(b) Briefly highlight the difference between code inspection and code walk-through.

(c) What is stress and regression testing? When is regression testing done? Why is regression testing necessary? How is regression testing performed?

5. Attempt any two questions: 10×2=20

(a) What is software maintenance? Explain software re-engineering.

(b) Schematically draw the architecture of a CASE environment and explain how the different tools are integrated.

(c) Explain the COCOMO-II in detail. What types of categories of project are identified?

—x—

Printed Pages : 4

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281

NBC-405

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

PAPER ID :294405

Roll No.

M.C.A

(SEM-IV) EVEN SEMESTER THEORY EXAMINATION, 2014-15

SOFTWARE ENGINEERING

Time : 3 Hours] *[Total Marks : 100*

Note: (1) Attempt all questions.

(2) All questions carry equal marks.

1. Attempt any four questions: 5×4=20

(a) Suggest some ways to detect software errors in the early phases of the project when the code is not yet available.

(b) What is computer system engineering? How is it different from software engineering?

(c) What do you mean by software process? What is the difference between a methodology and a process?

(d) What are the important activities that are carried out during the feasibility study Phase?

(e) Differentiate between waterfall model and prototyping model.

(f) What is software crisis? Was Y2K a software crisis?

2. Attempt any four questions: 5×4=20

(a) What do you mean by component level design? Illustrate Fourth Generation Techniques also.

(b) What is software quality? Discuss software quality attributes.

(c) Differentiate between functional and object oriented approach of software design.

(d) What do you mean by functional requirements and non-functional requirements? List the above various requirements for any hospital.

(e) Consider the problem of railway reservation system and design the following:

(i) Problem Statement

(ii) Use Case Diagram

(f) What is software quality framework and SQA?

3. Attempt any two questions: 10×2=20

(a) Explain the following:

(i) Coupling

(ii) Cohesion

(b) What is Cyclomatic complexity? Explain with the help of an example.

(c) What are the generic guidelines that will lead to a good design? Explain.

4. Attempt any two questions: 10×2=20

(a) What are various debugging approaches? Discuss them with the help of examples.