

## Numerical Set-2 answers

1. Show the value of all bits of a 12-bit register that hold the number equivalent to decimal 215 in

(a) binary; (b) binary-coded octal; (c) binary coded hexadecimal; (d) binary-coded decimal (BCD).

a) 000011010111

b) 000 011 010 111

c) 0000 1101 0111

d) 0010 0001 0101

2. Show the bit configuration of a 24-bit register when its content represents the decimal equivalent of 295:

(a) in binary; (b) in BCD; (c) in ASCII using 8 bits?

a) 0000000000000000100100111

b) 0000 0000 0000 0010 1001 0101

c) 00110010 00111001 00110101

3. What is the radix of the numbers if the solution to the quadratic equation:

$x^2 - 10x + 31 = 0$  is  $x = 5$  and  $r = 8$ ?

ans: 13