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**Question Paper Code : 66083**

**M.E. DEGREE EXAMINATION, DECEMBER 2015/JANUARY 2016**

**Elective**

**Computer Science and Engineering**

**CP7007 : SOFTWARE REQUIREMENTS ENGINEERING**

**(Common to M.E. Computer Science and Engineering**

**(with Specialization in Networks))**

**(Regulations : 2013)**

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A (10 × 2 = 20 Marks)**

1. Define the term : Requirements Engineering.
2. What is System Engineering ?
3. How will you collect raw requirements from the customers ?
4. Define the term : Software Requirements Specification (SRS).
5. What are Quality Requirements ?
6. What is meant by Technical Feasibility ?
7. What is Requirements Consistency ?
8. What is Usability Engineering ?
9. Name few Requirements Management Tools used in IT industry.
10. What is Requirements Metrics ?

**PART – B (5 × 13 = 65 Marks)**

11. (a) What are functional and Non-functional Requirements ? Give Examples. (13)

**OR**

(b) How will you verify and validate requirements in a software project ? Illustrate with a neat diagram ? (13)

12. (a) Explain the steps involved in requirements Elicitation process. (13)

**OR**

(b) How is brainstorming used during requirements engineering process ? (13)

13. (a) With a neat diagram, Explain the significance of Business Use Case Diagram. (13)

**OR**

(b) What is Business Process Modeling ? How it reduces complexity of business processes ? (13)

14. (a) How are Quality Attributes related to Software Requirements Engineering ? (13)

**OR**

(b) How will you develop and document quality attributes of the software system to be implemented ? (13)

15. (a) What is Requirements Traceability ? How is Requirements Traceability Matrix (RTM) used in Requirements Engineering ? (13)

**OR**

(b) How will you define the scope of the software project ? Give an example choosing an application such as Banking or Insurance. (13)

**PART – C (1 × 15 = 15 Marks)**

16. (a) How will you use Class Diagram and Activity Diagram to analyze System. Requirements ? Illustrate with a neat diagram. (15)

**OR**

(b) How will you extract performance requirements and security requirements from the Software Requirements Specification (SRS) documents ? Give examples. (15)