Unit 9 - Introduction to Digital Testing

Assignment-8

The due date for submitting this assignment has passed. **Due on 2018-09-26, 23:59 IST.**
As per our records you have not submitted this assignment.

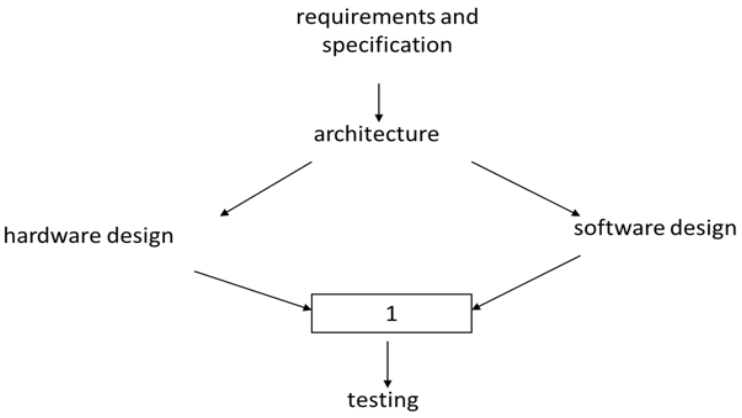
1) Murphy's Law states that _____ ***1 point***

- If anything can go wrong, it will
- If nothing goes wrong, it will
- If anything can go wrong, it will not
- If nothing goes wrong, it will not

No, the answer is incorrect.
Score: 0

Accepted Answers:
If anything can go wrong, it will

2) Figure below illustrates the process of Embedded Systems Design and Test flow. What is the block marked "1" in the figure? ***1 point***



- Test Response storage
- Integration
- Test Response compressor
- Copy of Manufactured circuit under test

No, the answer is incorrect.
Score: 0

Accepted Answers:

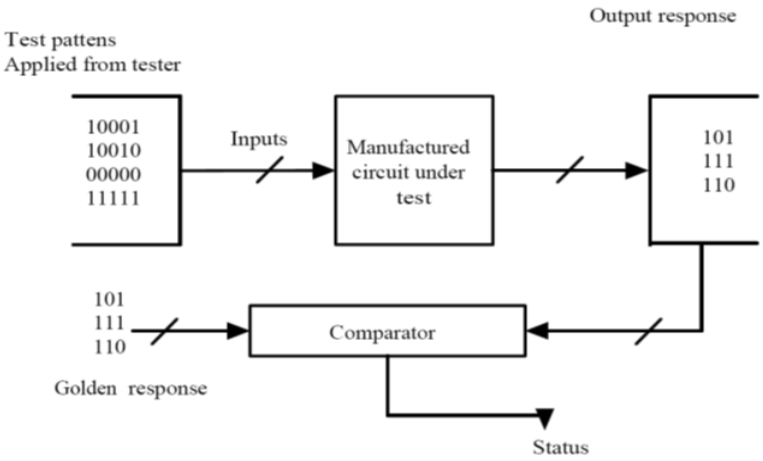
Google

- Data flow-based testing
- None

No, the answer is incorrect.
Score: 0

Accepted Answers:
Design for testability

4) Figure below illustrates a process of ____ circuit testing. ***1 point***



- Digital
- Analog
- Both of the above
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Digital

5) For an n-input circuit, ____ test patterns are needed for functional testing. ***1 point***

- n
- 2n
- n^2
- 2^n

No, the answer is incorrect.
Score: 0

Accepted Answers:
2^n

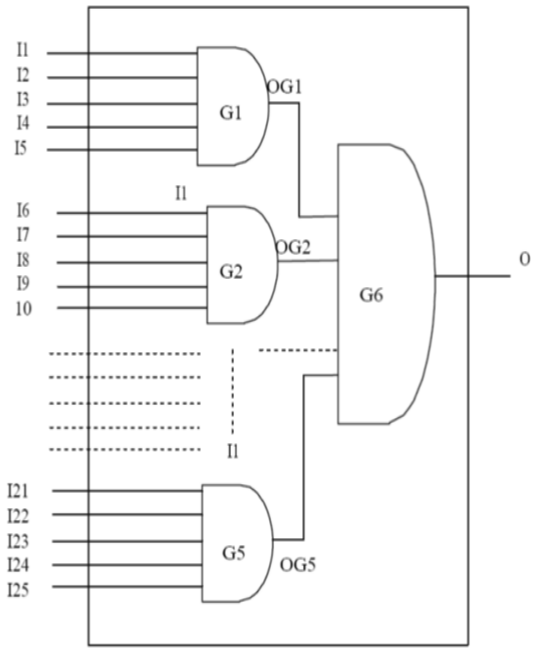
6) A circuit with n nets can have ___ possible stuck-at faults under single stuck-at fault model. ***1 point***

- 2^n
- n^2
- infinite
- 2n

No, the answer is incorrect.
Score: 0

Accepted Answers:
2n

7) How many test patterns are needed to test the circuit given in the figure below? Assume that structural testing with single stuck at fault model is used. ***0 points***

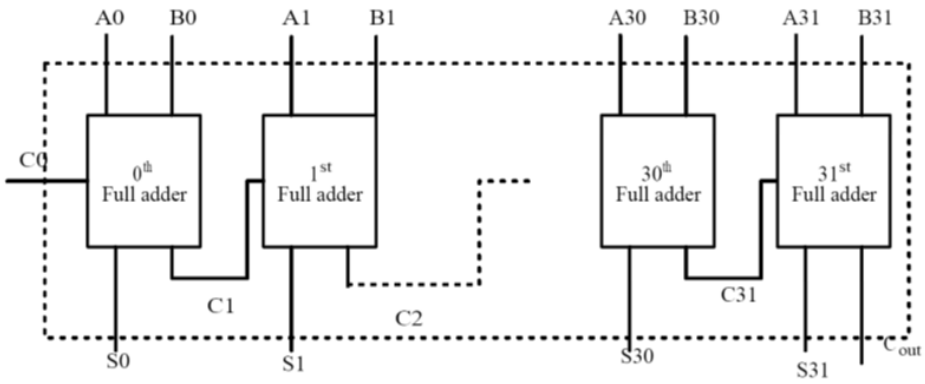


- 25
- 60
- 192
- 160

No, the answer is incorrect.
Score: 0

Accepted Answers:
192

8) Functional and structural testing of the 32-Bit adder circuit shown below needs ____ and ____ test patterns, ***1 point*** respectively.

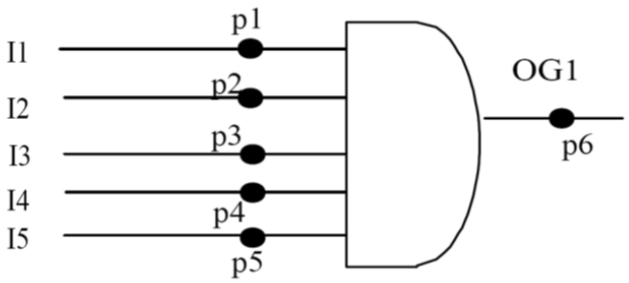


- 2^{65}, 2^3
- 2 * 65, 2^3
- 2^{65}, 2 * 3
- 65, 3

No, the answer is incorrect.
Score: 0

Accepted Answers:
2^{65}, 2^3

9) How many stuck-at faults are possible in the AND-gate shown below? ***1 point***



- 6
- 12
- 11
- 10

No, the answer is incorrect.
Score: 0

Accepted Answers:
12

10)A net having fan-out to k gates will have ___ stuck at fault locations **1 point**

- k+1
- k-1
- 2k
- None

No, the answer is incorrect.
Score: 0

Accepted Answers:
k+1

11)Which of the following statement is generally valid for a circuit? **1 point**

- All faults are “easy to test”
- All faults are “difficult to test”
- Few faults are “easy to test” and most others are “difficult to test”
- Most faults are “easy to test” and few are “difficult to test”

No, the answer is incorrect.
Score: 0

Accepted Answers:
Most faults are “easy to test” and few are “difficult to test”

12)The test patterns for “easy to test faults” are derived by ____ **1 point**

- Fault simulation algorithms
- Sensitization–propagation -justification approach
- Boolean Difference approach
- All the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Fault simulation algorithms

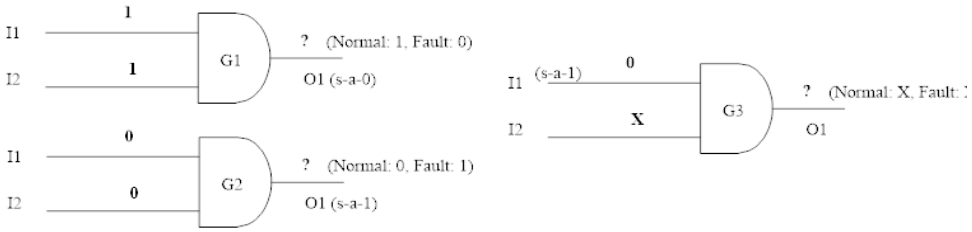
13)The test patterns for “difficult to test faults” are derived by ____ **1 point**

- Fault simulation algorithms
- Sensitization–propagation -justification approach
- both (a) and (b)
- other than the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Sensitization–propagation -justification approach

14)Let us consider a 2-input AND gates shown in figure below where the inputs are marked using notations from Roth's 5-valued algebra. What is the output notation at the ? marked net i.e., output of gate G1? ***1 point***



- 0
- 1
- D
- X

No, the answer is incorrect.
Score: 0

Accepted Answers:
D

15)Consider figure of Question 14. What is the output notation at the ? marked net i.e., output of gate G2? ***1 point***

- 0
- $\overline{D}$
- D
- X

No, the answer is incorrect.
Score: 0

Accepted Answers:
$\overline{D}$

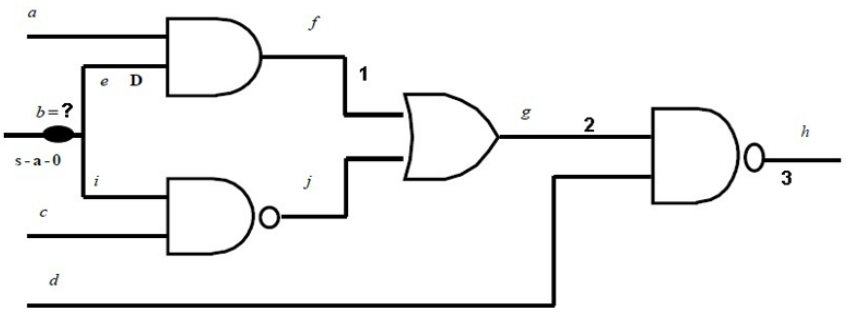
16)Consider figure of Question 14. What is the output notation at the ? marked net i.e., output of gate G3? ***1 point***

- 0
- D
- 1
- X

No, the answer is incorrect.
Score: 0

Accepted Answers:
X

17)If one wants to take the path "e-f-g-h" in the figure below for propagating the fault effect to the output h. The signals labelled as 1, 2, 3 in the nets of the path are assigned in terms of Roth's 5 valued algebra. The signal value of the net labelled with 1 is _____. ***1 point***



- 0
- 1
- D
- X

No, the answer is incorrect.
Score: 0

Accepted Answers:
D

Previous Page End