

(Time: 3 Hrs.)

[Marks: 80]

- N.B.:** (1) Question no. 1 is compulsory.  
(2) Attempt any three questions out of remaining questions.  
(3) Make suitable assumptions wherever necessary

- Q 1. (a) What are the attacks on Web application? (5)  
(b) Explain different ways to strengthen the web application security? (5)  
(c) What is the difference between encoding, encryption and hashing? (5)  
(d) How do you classify and prioritize threats in web applications? (5)
- Q.2 (a) What is security testing? Explain the issues related to security testing of Web Application (10)  
(b) What are the security challenges in software engineering? Explain different secure software development methodologies? (10)
- Q.3 (a) What are the most important steps you would recommend for securing a new Web server and Web application? (10)  
(b) State and explain the different authorization layers within a Web application? (10)
- Q.4 (a) What do you mean by "Cross-Site Scripting"? What is the potential impact to servers and clients? (10)  
(b) Explain two factor and three factor authentication in web application? (10)
- Q.5 (a) Explain web application security principles? (10)  
(b) What is session state? How to manage session state? (10)
- Q.6 Write short notes on (20)  
(i) Reflected XSS and stored XSS  
(ii) Network security vs application security  
(iii) Client site attack  
(iv) Reverse Engineering