(c) Explain the following :

(i) Software reliability indicators.

(ii) Customer satisfaction metrics.

3. Attempt any **two** parts of the following : **(10×2=20)**

(a) Discuss the importance of software reliability models. Compare the Ray Leigh model with the phase based defect removal model.

(b) Describe the exponential model for software reliability.

(c) Discuss the Software Quality Assessment models. What are the criteria for model evaluation ?

4. Attempt any **two** parts of the following : **(10×2=20)**

(a) Briefly discuss the evolution of S/W Quality Assurance. What are the different SQA Activities ? Explain in brief.

(b) What do you mean by software quality planning and control ? Explain with suitable example.

(c) Write short notes on the following :

(i) Quality improvement process

(ii) Zero Defect Software,

5. Write notes any **two** of the following : **(10×2=20)**

(a) Predicting Reliability Techniques

(b) Error Seeding and Failure rate

(c) CASRE tool.

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2525 **Roll No.**

B.Tech.

(SEM. VI) EVEN THEORY EXAMINATION 2012-13

SOFTWARE RELIABILITY

Time : 3 Hours *Total Marks : 100*

Note :– (1) Attempt **ALL** questions.

(2) Make suitable assumptions wherever necessary.

1. Attempt any **two** parts of the following : **(10×2=20)**

(a) Why is software reliability so important in the area of software quality ? Explain.

(b) Since the failure intensity is proportional to the number of faults remains, why can't we just use faults for a software quality metric instead of failure intensity ? Explain.

(c) What do you mean by software review ? Discuss the different types of reviews.

2. Attempt any **two** parts of the following : **(10×2=20)**

(a) What are the different levels of software measurement ? Explain each in brief.

(b) (i) Can two different faults produce the same failure ? Explain.

(ii) Are there conditions under which the number of failures is equal to the number of faults ? Explain.