**137184 Luwate Inda**

**Question 1**

**a)**

Decimal Binary Hexadecimal

0 0000 0

1 0001 1

2 0010 2

3 0011 3

4 0100 4

5 0101 5

6 0110 6

7 0111 7

8 1000 8

9 1001 9

10 1010 A

11 1011 B

12 1100 C

13 1101 D

14 1110 E

15 1111 F

16 0001 0000 10

17 0001 0001 11

18 0001 0010 12

31 0001 1111 1F

100 0110 0100 64

255 1111 1111 FF

256 0001 0000 0000 100

**b)**

Decimal Number Binary Conversion Remarks

54.106 110110.00011 Approximate

82.423 1010010.01101 Approximate

8.843 1000.11010 Approximate

89.389 1011001.01100 Approximate

47.987 101111.11111 Approximate

43.146 101011.00100 Approximate

26.38 11010.01100 Approximate

9.8 1001.11001 Approximate

83.295 1010011.01001 Approximate

73.171 1001001.00101 Approximate

32.162 100000.00101 Approximate

22.113 10110.00011 Approximate

46.606 101110.10011 Approximate

45.257 101101.01000 Approximate

88.473 1011000.01111 Approximate

54.979 110110.11111 Approximate

63.631 111111.10100 Approximate

60.309 111100.01001 Approximate

5.052 101.00001 Approximate

93.875 1011101.111 Exactly

69.994 1000101.11111 Approximate

31.021 11111.00000 Approximate

75.741 1001011.10111 Approximate

19.35 10011.01011 Approximate

64.502 1000000.10000 Approximate

27.465 11011.01110 Approximate

87.528 1010111.10000 Approximate

75.0 1001011.00000 Approximate

87.626 1010111.10100 Approximate

88.774 1011000.11000 Approximate

70.908 1000110.11101 Approximate

47.505 101111.10000 Approximate

27.354 11011.01011 Approximate

99.699 1100011.10110 Approximate

46.519 101110.10000 Approximate

24.735 11000.10111 Approximate

92.205 1011100.00110 Approximate

28.579 11100.10010 Approximate

37.18 100101.00101 Approximate

34.762 100010.11000 Approximate

6.883 110.11100 Approximate

24.145 11000.00100 Approximate

56.72 111000.10111 Approximate

58.566 111010.10010 Approximate

79.928 1001111.11101 Approximate

72.559 1001000.10001 Approximate

57.433 111001.01101 Approximate

52.262 110100.01000 Approximate

64.676 1000000.10101 Approximate

23.263 10111.01000 Approximate