



## **ICT Assignment 2**

**Teacher: Safina**

**Total Marks 10**

**Kindly submit your assignment on blackboard in soft copy before due date and time**

**Write your Name, Department and ID on the front page of assignment**

**Copied Assignment will be awarded zero marks**

**Due Date: 17.03.2023**

Briefly answer the following questions.

1. Differentiate between the characteristic of primary and secondary storage of a computer?
2. Why are mainframe systems usually limited in the number of tasks they perform?
3. What new types of computer application emerged during third, fourth, and fifth computer generations and what were the main driving technologies behind each?
4. What are advantages of transistor over vacuum tubes?

1. Perform the following expressions.  $(FACE)_{16} = (?)_2$

2. Perform the following expressions.  $(BEAF)_{16} = (?)_2$

3. Convert the following octal numbers into decimal  $a = (1054352)_8$   $b = (1205)_8$

4. Convert the following binary number into octal and then into hexadecimal number

$a = (11100001101)_2$      $b = (1100001101)_2$      $c = (000110111101)_2$

**Practice questions: (Not for Submission)**

Convert the following hexadecimal number into binary and then binary to octal

$$a = (\text{ABFCFDA})_{16} \quad b = (\text{FDABCAA6})_{16} \quad c = (\text{ABC})_{16}$$

Convert the following octal numbers into decimal

$$a = (1205446)_8 \quad b = (456345)_8$$

Convert the following binary numbers into octal and hexadecimal

$$a = (10000011010)_2 \quad b = (111111011110100)_2$$

Convert the Following binary numbers into octal and then into base 6

$$a = (00111101)_2 \quad b = (10100110)_2$$

Convert the following octal number into binary and then into base 4

$$a = (3456721)_8 \quad b = (56743221)_8$$