**Code No. 2355 / N**

# FACULTY OF INFORMATICS

**B.E. 3/4 (IT) I-Semester (New) (Main) Examination, November / December 2012**

Subject : **Software Engineering**

**Time : 3 Hours** **Max. Marks: 75**

**Note:** Answer **all** questions of Part - A and answer any **five** questions from Part-B.

## PART – A (25 Marks)

| | | |
|---|---|---|
| 1. | Define the following terms :<br>(a) Engineering (b) Software Engineering | (3) |
| 2. | Differentiate the following:<br>(a) Testing and debugging<br>(b) Error and fault | (3) |
| 3. | What is a metric? Discuss its need. | (2) |
| 4. | What is a component? How is it different from object? | (3) |
| 5. | What do you mean by architectural style? | (2) |
| 6. | Define the following terms :<br>(a) software Reliability<br>(b) Software Availability | (3) |
| 7. | What is risk? Discuss why risk management is necessary? | (2) |
| 8. | List any three practitioner's myths. | (3) |
| 9. | What is SQA? | (2) |
| 10. | What is regression testing? | (2) |

## PART – B (5x10=50 Marks)

| | | |
|---|---|---|
| 11.(a) | Discuss the concept of team software process TSP) proposed by watts Humphrey. | (5) |
| (b) | List and explain the three types of requirements identified in quality function deployment (QTD) technique. | (5) |
| 12. | Discuss the concept, advantages and limitations of<br>(a) waterfall model (b) V-model | (5+5) |
| 13. | Discuss the concept of the following architectural styles:<br>(a) layered architecture (b) pipe and filter architecture | (5+5) |
| 14.(a) | What is system testing? Discuss any three types of system testing. | (5) |
| (b) | List and explain the various tasks done by SQA group. | (5) |
| 15.(a) | Explain the concept of basis path testing proposed by Tom McCabe. | (7) |
| (b) | What is equivalence partitioning? | (3) |
| 16. | Discuss the concept of COCOMO II model in detail. | (10) |
| 17. | List and explain the various metrics you suggest for small software organizations. | (10) |

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