

Question Bank (Unit -1 Number System)

Write Question No 1 (d), 2(d),3(d),4(c),5(b),6(a),7(b),8(c),9(d),10(c),11(d),12(d),13,17 ,20(a)as

Assignment -1- (10) marks

Last Date of Submission: 10/8/2024

1. Subtract following decimal number by 9's & 10's complement method

(a) $274-86$ (b) $93-615$ (c) $574.6-279.7$ (d) $376.3-765.6$

2. Convert following binary number to decimal

(a) 1011 (b) 1101101 (c) 1101.11 (d) 1101110.011

3. Convert following decimal to binary

(a) 37 (b) 28 (c) 197.56 (d) 205.05

4. Add the following binary number

a) $11011 + 1101$

b) $1011+1101+1001+1111$

c) $10111.010 +110111.01$

d) $1010.11 +1101.10+1001.11+1111.11$

5. Subtract following binary number

a) $1011-101$

b) $10110-1011$

c) $1100.10-111.01$

d) $10001.01-1111.11$

6. Convert following octal number to hexadecimal & Binary.

a) 256

b) 2035

- c) 1762.46
- d) 6054.263

7. Convert following hexadecimal number to octal & Binary.

- a) 2AB
- b) 42FD
- c) 4F7.A8
- d) BC70.0E

8. Convert following octal to decimal

- a) 463
- b) 2056
- c) 2057.64
- d) 6534.04

9. Convert following decimal to octal

- a) 287
- b) 3956
- c) 420.6
- d) 8476.47

10. Convert decimal to hexadecimal

- (a) 452 (b) 4796 (c) 1248.56 (d) 8957.75

11. Convert hexadecimal to decimal.

- (a) AB6 (b) 2EB7 (c) A08F.EA (d) 8E47.AB

11. Convert following binary number to octal & hexadecimal Number

- (a) 1011 (b) 1101101 (c) 1101.11 (d) 1101110.011

1's & 2's Complement Method:

12. Add -75 to 26 using 8 bit 2's complement arithmetic .
13. Add -45.75 to 87.5 using 2's complement arithmetic
14. Add 27.125 to -79.625 using 2's complement arithmetic
15. Add 47.25 to 55.75 using 12 bit 2's complement arithmetic
16. Add -75 to 26 using 8 bit 1's complement arithmetic .
17. Add -45.75 to 87.5 using 1's complement arithmetic
18. Add 27.125 to -79.625 using 1's complement arithmetic
19. Add 47.25 to 55.75 using 12 bit 1's complement arithmetic

20. Multiply Following binary numbers

- a) $1101 * 101$
- b) $11001 * 10$
- c) $1101.11 * 101.1$
- d) $10110 * 10.1$