



GAJ-623

Seat No. _____

B. C. A. (Sem. V) Examination

November / December – 2015

BCA-503 : Software Engineering

Time : 3 Hours]

[Total Marks : 70

1 (A) Do as directed : 6

(i) Define : Software Engineering.

(ii) Define : Software Portability.

(iii) Define : System Software

(iv) What is maintenance ?

(v) What is Unit testing ?

(vi) What is requirement analysis ?

(B) Attempt following : (any two) 12

(i) Explain spiral model with its advantages and disadvantages.

(ii) Explain characteristics of software.

(iii) Explain phase development process in detail.

2 (A) Answer the following :

5

- (i) What is product metrics ?
- (ii) Define SRS.
- (iii) What is design pattern ?
- (iv) What is functional requirement ?
- (v) What is object oriented design ?

(B) Attempt any two:

12

- (i) Explain types of requirements in detail.
- Feasibility*
(ii) Explain role of management in software development.
- (iii) Explain general structure of SRS.

3 (A) Define following terms :

6

- (i) Error
- (ii) Blackbox testing
- (iii) Alpha testing
- (iv) Regression testing
- (v) Coding
- (vi) Driver and stub modules.

(B) Answer the following: (any two)

12

- (i) Explain sample testing cycle.
- (ii) Explain structured programming.
- (iii) What is whitebox testing ? Explain any one technique for selecting cases for white box testing.

4 (A) Answer the following :

5

- (i) What is adaptive maintenance ?
- (ii) What is validation ?
- (iii) What is project management ?
- (iv) What is business process engineering ?

(B) Attempt any two :

12

- (i) Explain COCOMO model.
- (ii) Explain risk management concept in detail.
- (iii) Explain characteristics of CASE tools.