# Third Semester MCA Degree Examination, Dec.2018/Jan.2019 Software Engineering

Time: 3 hrs

Max. Marks: 80

Note: Answer FIVE full questions, choosing one full question from each module.

# Module-1

- Describe software engineering code of ethics and professional practices as defined by 1 (08 Marks) IEEE/ACM.
  - Why software engineering is important? Explain the attributes of good software. (08 Marks) b.

## OR

Explain the phases in Rational Unified Process. 2

(08 Marks)

List and explain the Extreme Programming practices. b.

(08 Marks)

### Module-2

- Explain the terms "user-requirements" and "system requirements". List different readers of 3 user requirements and system requirements.
  - With a neat diagram, explain the different types of activities that are performed in the (08 Marks) requirement engineering process.

Explain the CBSE process with a neat diagram.

(08 Marks)

With a neat diagram, explain the different types of non-functional requirements. b.

(08 Marks)

# Module-3

- What is meant by system model? With an ATM model explain the context model. (08 Marks)
  - Explain the role of software architecture.

(08 Marks)

Explain Architectural styles for C and C view.

(08 Marks)

Explain state machine models with an example.

(08 Marks)

## Module-4

a. Explain function oriented design.

(08 Marks)

Write a note on cohesion and coupling.

(08 Marks)

# OR

Briefly explain the architectural patterns for distributed systems.

(08 Marks) (04 Marks)

Discuss the complexity matrix for function oriented design.

Write a note on Software as Service.

(04 Marks)

### CMRIT LIBRARY Module-5

Explain project schedule and staffing.

BANGALORE - 560 037

Explain the activities of software configuration management plan.

(08 Marks) (08 Marks)

# OR

Describe in details the process of testing. 10 a.

(08 Marks)

Mention the differences between white box testing and block box testing.

(08 Marks)

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.