

Assignment - 1.

Date:- 2021-01-19

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Lecture = 1.

Roll no:- 2029165

Q.1.

Soln,

162

binary = 10100010

octa = 242

hexa = 102 = A2

Decimal	binary	octa	hex
162	(10100010) ₂	(242) ₈	(A2) ₁₆
193	(11000001) ₂	(301) ₈	(C1) ₁₆
128	(10000000) ₂	(200) ₈	(80) ₁₆
32	(000000) ₂	(40) ₈	(20) ₁₆
47	(101111) ₂	(57) ₈	(2F) ₁₆
93	(1011101) ₂	(135) ₈	(5D) ₁₆

Q.2. Soln;

Binary	Decimal	Octa	Hex
$(01011)_2$	11	$(13)_8$	$(B)_{16}$
$(11000001)_2$	193	$(301)_8$	$(C1)_{16}$
$(1011101)_2$	93	$(135)_8$	$(5D)_{16}$
$(10001111)_2$	143	$(217)_8$	$(8F)_{16}$

Q.3. Soln;

hex	binary	octa	decimal
$(A023)_{16}$	$(1010000000100011)_2$	$(120043)_8$	$(40995)_{10}$
$(A105)_{16}$	$(10100001000000101)_2$	$(120405)_8$	$(41221)_{10}$
$(016BC)_{16}$	$(1011010111100)_2$	$(13274)_8$	$(5820)_{10}$
$(223AE)_{16}$	$(10010001110101110)_2$	$(221656)_8$	$(74670)_{10}$

Q.4. Soln;

Octa	binary	hex	decimal
$(1271)_8$	$(1010111001)_2$	$(2B9)_{16}$	$(697)_{10}$
$(1392)_8$	not defined		
$(126)_8$	$(1010110)_2$	$(56)_{16}$	86
$(674)_8$	$(1110111100)_2$	$(3BC)_{16}$	956

Q. 5. Soln;

(8bit signed) binary	Integer Decimal
$(10110111)_2$	-73
$(01110111)_2$	59
$(11011010)_2$	-38
$(11111111)_2$	-65

Q. 6. Soln;

Decimal 4 bit 2 bit

• -10

84 bits = 011000000000

2 bits = 10101011

• 190

7 bits = 0111110

• -193

7 bits = 0111111

• -45

6 bits - 010011

• -32

6 bits - 100000

• 128

8 bits - 10000000

• -12

7 bits - 1000001