R13

Code No: 115EM

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, March - 2017
SOFTWARE ENGINEERING
(Common to CSE, IT)

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A
(25 Marks)

1.a) What are the merits of incremental model? [2]
b) What are the fundamental activities of a software process? [3]
c) Differentiate ERD and DRD. [2]
d) What are non functional requirements? [3]
e) Define design process. [2]
f) List the principles of a software design. [3]
g) Distinguish between verification and validation. [2]
h) Write about drivers and stubs. [3]
i) Give a note on the various estimation techniques. [2]
j) Define maintenance. What are the types of software maintenance? [3]

PART - B
(50 Marks)

2.a) Define the term Software. Describe its various characteristics.
b) Elaborate on the changing nature of software in detail. [5+5]

OR

3.a) Explain software development life cycle. Discuss various activities during SDLC.
b) What are various myths about software? [5+5]

4. Give an overview of various system models. [10]

OR

5.a) Discuss about principal requirements engineering activities and their relationships.
b) Explain how a software requirements document is structured. [5+5]

6.a) Distinguish between coupling and cohesion? How do they effect software design?
b) For a Case study of your choice show the architectural and component design. [5+5]

OR

7. List and explain different kinds of architecture styles and patterns. [10]

8. What is black box testing? What is boundary value Analysis? Explain the technique specifying rules and its usage with the help of an example. [10]

OR

9.a) Define unit testing. Explain about unit testing considerations and procedures.

b) What is equivalence class partitioning? List rules used to define valid and invalid equivalence classes. Explain the technique using examples. [5+5]

10.a) What is the purpose of Delphi method? State advantages and disadvantages of the method. [5+5]

b) Explain the COCOMO model for estimation.

OR

11. What is software configuration management? Explain various aspects of the configuration management. [10]

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