

2054

M.E. (Information Technology)

Second Semester

MEIT-2104: Software Quality Assurance

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Section.

x-x-x

- I.
1. Write role of tester in software development organization.
 2. Explain role of process in software quality.
 3. Define the role of SQA Group.
 4. What is software quality assurance?
 5. Explain various Components of the Software Quality Assurance System.
 6. List out the advantages and disadvantages of water fall model
 7. List out the advantages and disadvantages of spiral model.
 8. What is cyclomatic complexity in software testing?
 9. List the advantages of Automation Testing.
 10. What is Formal technical review?

10*1

SECTION 1

- II. (a) What do you understand by total quality management (TQM)? What are the advantages of TQM? Does ISO 9000 standard aim for TQM?
- (b) In a software development organization, identify the persons responsible for carrying out the quality assurance activities. Explain the principal tasks they perform to meet this responsibility. 5,5
- III. Discuss levels of reverse engineering. What are the appropriate reverse engineering tools? Discuss any two tools in detail. Discuss the suggestions that may be useful for the modification of the legacy code. 10
- IV (a) Explain any four software quality metrics for product and process. How these values will be helpful to software quality engineer for improving quality.
- (b) Describe about the measures of reliability and safety in software quality assurance. 5,5

SECTION 2

- V. (a) What are risk management activities? Is it economical to do risk management? What is the effect of this activity on the overall cost of the project?.
- (b) What are configuration management activities? Draw the perform of change request form. 5,5
- VI.(a) Explain the boundary value analysis testing techniques with the help of an example.
- (b) Describe the equivalence class testing method. Compare this with boundary value analysis techniques. 5,5
- VII. Write Short notes on-
1. CASE
 2. RMMM

5,5

x-x-x