

Information & Communication Technology Model Questions**Number systems 2**

1. Convert following binary numbers to octal
 - (1) 101
 - (2) 101111
 - (3) 1000101
 - (4) 10000001
 - (5) 101010101
 - (6) 000001101

2. Convert following octal numbers to binary
 - (1) 134
 - (2) 254
 - (3) 2212
 - (4) 4360
 - (5) 4001
 - (6) 0074

3. Convert following hexadecimal numbers to binary
 - (1) 9
 - (2) 131
 - (3) 6A4
 - (4) 1010
 - (5) B23A
 - (6) F01C

4. Convert following binary numbers to hexadecimal
 - (1) 1001
 - (2) 11001011
 - (3) 111100001
 - (4) 0001101111
 - (5) 101011001001
 - (6) 100011101100110

5. Convert following octal numbers to hexadecimal
 - (1) 7
 - (2) 10
 - (3) 106
 - (4) 6772
 - (5) 70004
 - (6) 100011
 - (7) 45102
 - (8) 22013
 - (9) 657143

6. Convert following hexadecimal numbers to octal
 - (1) 8
 - (2) 10
 - (3) 101
 - (4) 16
 - (5) 1A4
 - (6) 7A4C
 - (7) BC49
 - (8) 4BD0
 - (9) E01BF

7. Convert following binary numbers to decimal
 - (1) 11.1
 - (2) 10.01
 - (3) 1.101
 - (4) 1.1101
 - (5) 101.1011
 - (6) 101.1011
 - (7) 101.1111
 - (8) 1011.1001
 - (9) 1011.10011

8. Convert following decimal numbers to binary
 - (1) 2.5
 - (2) 12.25
 - (3) 15.125
 - (4) 20.0625
 - (5) 14.75
 - (6) 26.625
 - (7) 38.5625
 - (8) 39.1875
 - (9) 41.875



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9. Convert following octal numbers to decimal

- | | | |
|------------|------------|-------------|
| (1) 4.5 | (2) 23.13 | (3) 25.024 |
| (4) 22.213 | (5) 42.617 | (6) 51.7005 |

10. Convert following decimal numbers to octal

- | | | |
|---------------------|---------------|------------------|
| (1) 6.125 | (2) 31.015625 | (3) 42.00195313 |
| (4) 89.625 | (5) 67.109375 | (6) 84.296875 |
| (4) 58.000244140625 | (5) 42.140625 | (6) 151.14257813 |

11. Convert following decimal numbers to BCD

- | | | |
|-----------|-----------|-----------|
| (1) 4 | (2) 10 | (3) 42 |
| (4) 426 | (5) 749 | (6) 3651 |
| (7) 10011 | (8) 50924 | (9) 97632 |

12. Find the 7bit ASCII value equivalents to the following Alpha Numeric symbols.

- | | | |
|-------|-------|---------|
| (1) 6 | (2) A | (3) a |
| (4) @ | (5) % | (6) R |
| (7) p | (8) ! | (9) ESC |

