

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA – SEMESTER-IV EXAMINATION –SUMMER-2020****Subject Code:4649308****Date:07-11-2020****Subject Name:Software Quality Assurance (SQA)****Time:02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Attempt all of the following (Any Seven) **07**
- I. What is Software Quality?
 - II. Explain peer review.
 - III. What is Software testing?
 - IV. What is Checklist?
 - V. Full form of FDR.
 - VI. What is SDLC.
 - VII. What is quality record?
 - VIII. What is work instruction?
 - IX. What is procedure?
- (b) Illustrate McCall's factor model with an example **07**
- Q.2** (a) List and briefly describe the various causes of software errors. **07**
- (b) Explain in detail about SQA Architecture. **07**
- OR**
- (b) Classify SQA system components and explain at least two major components in detail. **07**
- Q.3** (a) Define software reliability. Explain reliability techniques in detail **07**
- (b) Discuss Supporting quality devices. **07**
- OR**
- Q.3** (a) Explain software quality metrics methodology in detail **07**
- (b) Explain the contribution of CASE tools in SQA. **07**
- Q.4** (a) Discuss Metrics used in software maintenance. **07**
- (b) How to measure software quality metrics? Give Examples on metrics program. **07**
- OR**
- Q.4** (a) Explain the implementation of alpha and beta site test and discuss their advantages and disadvantages. **07**
- (b) Describe Prevention Costs. **07**
- Q.5** (a) Explain CAPA in detail. **07**
- (b) Describe Procedure and work instruction. **07**
- OR**
- Q.5** (a) Explain Preventive and corrective actions. **07**
- (b) Explain SQA Trustees and their tasks. **07**
