MASTER OF SCIENCE (INFORMATION SECURITY) (MSCIS)

Term-End Examination December, 2024

MSE-033: WEB APPLICATION TESTING AND AUDIT

Time: 3 Hours Maximum Marks: 100

Note: (i) Question No. 1 is compulsory.

- (ii) Attempt any three questions from the rest.
- 1. This question is comprised of two parts I and II (attempt both).
 - (I) Write short notes on the following: $5\times4=20$
 - (a) Website Performance Audit
 - (b) Accessibility Audit
 - (c) Black-Box Testing
 - (d) Cross Site Scripting (XSS)
 - (e) Load Testing

(II) Answer the following:

- $5 \times 4 = 20$
- (a) Discuss the importance of crossbrowser testing and compatibility testing in web application testing.
- (b) Define website auditing and its significance in optimizing the performance of websites.
- (c) Explain the difference between functional testing and security testing in the context of web applications.
- (d) Describe the deliverables and recommendations typically provided in a website audit report to guide improvements and enhancements.
- (e) Briefly discuss any *two* OWASP attacks with example.
- 2. (a) Explain the significance of security auditing for websites, including vulnerability assessments and threat modelling.
 - (b) Describe the steps involved in auditing a website's User Experience (UX) and User Interface (UI).

- 3. (a) How can Cross-Site Scripting (XSS) vulnerabilities be identified and mitigated during web application testing?
 - (b) Describe the process of conducting usability testing for a web application. 10
- 4. (a) How can website analytics data be used during an audit to identify areas for improvements?
 - (b) How can website speed and performance be evaluated during an audit, and why is it critical for user satisfaction?
- 5. (a) How is CSRF attack different from SSRF attack? Explain with examples. 10
 - (b) Is Mobile App auditing different from Website App auditing? Explain with examples and case studies.