

VVM's
Shree Damodar College of Commerce and Economics, Margao-Goa

S.Y.B.C.A, Semester- IV, End Semester Examination, *May 2016 (Supplementary)*

SOFTWARE ENGINEERING (BCA-401)

Duration: 2 hours

Marks-50

Instructions :

1. All questions are compulsory
2. Start each new question on fresh page
3. Figures to the right indicate maximum marks
4. Support your answers with relevant diagrams.

Q.1 Define the following in one or two sentences

Marks (1 X 10)

- a) Software process
- b) UML
- c) <<include>> relationship
- d) Predictability of a software process
- e) Functional requirements
- f) Attributes in a class diagram
- g) Reliability
- h) Light Weight Methodologies
- i) SRS
- j) <<create object>> in sequence diagram

Q.2a) What are the major challenges faced by software developers that would determine the success of a project (2)

b) What are the drawbacks of using natural language for gathering software requirements. (3)

c) Discuss the advantages of the iterative model over the waterfall model. (5)

Q.3 a) Explain how Use case diagrams can be used to study the behaviour of the system? (2)

b) What are the different types of relationships used in UML. (3)

c) Draw a class diagram for the Hospital Management System. The hospital must provide basic facilities like patient admission /discharge, operations, billing etc. State your assumptions. (5)

Q.4 a) What are the different types of messages used in a sequence diagram? (2)

b) Explain the various graphical notations used in a state chart diagram. (3)

c) Draw an activity diagram for issue and return of books in a library. A student searches for a book, selects the book and requests for issue. The book is issued only if the student is a member and has not exceed the limit of 5 books (5)

Q.5 a) What are the benefits of using a Gantt chart? (2)

b) Explain financial and technical feasibility. (3)

c) Explain the steps involved in Interviewing the stake holders of the software project to be developed. (5)