Feedback — Quiz_week2

Help Center

You submitted this quiz on **Thu 29 Jan 2015 9:33 AM PST**. You got a score of **15.00** out of **15.00**.

Question 1

Which of the followings are the goals of IP protection? Check all that apply.

Your Answer		Score	Explanation
☑ Protect testing data associated with the IP	✔	0.40	
☑ Trace IPs	✔	0.40	
☐ Ensure that the IP is compatible with other IPs	✔	0.40	
☑ Protect IP against unauthorized use	✔	0.40	
☐ Improve the quality of the IP	✔	0.40	
Total		2.00 / 2.00	

Question Explanation

0.4 points for each option.

Question 2

You want to minimize a 4-variable function F(a,b,c,d) with two don't care conditions, {a=b=c=d=1} and {a=d=1, b=c=0} (or abcd and ab'c'd). To embed your signature with the watermarking approach described on slide "Watermarking a Boolean Formula" (page 1 in "Watermarking Examples"), you decide to minimize F(a,b,c,d)+abcd instead, what is your signature?

Your Answer		Score	Explanation
01			
00			
11			
10	✔	1.00	
Total		1.00 / 1.00	

Question 3

A good watermark will be difficult or impossible to be removed by any adversary without detailed knowledge about the watermark, this property is known as

Your Answer		Score	Explanation
high credibility			
easy detectability			
transparency			
resilience	✔	0.50	
Total		0.50 / 0.50	

Question 4

A good watermark should not require major modification to the industrial design tools and design software, this property is known as

Your Answer	Score	Explanation
resilience		

○ fairness		
○ low overhead		
◉ transparency	✔	0.50
Total		0.50 / 0.50

Question 5

In the slide of "Public Watermarking GP Problem" (page 6 in "Good Watermarks"), which of the followings should be made to the public? Check all that apply.

Your Answer		Score	Explanation
☑ The pairs of nodes selected to embed the public watermark bits	✔	0.50	
☑ The rules on how each public watermarking bit will be embedded	✔	0.50	
☑ The public watermark you want to embed in the solution	✔	0.50	
☑ The scheme that public watermark head and body will be constructed	✔	0.50	
Total		2.00 / 2.00	

Question 6

In the node duplication example for fingerprinting graph coloring solutions, (see slide "Fingerprinting: Node Duplication", page 4 in "Fingerprinting"), if we add a new node B' as the duplicate of node B, which nodes should B' be connected to? Check all that apply.

Your Answer		Score	Explanation
☐ F	✔	0.30	
☑ A	✔	0.30	
☐ E	✔	0.30	
☑ B	✔	0.50	
☑ C	✔	0.30	
☑ D	✔	0.30	
Total		2.00 / 2.00	

Question 7

Bob decides to use the clique manipulation method to generate fingerprinting solutions to the graph coloring problem, (see slide "Fingerprinting: Clique Manipulation", page 5 in "Fingerprinting"). He finds a clique of 4 nodes and apply the method. How many distinct solutions can Bob generate?

Your Answer	Score	Explanation

4		
1		
4! = 24	✔	2.00
4^4 = 256		
2^4 = 16		
Total		2.00 / 2.00

Question 8

In the slide "Fingerprinting: Don’t Cares (I)" (page 6 in "Fingerprinting"), Alice decides to create fingerprinting copies of the original circuit by adding a new connection to the OR gate, which of the followings are correct? Check all that apply.

Your Answer		Score	Explanation
connect signal B to the OR gate	✔	0.50	
connect signal A to the OR gate	✔	0.50	
connect signal X' to the OR gate	✔	0.50	

☐ connect signal X to the OR gate	✔	0.50
Total		2.00 / 2.00

Question 9

When we use serial number as the tag for a device, which property does this tag have? Check all that apply.

Your Answer		Score	Explanation
☐ intrinsic	✔	0.40	
☐ functional	✔	0.40	
☐ unclonable	✔	0.40	
☑ reproducible	✔	0.40	
☑ passive	✔	0.40	
Total		2.00 / 2.00	

Question 10

IC metering methods that can also be used to lock, unlock, enable, disable, or controll the IC are known as _____ metering method.

Your Answer		Score	Explanation
active	✔	0.50	
passive			
Total		0.50 / 0.50	

Question 11

IC tags that are based on fabrication variations have the property of _____ and therefore will be a good candidate to countermeasure foundry overbuilding.

Your Answer		Score	Explanation
unclonable	✔	0.50	
extrinsic			

intrinsic	
reproducible	
Total	0.50 / 0.50