Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 08

M.Tech.(CSE)EL-I (2015 to 2017)
(Sem.–4)

SOFTWARE METRICS

Subject Code : MTCS-203
M.Code : 72887

Time : 3 Hrs. Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. **Attempt any FIVE questions out of EIGHT questions.**
2. **Each question carries TWENTY marks.**

1. A. Explain metrics for object-oriented systems in detail.

   B. How to measure software quality? Explain its models.

2. A. Briefly describe size, cost. Effort, functionality metrics.

   B. Describe how statistical methods help in analysing software-measurement data. Explain the concept of frequency distribution.

3. What are the different activities of Risk Management? How to compute the intent of risk in a software? Explain in detail.

4. A. Explain reliability growth model to manage metrics.

   B. Is it possible to estimate software size before coding? Justify your answer with suitable example.

5. A. How function point analysis methodology is applied in estimation of software size? Explain. Why FPA methodology is better than LOC methodology?

   B. Write in brief the tools and methods used in resource management.

6. A. What is risk? Is it economical to do risk management? What is the effect of this activity on the overall cost of the project?

   B. What is data structure metric? Explain in detail.

7. Explain the external product attributes. How do their measurements influence on development? Explain software reliability problem and reliability growth model.

8. Discuss the following :

   A. Empirical-investigation

   B. Modularity

   C. Extent of class usage in OO system

   D. Component based metrics