CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–I–Semester End Examinations (Regular) - November- 2024
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 operational.   [2M]
   b) Recall the total quality management.   [2M]
   c) Define a checklist in the context of software quality management.   [2M]
   d) Explain the purpose of a Histogram in quality analysis.   [2M]
   e) Define depth and complexity metrics for object-oriented software.   [2M]
   f) Explain the significance of quality metrics in quality management for software   [2M]
      projects.
   g) Recall how data is collected to track customer outages?   [2M]
   h) Name a method used in conducting software project assessments.   [2M]
   i) Explain the importance of aligning software processes with organizational goals. [2M]
   j) How does measuring process compliance help in process improvement?   [2M]

PART-B   (50 Marks)

2. Describe the COCOMO model and how is it used in software development?   [10M]

OR

3. How does software quality relate to total quality management? Give examples of   [10M]
   metrics program.

4. Name any three tools from Ishikawa's Seven Basic Quality Tools and explain each   [10M]
   tool.

OR

5. How does a Control Chart help in identifying variations?   [10M]

6. Describe Syntactic Metrics and their role in evaluating software.   [10M]

OR

7. Discuss the significance of quality metrics in quality management for software   [10M]
   projects.

8. Describe the methods are used for software project agreement evaluation?   [10M]

OR

9. Define and explain the main purpose of conducting an audit in a software project   [10M]
   assessment with use case?

10. Describe the process maturity and explain the process capability.   [10M]

OR

11. Describe the function point metric and explain the key steps in establishing alignment [10M]
    in software processes.

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