Unit-V

5. a) What are the advantages of reverse engineering process?

   b) Justify the importance of feasibility study in software development?

   c) What is Gantt Chart? Give the advantages of Gantt Charts in monitoring software project?

   d) Describe the components of software maintenance process? Why the cost of software maintenance is high?

   OR

   Discuss various cost estimation models and compare them?

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Roll No .....

CS-603

B.E. VI Semester

Examination, June 2015

Software Engineering and Project Management

Time : Three Hours

Maximum Marks: 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

Unit-I

1. a) What is Software process? How the process is different from methodology show by an example?

   b) List out the Pros and Cons of waterfall model of software development?

   c) What do you mean by Software Complexity? How the complexity of software is measured?

   d) Compute the function point value for a project with the following information domain characteristic:

   i. No. of external inputs -32

   ii. No. of external outputs -60

   iii. No. of external enquiries -24

   iv. No. of internal Logic files -08

   v. No. of external interfaces files -02

   Assume that all complexity adjustment values are average.

OR

Show why and how software metrics can improve the software process? Enumerate the effects of metric on software productivity?

Unit-II

2. a) List out the importance of Software Requirement document in brief?

   b) Define DFD (Data Flow Diagram)? Also describe the limitations of DFD for performing structural analysis?

   c) Explain the different characteristics of Software Requirement Specification?

   d) What are the elements of analysis modeling explain each of them in brief?

OR

Why validation is important in the requirement phase? Justify your answer with proper example?

Unit-III

3. a) What are the different system views that can be modelled using UML?

   b) Differentiate between cohesion and coupling with example?

   c) Define Software design process? Describe various steps involve in software design?

   d) What are the fundamental principles of user interface design? Explain and enumerate the end user requirement in user interface design?

OR

What is modularity? List out the important properties of modular system in brief?

Unit-IV

4. a) What are the primary objectives of glass box testing?

   b) Calculate the cyclomatic complexity for following program? Also explain your approach:

```
int temp
if (a>b)
    temp=a
else
    temp=b
if (c>temp)
    temp=c
return temp
```

   c) Explain the term boundary value analysis with suitable example?

   d) Define functional testing? Also explain the various approaches used in functional testing?

OR

Describe integration testing? Explain the steps for top-down integration? Also list out shortcomings of top-down integration?