## MCA DEGREE III SEMESTER EXAMINATION NOVEMBER 2013

## **CAS 2304 SOFTWARE ENGINEERING**

(New Scheme - 2010 Admission onwards) (Regular & Supplementary)

Time: 3 Hours

Maximum Marks: 50

## PART A (Answer ALL questions)

 $(15 \times 2 = 30)$ 

- I. (a) What is meant by software process model?
  - (b) Write the demerits of linear sequential model.
  - (c) What specialized strategies and methods are used to design web apps?
- II. (a) Write a short note on collaborative requirements gathering.
  - (b) Write the procedure to write effective use cases.
  - (c) Why do we say that the requirements model represents a snapshot of a system in time?
- III. (a) Write the rules of thumb that should be followed when creating the analysis model.
  - (b) What is the purpose of domain analysis? How is it related to the concept of requirements patterns?
  - (c) Write a note on Swimlane diagrams.
- IV. (a) Write a note on SCM process.
  - (b) Why is "chunking" important during the component-level design review process?
  - (c) Why are control components necessary in traditional software and generally not required in object oriented software?
- V. (a) Differentiate between verification and validation.
  - (b) Write the difference between top-down integration and bottom-up integration.
  - (c) Why is a highly coupled module difficult to unit test?

## PART B

 $(5 \times 4 = 20)$ 

- VI. A. Explain the prescriptive process model in detail.
  - OR
  - B. Explain specialised process models in detail.
- VII. A. Explain the generic elements of the requirements model.

OR

- B. Explain the concept of quality function deployment.
- VIII. A. What is meant by software architecture? Why is architecture important?

OF

- B. Explain the concept of class based modelling in detail.
- IX. A. Explain the user interface design process in detail.

OR

- B. Describe the steps to be followed for component level design, when it is applied for an object oriented system.
- X. A. Describe the difference between black box testing and white box testing.

OR

B. Explain the strategic issues in software testing in detail.