Question **1**
Correct
Mark 1.00 out of 1.00
Flag question

Which of the following is equivalent to the Boolean expression $A + AB + ABC + ABCD + ABCDE + ABCDEF$?

- a. $A + AD$ ✔
- b. $ABCDEF$
- c. AB
- d. $A + B + C + D + E + F$

Your answer is correct.
The correct answer is:
$A + AD$

Question **2**
Correct
Mark 1.00 out of 1.00
Flag question

What is the most simplified form of the Boolean equation $\overline{\overline{(A\,BC\,\overline{D} + BC\,D)(A \cdot \overline{B})}}$?

- a. $BC\,D$
- b. BC
- c. $A + \overline{B}$
- d. $\overline{A} + B$ ✔

Your answer is correct.
The correct answer is:
$\overline{A} + B$

Question **3**
Correct
Mark 1.00 out of 1.00
Flag question

Complement of a function expressed as sum of minterms will be:

- a. sum of maxterms
- b. product of minterms
- c. sum of minterms
- d. product of maxterms ✔

Your answer is correct.
The correct answer is:
product of maxterms

Question **4**
Correct
Mark 1.00 out of 1.00
Flag question

What is the hexadecimal equivalent of the octal number $(763276327632)_8$?

- a. $(F9AF9AF9A)_{16}$ ✔
- b. $(68987BAE1)_{16}$
- c. $(B23B23B23)_{16}$
- d. $(ED315134B)_{16}$

Your answer is correct.
The correct answer is:
$(F9AF9AF9A)_{16}$

Question **5**
Correct
Mark 1.00 out of 1.00
Flag question

Which of the following gates can be used to make all other logic functions?

- a. NOT
- b. OR
- c. NAND ✔
- d. AND

Your answer is correct.
The correct answer is: NAND

Question **6**
Correct
Mark 1.00 out of 1.00
Flag question

What is the decimal value of the recurring binary number $(0.1111\ldots\ldots\ldots\ldots)_2$?

- a. $(0.5)_{10}$
- b. $(0.99)_{10}$
- c. $(0.555.....)_{10}$
- d. $(1)_{10}$ ✔

Your answer is correct.
The correct answer is: $(1)_{10}$

Question **7**
Correct
Mark 1.00 out of 1.00
Flag question

Which of the following signed representations has one representation for zero?

- a. 1's complement
- b. 2's complement ✔
- c. signed magnitude
- d. both a and c

Your answer is correct.
The correct answer is: 2's complement

Question **8**
Correct
Mark 1.00 out of 1.00
Flag question

The AND of the two implication functions $x \rightarrow y$ AND $y \rightarrow x$ gives:

- a. XOR of x, y
- b. Always 1
- c. Always 0
- d. XNOR of x, y ✔

Your answer is correct.
The correct answer is: XNOR of x, y

Question **9**
Correct
Mark 1.00 out of 1.00
Flag question

Which of the following equations is an example of the Associative Property?

- i. $A + B = B + A$
- ii. $A(B + C) = AB + AC$
- iii. $A + (B + C) = (A + B) + C$ ✔
- iv. $A \cdot 1 = A$

Your answer is correct.
The correct answer is:
$A + (B + C) = (A + B) + C$

Question **10**
Correct
Mark 1.00 out of 1.00
Flag question

Which of the following functions does not follow the associative law?

- a. NAND ✔
- b. XNOR
- c. OR
- d. XOR

Your answer is correct.
The correct answer is: NAND