|  |  |  |  |
| --- | --- | --- | --- |
|  | **Performance Task No. 3: Problem Solving** |  |  |
| **Topic:** | Module 3: **Number System and Number System Conversion** | **Week No.** |  |
| **Course Code:** | ITEC 101 | **Term:** | 1st Semester |
| **Course Title:** | Introduction to Computing | **Academic Year:** | 2021-2022 |
| **Student Name** | Joshua B. Sapin | **Section** | BSCS - 1A |
| **Due date** |  | **Points** | **20** |

This learning activity will help attain the intended learning outcomes of this module and will solidify the objectives of the module.

**Direction:** Perform the following conversion and put your final answer on their respective boxes. Show your solution.

A.

|  |  |  |  |
| --- | --- | --- | --- |
| Base 2 | Base 10 | Base 8 | Base 16 |
| **(1)** 10011101011 | 1259 | 2353 | 4EB |
| 11111101 | **(2)** 253 | 375 | FD |
| 100011111 | 287 | **(3)** 437 | 11F |
| 110011110000100 | 26500 | 63604 | **(4)** 6784 |
| **(5)** 01101110 | 110 | 156 | 6E |
| 1000011110 | **(6)** 542 | 1036 | 21E |
| 010100111 | 167 | (**7)**247 | A7 |
| 1100110110110100 | 52660 | 146664 | **(8)** CDB4 |

B.

1. 11110010002 – 96810 – 17108 – 3C816

2. 64310 – 10100000112 – 12038 - 28316

3. 3258 – 110101012 – 2138 – D516

4. AD9216 – 10101101100100102 – 1266228 - 4443410

5. 1010110112 – 34710 – 5338 – 15B16

6. 54110 – 10000111012 – 10358 – 21D16

7. 4478 – 1001001112 – 29510 - 12716

8. CA8B 16 – 11001010100010112 – 1452138 – 5185110

9. 1111100012 – 7618 – 49710 – 1F116

10. EFC16 – 1110111111002 – 73748 – 383610

**Assessment Task Rubrics for rating per item:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Score** | **Content** | **Organization** |  | **Development** | **Use of Language** |
| **4** | Answer is appropriate to the question.  Content is factually correct. | Clear sense of order.  Begins with a thesis or topic sentence.  Supporting points are presented in a logical progression. |  | Develops each point with many specific details.  Answers question completely. | Uses technical or scientific terminology appropriately and correctly.  No major grammatical or spelling errors. |
| **3** | Answer is appropriate to the question.  Content may have one or two factual errors. | May lack a thesis sentence, but points are presented in a logical progression. |  | Each point supported with some details and evidence.  All important points included. | Accurate word choice.  No more than 2 major errors and a few minor errors. |
| **2** | Content relates peripherally to the question; contains significant factual errors. | Logic of argument is minimally perceivable.  Points presented in a seemingly random fashion, but all support argument. |  | Sparse details or evidence.  Question only partially answered. | Ordinary word choice; use of scientific terminology avoided.  Some serious errors (but they don’t impair communication). |
| **1** | Content unrelated to question. | Lacks clear organizational plan.  Reader is confused. |  | Statements are unsupported by any detail or explanation.  Repetitious, incoherent, illogical development. | Limited vocabulary; errors impair communication. |

**Adapted from the Creator:  Denise Lim, Biology, Cabrillo College**

**Reminders:**

1. AVOID PLAGIARISM, include the source/reference of the performance task output.
2. You can use another paper to write your answers. Just attach it in your Performance Task.