Central Administration for General Education

Educational Computer Material Development Department

Under the patronage of His Excellency the Minister of Education,

Mr. Mohamed Abdel Latif

Weekly Assessments for Programming and Artificial Intelligence for General Education (First Secondary Grade)

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Fifth Week

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Weekly assessment

First test

First:

1. **What is meant by Character Code?**
2. **What is meant by Character Code System?**
3. **Using the character code table, represent the character code for M in binary.**
4. **Perform the following binary operation:**
   $(1010)_2 + (0101)_2$
5. **Perform the following binary operation:**
   $(1010)_2 - (0110)_2$

Second:

Choose the correct answer:

1. **The number of character types that can be represented using** 1 Byte **is:**

   A) 64
   B) 128
   C) 256
   D) 65,536

2. **In binary addition, when the sum reaches** 2**:**

   A) A value is borrowed from the higher digit
   B) The value is carried one place to the next higher digit
   C) The digit is deleted
   D) Nothing changes

Second test

First:

1. **Briefly explain the characteristics of the ASCII character encoding system.**
2. **Briefly explain the characteristics of the Unicode character encoding system.**
3. **Use hexadecimal to represent the character codes for the word MILK.**
4. **Perform the following binary operation:**
   $(0011)_2 + (1100)_2$
5. **Perform the following binary operation:**
   $(1001)_2 + (0101)_2$

1. **Second:**

Choose the correct answer:

1. **Representing a text string using character codes is called:**

   A) Font
   B) Encoding
   C) Character Corruption
   D) Unicode

2. **In binary subtraction, when the minuend is not sufficient:**

   A) A value of 2 is borrowed from the next higher digit
   B) A value of 1 is carried to the next higher digit
   C) The digit is deleted
   D) The number is converted to decimal

Third test

First:

1. **What is meant by Character Corruption?**
2. **What is meant by Font?**
3. **What is the character string corresponding to the following hexadecimal character code:**
   "5468616E6B596F7521"?
4. **Perform the following binary operation:**
   $(0111)_2 + (0001)_2$
5. **Perform the following binary operation:**
   $(1010)_2 + (0101)_2$

Choose the correct answer:

1. **Which of the following represents the shape data of characters corresponding to character codes?**

   A) ASCII
   B) Unicode
   C) Font
   D) Encoding

2. **When adding 1 + 1 in the binary system, the result is:**

   A) 0
   B) 1
   C) 10
   D) 11

Classroom Assessment:

First:

1. **What is meant by Decoding?**
2. **What is the character string corresponding to the following hexadecimal character code:**
   "776f726b "?
3. **Perform the following binary operation:**
   $(0101)_2 + (0110)_2$

Second:

Choose the correct answer:

1. **Which character encoding system accommodates writing systems for countries around the world?**

   A) ASCII
   B) Unicode
   C) Font
   D) Character Code

   5. Choose the correct answer:

2. **In binary subtraction, when 1 is borrowed from the higher digit:**

   A) There are 2 in the lower digit
   B) There is 1 in the lower digit
   C) There are 0 in the lower digit
   D) The lower digit is deleted

Homework Assignment:

First:

1. **What is meant by Encoding?**
2. **Using the character code table, represent the character code for Y in binary.**
3. **Perform the following binary operation:**
   $(1101)_2 + (0010)_2$
3. **Second:**

Choose the correct answer:

1. **The number of character types that can be represented using** 2 Bytes **is:**

   A) 128
   B) 256
   C) 32,768
   D) 65,536

2. **The term used for the unique numerical value assigned to each character and symbol is:**

   A) Font
   B) Character Code
   C) Encoding
   D) Unicode