



Assam Textile Institute

Empowering Textile Education



COURSE TITLE = TEXTRONICS

COURSE CODE = TT-603

ASSIGNMENT No.(1)

Full Marks = 20

Faculty,

PANKAJ JYOTI DAS

Questions

Question 1

Calculate the binary numbers:

- (a) $11 + 1$
- (b) $11 + 11$
- (c) $111 + 11$
- (d) $111 + 10$
- (e) $1110 + 111$
- (f) $1100 + 110$
- (g) $1111 + 10101$
- (h) $1100 + 11001$
- (i) $1011 + 1101$
- (j) $1110 + 10111$
- (k) $1110 + 1111$
- (l) $11111 + 11101$

6) Convert the following numbers into BCD.

- i) 92 iii) 127
- ii) 268 iv) 80

Question 2

Calculate the binary numbers:

- (a) $11 - 10$
- (b) $110 - 10$
- (c) $1111 - 110$
- (d) $100 - 10$
- (e) $100 - 11$
- (f) $1000 - 11$
- (g) $1101 - 110$
- (h) $11011 - 110$
- (i) $1111 - 111$
- (j) $110101 - 1010$
- (k) $11011 - 111$
- (l) $11110 - 111$

Question 3

Solve the following equations, where all numbers, including x , are binary:

- (a) $x + 11 = 1101$ $x =$
- (b) $x - 10 = 101$ $x =$
- (c) $x - 1101 = 11011$ $x =$
- (d) $x + 1110 = 10001$ $x =$
- (e) $x + 111 = 11110$ $x =$
- (f) $x - 1001 = 11101$ $x =$

Question 4

Calculate the binary numbers:

- (a) $10 - 1$
- (b) $100 - 1$
- (c) $1000 - 1$
- (d) $10000 - 1$

Question 5

Calculate the binary numbers:

- (a) $11 + 11$
- (b) $111 + 111$
- (c) $1111 + 1111$
- (d) $11111 + 11111$