention the four layers of software engineering.
- 2. Draw a diagram to show the relationship between effort and delivery time in project scheduling.
- 3. What do you meant by 'Non-Functional' requirements?
- 4. Identify any two requirements validation techniques.
- 5. Specify any four software design quality attributes.
- 6. What are the three golden rules to be followed for better user interface design?
- 7. Suggest any two attributes of a good test.
- 8. How and where alpha testing is conducted?
- 9. Mention any two approaches to the software sizing problem.
- 10. What is RMMM?

PART - B (5 x
$$16 = 80$$
 Marks)

11. (a) Enumerate the different specialized process models used in the software development. When will you apply the specialized process models?

(16)

- (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) Identify the four high-level activities of requirements engineering process and describe how these activities are interleaved? (16)
- 13. (a) How the design model can be viewed? Illustrate the different elements of the design model with an example. (16)

Or

- (b) Draw a component level design diagram to compute the printing cost per page based on the specifications provided by the customer. The specification includes the number of pages in the document, total number of documents to be produced, one-or-two side printings, color and size requirements. (16)
- 14. (a) How the basis path testing method enables the test case designer to derive a logical complexity measure of a procedural design? Discuss with an 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) Describe the various risk identification and risk projection techniques. Derive the formula to determine the risk exposure. (16)

Or

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