Assignment 3

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. 

Due on 2019-02-20, 23:59 IST.

1) Among the following attributes, which one cannot be assigned to digital signals?

- truncation error
- negligible transmission loss
- high density of information
- programmability

No, the answer is incorrect.
Score: 0

Accepted Answers:
high density of information

2) Among the following equalities, which one is incorrect?

- 1 TB = 2^{10} GB
- 1 TB = 2^{20} MB
- 1 TB = 2^{100} MB
- 1 TB = 2^{-10} PB

No, the answer is incorrect.
Score: 0

Accepted Answers:
1 TB = 2^{100} MB

3) A new number system has been proposed, which utilizes six digits in the form of A, B, C, D, E and F, with ‘A’ having the least magnitude. What will be the representation of the decimal number 16_{10} as per this new number system?

CE
4) Two binary signals A and B have been combined using a NAND gate, the output of which is combined with another binary signal C through a NOR gate. If the output of the NOR gate is directed towards an inverter, what will be the symbolic form of the output obtained from the inverter?

- \((A + B)\cdot C\)
- \((A + B) + \overline{C}\)
- \((A \cdot B) + \overline{C}\)
- \((A \cdot B) + \overline{C}\)

No, the answer is incorrect.

Score: 0

Accepted Answers:

CE

5) What will be the Gray code equivalent of the hexadecimal number \(A2_{16}\)?

- 1010 0010
- 1111 0011
- 1011 0011
- 1110 0010

No, the answer is incorrect.

Score: 0

Accepted Answers:

1111 0011

6) Among the following ADCs, which one is expected to be the fastest in terms of response time?

- Flash
- Sigma-Delta
- Successive approximation
- Digital ramp

No, the answer is incorrect.

Score: 0

Accepted Answers:

Flash

7) Total number of non-printable characters present in the 1968 version of the ASCII character set is ___________.

Hint

No, the answer is incorrect.
A 4-bit A/D converter works within the voltage range of 0 – 20 V. If it receives an input voltage of 13.36 V, corresponding binary output will be ___________.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 33

A 8-bit successive approximation ADC works within the voltage range of 0 – 20 V. The magnitude of voltage associated with its second significant bit is ______________ V.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 5

A 4-bit binary weighted resistor type DAC is designed with a reference voltage of 10 V. The magnitude of the output-side resistance is equal to the resistance corresponding to the MSB. If it receives a binary input of 1011, then the output voltage will be ___________ V.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 13.6,13.9