Quadrant IV- In Module Assessment

Paper Code: ELC 102

Module Name: Decimal, Binary, Octal and Hexadecimal number systems, base conversions

Module Number:10

Completion type (fill in the blanks)

1) **In ___ number system 16 symbols are used to specify any number**
2) **The base of an octal number system is _____.**

Determine the decimal numbers represented by the following binary numbers:

1) **1110001**
2) **001111101**
3) **101.101**
4) **0.1110**

Determine the binary numbers represented by the following decimal numbers:

1) **125.5**
2) **38.625**
3) **0.685**
4) **1024**

Determine the decimal numbers represented by the following octal numbers:

1) **37**
2) **42**
3) **12.56**
4) **1256**

Determine the octal numbers represented by the following decimal numbers:

1) **444**
2) **1256.25**
3) **0.750**
4) **12.8**

Determine the hexadecimal numbers represented by the following decimal numbers:

1) **1250**
2) **25.25**
3) **1000**
4) **12.1250**

Determine the decimal numbers represented by the following hexadecimal numbers:

1) **10AF**
2) **DE.BC**
3) **1000**
4) **0.1025**

Perform the following operations:

1) **Convert 10101.1111_2 to octal and then to hexadecimal**
2) **Convert $(1010101.1110101)_2$ to hexadecimal and then to its octal equivalent.**