M4A1Solution CSS 211/ CS 459 Spring 2020 Covers: Chapter 4 of textbook

DATE Assigned: February 11, 2020 DATE Due: Feb. 17, 2020 POINTS: 27

[A] Multiple Choice:

[A1] Most users \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ see the data sent and received by their browser. (b)

(a) can (b) cannot

[A2]Browsers \_\_\_\_\_\_\_\_\_\_\_\_\_\_ users to security threats. (a)

(a) expose (b) do not expose

[A3] The functioning of a browser \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ be impaired by attacking the operating system. (a)

(a) can (b) cannot

[A4] The functioning of a browser \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ be impaired by attacking an add-on or plug-in. (a)

(a) can (b) cannot

[A5] A keystroke logger is implemented in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (c)

(a) hardware (b) software (c) either hardware or software

[A6] A download substitution typically occurs in conjunction with a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attack. (b)

(a) man in the browser (b) page in the middle

[A7] Spammers use the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attack to obtain new email accounts that require

solving a CAPTCHA. (a)

(a) man in the middle (b) page in the middle

[A8] A phishing attack succeeds because of the failure of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to authenticate

the entity on the other side of the communication. (b)

(a) an institution such as a bank (b) a user or customer of an institution such as a bank

[B] For each of the following, state if it is TRUE or FALSE.

[B1] Encryption can solve the “Man-in-the-Browser” problem. (F)

[B2] When a user agrees to download a program, he can be sure what the program will actually do. (F)

[B3] A CAPTCHA is a puzzle that supposedly only a machine can solve. (F)

[B4] Each side of a computer interchange needs assurance of the authentic identity of the opposing side.

(T)

[B5] Shared secrets, one-time passwords, and out-of-band communications are useful countermeasures

for attacks against identification and authentication. (T)

[B6] Integrity checksums can prevent attacks that alter the content of a web site. (F)

[B7] It is possible for miscreants to apply for and obtain legitimate certificates. (T)

[B8] Reports sent by web bugs can be used by a web tracking service to compromise privacy. (T)

[B9] Frames cannot facilitate Clickjacking. (F)

[B10] Cross-site scripting attacks are caused by execution of a script that is contained in data. (T)

[B11] In an SQL injection attack ,the SQL query sent to the database server is modified to

return more data. (T)

[B12] Current estimates are that spam constitutes 50 percent of all email traffic. (F)

[B13] Email sender addresses are reliable. (F)

[B14] A phishing email attack tries to trick the recipient into disclosing private data, or taking another unsafe action. (T)

[B15] A spear phishing email is a phishing email that seems to come from a source not known to the receiver. (F)

[B16] A man in the browser attack happens because of an infected browser. (T)

[B17] A page in the middle attack happens because of an infected browser. (T)

[B18] A man in the middle attack happens because of an infected browser. (F)

[B19] Encryption can provide continuous authentication. (T)