

Code No.: IT742PE

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**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**

**IV–B.TECH–I–Semester End Examinations (Supply) - December- 2025**

**SOFTWARE METRICS AND MEASURES**

**(IT)**

**[Time: 3 Hours]**

**[Max. Marks: 70]**

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART-A**

**(20 Marks)**

1. a) What is Software Quality? [2M]
- b) Define Quality management. [2M]
- c) What is pareo diagram? [2M]
- d) What is control chart? [2M]
- e) Define Metrics for testing. [2M]
- f) What are Quality metrics? [2M]
- g) What are Availability metrics? [2M]
- h) Define Customer outage. [2M]
- i) What is Process maturity? [2M]
- j) What is face decomplexification? [2M]

**PART-B**

**(50 Marks)**

2. Explain about the concept of total quality management and summary. [10M]
- OR**
3. Demonstrate the reliability and validity in detail. [10M]
4. Discuss about the rayleigh model. [10M]
- OR**
5. Illustrate about ishikawa's seven basic tools. [10M]
6. Compare the metrics for design model and source code. [10M]
- OR**
7. Determine the quality and quality management metrics. [10M]
8. Demonstrate the way of collecting customer outage data for quality improvement. [10M]
- OR**
9. Elaborate the process of Conducting software project assessment. [10M]
10. Explain about the process of establishing the alignment principles. [10M]
- OR**
11. Explain how to measure the value of process improvement. [10M]

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