Quiz #4

Security and Privacy
Sept. 29, 2018

Name: **Student Number:**

1. **Access Control Matrix model is considered to be a general solution for controlling who can access what in a security system because it _____.**

(A) includes the necessary elements for access control	4 (9%)
(B) specifies the rights for subjects to access objects	18 (39%)
(C) works for any number of subjects, objects and access rights	24 (52%)
(D) has a two-dimensional matrix	0
(E) none of the above	0

2. **In the Bell-LaPadula Model, mandatory policy is required to be checked prior to discretionary policy because the former _____ than the latter.**

(A) is more mandatory	11 (24%)
(B) reflects more precisely the confidentiality requirement	31 (68%)
(C) can be determined more easily	3 (6%)
(D) takes less time to complete	0
(E) none of the above	1 (2%)

3. **In the mandatory policy of the Bell-LaPadula model, a subject with a lower clearance level is allowed to modify (but not to read) an object with a higher classification level because _____.**

(A) such an access would never happen	0
(B) the model doesn't consider modification as a possible form of access	1 (2%)
(C) allowing such access doesn't violate the confidentiality requirement	42 (92%)
(D) the discretionary policy could be relied upon to prevent the modification	3 (6%)
(E) none of the above	0

4. **The purpose of introducing the notion of the category into the General Bell-LaPadula Model is to _____.**

(A) unify the clearance and the classification levels using a single concept	3 (6%)
(B) constrain the clearance and the classification levels within a scope	40 (88%)
(C) introduce another element for access control	1 (2%)
(D) replace the clearance and the classification levels	2 (4%)
(E) none of the above	

5. **An availability model should _____.**

(A) specify access control rules that would make information and resources accessible to legitimate users	31 (68%)
(B) include techniques that can fight against known attacks	8 (17%)
(C) define security levels for all the subjects and objects	3 (6%)
(D) identify all attacks that cause the availability problem	4 (9%)
(E) none of the above	0

6. Hybrid models or policies mainly address _____ requirement.

(A) the confidentiality	0
(B) the integrity	2 (4%)
(C) the availability	1 (2%)
(D) a mix of confidentiality, integrity and availability	43 (94%)
(E) none of the above	0

7. Role-based access control would _____.

(A) definitely make identity-based access control obsolete	0
(B) generally simplify the management of access control	36 (78%)
(C) definitely improve the granularity of access control	10 (22%)
(D) obviously solve the confidentiality, integrity and availability problems	0
(E) none of the above	0

Honor list (in alphabetical order): 18 (39%)

白　婧　毕诗旋　蔡亦华　冯泽琛　黄　琚　李锐智

李雨承　林　健　刘滔文　刘　颖　马天嘉　苏立梓

王　品　徐天元　姚健菁　于　璐　张馨以　朱学涵

Absentees (in alphabetical order): 8 (15%)

Bartkowski　Clancy　Crown　Gwizdz　Labuzek

Moylan　Raman　孙力　吴瑀