Code No.: IT742PE | R20 | H.T.No. | | | 8 | R | | | | | |

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–I–Semester End Examinations (Supply) – April - 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) Define software quality. [2M]
   b) Write the COCOMO model. [2M]
   c) What is correlation and scatter diagram? [2M]
   d) What is the 3 C's of reliability? [2M]
   e) What is the rule of cyclomatic complexity? [2M]
   f) Define quality. [2M]
   g) What is software process maturity? [2M]
   h) Define system availability. [2M]
   i) What is an example of alignment principle? [2M]
   j) Why the alignment principle of design is important? [2M]

	PART-B	**(50 Marks)**

2. Discuss the product quality metrics. [10M]
   OR
3. Describe the metrics for software maintenance. [10M]

4. Differences between the control charts and run charts. [10M]
   OR
5. Describe the pareo diagram. [10M]

6. Explain the quality and quality management metrics. [10M]
   OR
7. Discuss the cyclomatic complexity syntactic metrics. [10M]

8. Describe the software process maturity assessment. [10M]
   OR
9. Difference between audit and assessment in compliance. [10M]

10. Discuss the measuring process capability. [10M]
    OR
11. What are the common measures of process capability? Explain. [10M]

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