

SCHOOL OF INFORMATION TECHNOLOGY & ENGINEERING

Internal Exam Question Paper – June 2013

Course : M.Tech(SDM)

Subject : SDM 510 - Software Reliability and Metrics

Duration : 1 Hour & 30 Minutes Max. Marks : 50

Answer All Questions

(10 * 10 = 50 Marks)

- 1. Define fault tree. Explain the primary, secondary and top level failure events with a suitable example.
- 2. Explain in detail Goal Based Measurement (GBM) framework with a suitable example.
- 3. What is a bathtub curve? Explain why it is not applicable to software reliability based on its characteristics.
- 4. What is the need of reliability estimation? Explain the major steps in the framework of reliability centered maintenance.
- 5. Explain the concept of parallel redundancy and standby redundancy in the context of engine failure or uninterrupted power supply.