**WORKSHEET 2-3**

TOPIC

2

**EXAM 2 REVIEW**



**TIME TO COMPLETE: 1 ½ HOURS**

Please show your work, that way I know you’re able to replicate it on the exam.

***MAX MARKS: 37***

1. Convert the following numbers to hexadecimal:
   1. 1010011 [1]
   2. 67 [1]
2. Convert the following numbers to decimal:
   1. 11001101 [1]
   2. 6AF [1]
3. Convert the following numbers to binary:
   1. 8AF3 [1]
   2. 1904 [1]
4. Create a truth table for the following expression: [2]
   1. p AND q OR NOT r
5. Define the Boolean NOR operator [1]
6. Outline the function of the following programs:
   1. Web Browser: [1]
   2. Design Software: [1]
   3. Email Client: [1]
   4. Word Processor: [1]
   5. DBMS: [1]
   6. Spreadsheet Program: [1]
7. Outline the differences between Unicode and ASCII [2]
8. What makes RAM and ROM different? [2]
9. What are roles of the operating system in a computer? [2]
10. Explain each step of the machine instruction cycle: [4]
11. What is the maximum possible integer value that can be stored in this many bits (assume the numbers are not allowed to be negative):
    1. 8 [1]
    2. 16 [1]
12. Explain the following types of memory:
    1. RAM [1]
    2. ROM [1]
    3. Cache [1]
    4. Secondary Storage [1]
13. State the representation of the colors below in hexadecimal:
    1. Blue [1]
    2. Green [1]
    3. Red [1]
14. List 3 common features of a GUI [3]