

GUJARAT TECHNOLOGICAL UNIVERSITY**ME – SEMESTER – II (New)– EXAMINATION – WINTER-2019****Subject Code: 3720218****Date: 21-11-2019****Subject Name: Secure Software Design and Enterprise Computing****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) Identify and analyze any 3 software vulnerabilities in detail **07**
(b) List the technologies available for the presentation and describe business and data tiers of an enterprise software application **07**
- Q.2** (a) Explain the working of a directory-based server infrastructure in a heterogeneous systems environment **07**
(b) Design and build a database using an enterprise database system and mention the components at the different levels in an enterprise system **07**
- OR**
- (b) Explain the characteristics and scope of an enterprise software applications **07**
- Q.3** (a) Discuss the process of security testing. **07**
(b) What is server infrastructure? Describe directory-based server infrastructure in a heterogeneous systems environment. **07**
- OR**
- Q.3** (a) Mention the various loopholes in software security and troubleshoot a network running multiple services, **07**
(b) What is SQL injection? How are insecure exceptions and SQL injections handled? **07**
- Q.4** (a) Describe the various ways to defend web and mobile applications against hackers **07**
(b) List the requirements of an enterprise network and explain the process of managing them. **07**
- OR**
- Q.4** (a) Design and develop a multi-tier solution to a problem using technologies used in enterprise system **07**
(b) Explain any three security programming practices **07**
- Q.5** (a) Mention the various security programming practices and explain the fundamental software security design concepts **07**
(b) Explain in detail the various server resource utilization methods **07**
- OR**
- Q.5** (a) Explain enterprise network in detail **07**
(b) Describe the various technologies applicable in Enterprise Application Development. **07**
