31/6(22 (M)

Exam.Code: 09268 14 8 Sub. Code: 6773

## 2062

## B.E. (Information Technology) Eighth Semester IT-804(d): Software Testing and Quality Assurance

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Part.

x-x-x

- 1. Define the following:
  - a). What is Software Quality? List different attributes of Software Quality.
  - b). List the principles of TQM?
  - c). Define Risk mitigation?
  - d). What is the role of Configuration Audit in SCM?
  - e). What is Regression testing?

(5X2)

## Part A

- 2. a). What are the different techniques of SQA? Explain briefly the difference between Reviews and Audits?
  - b). Briefly explain the significance of Six Sigma in software quality? Describe the process of Six Sigma. (5,5)
- 3. a). Describe the difference between "known risks" and "predictable risks."
  - b). Explain the RMMM Plan? Can you think of a situation in which a high-probability, high-impact risk would not be considered as part of your RMMM plan? (5,5)
- 4. a). Write a short note on Six Sigma?
  - b). Differentiate between static reliability and dynamic reliability?

(5,5)

## Part B

- Describe in detail: Unit testing, Integration Testing, Function Testing, System Testing and Regression Testing? (5,5)
- 6. What is the purpose of Data Flow diagrams? What are the notations used for the same. Explain by constructing a context flow diagram level 0 DFD and level 1 DFD foe library management system? (10)
- 7. a). Discuss the techniques for testing web based systems?
  - b). Write short note on Design phase testing?

(5,5)