Code No: NR410501 **NR**

IV B.Tech I Semester Supplementary Examinations, November 2005
SOFTWARE ENGINEERING
(Common to Computer Science & Engineering, Information Technology and Computer Science & Systems Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. What is Computer Software? Why is it important? Explain the impact of software on our society and culture. [16]
2. Define software metrics. Why is it important and what are the steps involved? [16]
3. Discuss the use of 4GLs for prototyping. What are the kinds of applications for which this would be recommended? Justify. [16]
4. Explain the following briefly.
   (a) Alternative Analysis techniques. [8]
   (b) Requirement analysis techniques. [8]
5. What is Software Design? Explain Data Flow oriented design. [16]
6. (a) State the design principles for Object Oriented Design (OOD). [6]
   (b) Explain how Object Oriented Design methods combines elements of all three design categories i.e. data design, architectural design, and procedural design. [10]
7. Discuss about the following:
   (a) Equivalence partitioning. [5]
   (b) Boundary Value Analysis. [5]
   (c) Comparison Testing. [6]
8. (a) Why is completeness more difficult to achieve as abstraction level increases?
   (b) Why interactivity must increase if completeness is to increase?
   (c) Explain the differences between restructuring and forward engineering.[5+5+6]

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