

END TERM EXAMINATION

FOURTH SEMESTER [BCA] MAY-JUNE – 2014

Software Engineering

- Q1:** Answer the following questions:
- (a) What is a software crisis?
 - (b) Explain the term 'requirement' in reference to software development.
 - (c) Why is software development required to be managed?
 - (d) Discuss the importance of system analysis in brief.
 - (e) What is a module?
 - (f) Define Software design.
 - (g) What is the basic need of measurement in software development?
 - (h) What is risk mitigation?
 - (i) Define software testing.
 - (j) How does cost estimation help?
- (10 × 2.5
= 25)
- Q2:** What is software life cycle? Explain software life cycle model. Write down merits and demerits of various types of software life cycle models. (12.5)
- Q3:** (a) Explain the procedure of drawing a DFD for a software system.
(b) How is an SRS organized? Discuss various characteristics of a typical SRS. (12.5)
- Q4:** (a) What are major state holders in a software development project? Discuss the roles of each. (6)
(b) Explain the activities that are undertaken during any typical software project planning. (6.5)
- Q5:** (a) Explain all the five functional units used in FPA. (5)
(b) Discuss COCOMO model in detail. (7.5)
- Q6:** Define module coupling and module cohesion. Explain their different types with examples. (12.5)
- Q7:** Discuss the following:
- (a) Live variables
 - (b) Variable Spam
 - (c) Program weakness
 - (d) Data Structure Metric
 - (e) Token Count
- (5 × 2.5 =
12.5)
- Q8:** (a) Explain software testing, test case and test write with the help of examples. (6.25 × 2 =
12.5)

(b) Discuss path testing with the help of suitable illustrations.

- Q9:** (a) Discuss the role of graph metrics with the help of nodes in flow graph (6)
(b) What is software maintenance? (6.5)