Code: 15A05804

R15

B.Tech IV Year II Semester (R15) Advanced Supplementary Examinations July 2019

BUILDING LARGE SCALE SOFTWARE SYSTEMS

(Common to CSE and IT)

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) Define coupling.
(b) What is temporal cohesion?
(c) List out practices to compile large scale C programs.
(d) Outline good coupling design issues with large C program.
(e) Name tools for building large programs.
(f) Point the need for various control systems.
(g) State out merits for measuring the quality of C++.
(h) Expand MOOD metrics.
(i) Recall need for pattern oriented software architecture.
(j) How do you identify a design pattern for a given software?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Demonstrate various types of coupling with suitable examples.

OR

3 Compare and contrast cohesion mechanisms with elaborate justification.

UNIT – II

4 Summarize the design principles of large C programs having good cohesion.

OR

5 Illustrate how to build a large C program using C modules. Also state notation of separate compilation.

UNIT – III

6 Explain how to work with various development tools used for large scale programs.

OR

7 Describe various procedures used in implementing version control management through 'git'.

UNIT – IV

8 (a) What are the metrics for measuring the quality of C++ program?
(b) Organize the architecture of large C++ programs.

OR

9 Explain in detail how to redesign the Linux kernel into MOOL.

UNIT – V

10 Describe a case study in detail for building a software with most design patterns.

OR

11 Analyze the need for pattern oriented software architecture in building large software applications. Give an example with neat sketch.

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