www.rejinpaul.com

STUDENTSFOCUS.COM

Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 51346

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2014.

Fifth Semester

Computer Science and Engineering

CS 2301/CS 51/10144 CS 502 — SOFTWARE ENGINEERING

(Regulation 2008/2010)

(Common to PTCS 2301–Software Engineering for B.E.(Part–Time) Fifth Semester Computer Science and Engineering –Regulation 2009)

Time : Three hours | Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Distinguish verification and validation.
2. Define System Engineering.
3. What do you mean by functional and non–functional requirements?
4. List two advantages of employing Prototyping in Software Process.
5. Define Software Architecture.
6. List the notations used in Data-flow models.
7. What are the classes of loops that can be tested?
8. What is Cyclomatic complexity?
9. What is software configuration management?
10. What is error tracking?

PART B — (5 × 16 = 80 marks)

11. (a) Discuss in detail about any two evolutionary process models.

Or

(b) (i) Discuss about the classic Waterfall process model. (8)

(ii) Explain the prototype paradigm in process models. (8)

www.rejinpaul.com

STUDENTSFOCUS.COM

12. (a) (i) What are the components of the standard structure for the software requirements document? Explain in detail. (8)

(ii) Write the software requirement specification for a system of your choice. (8)

Or

(b) What are the types of behavioural models? Explain with examples.

13. (a) Explain in detail about any four architectural styles.

Or

(b) (i) What are the characteristics of a real-time system? Explain why real-time systems usually have to be implemented using concurrent processes. (6)

(ii) Illustrate with the aid of an appropriate example how to design a real-time monitoring and control systems. (10)

14. (a) Explain in detail about the Integration testing.

Or

(b) Explain in detail about Basis path testing

15. (a) (i) What is COCOMO model? Explain in detail. (8)

(ii) What are CASE tools? Explain the role of CASE tools in software development process. (8)

Or

(b) (i) Elaborate on Software Configuration Management. (10)

(ii) What are the categories of software risks? Give an overview about risk management. (6)

———————