



Fundação CECIERJ - Vice Presidência de Educação Superior a Distância

Curso de Tecnologia em Sistemas de Computação

Disciplina: Introdução à Informática

AP1 1º semestre de 2018.

GABARITO

1. 5 pontos (0.625 cada item)

1.1) D

1.2) C

1.3) A

1.4) A

1.5) C

1.6) C

1.7) A

1.8) A

2. 2.5 pontos (0.5 cada item)

$$\begin{aligned} \text{a) } (1019.011)_{10} &= (1111111011.000000101101\dots)_2 = \\ &= (3FB.02D\dots)_{16} \end{aligned}$$

$$\begin{aligned} \text{b) } (876543210.0123456)_9 &= \\ &= (222120121110020100.0001021011122)_3 \end{aligned}$$

$$\text{c) } (777776)_8 = (2141156)_7$$

$$\begin{aligned} \text{d) } (7654321.123456)_8 &= (1F58D1.29CB8)_{16} = \\ &= (111110101100011010001.00101001110010111)_2 \end{aligned}$$

$$\begin{aligned} \text{e) } (FEDCBA.ABCD)_{16} &= (77556272.527464)_8 = \\ &= (333231302322.22233031)_4 \end{aligned}$$

3. 2.5 pontos (0.5 cada item)

$$\begin{aligned} \text{a) } (FA0EEBCC.BB07)_{16} + (FFF9C09A.AFF9A)_{16} &= \\ &= (1FA08AC67.6B00A)_{16} \end{aligned}$$

$$\begin{aligned} \text{b) } (70001012.0001)_8 - (67557076.75506)_8 &= \\ &= (221713.00302)_8 \end{aligned}$$

$$\begin{aligned} \text{c) } (9000001.0A1)_{16} - (FEDCBA.FF9C)_{16} &= \\ &= (8012346.0A74)_{16} \end{aligned}$$

$$\begin{aligned} \text{d) } (1001011011.1111)_2 + (1111101111.10111)_2 + \\ + (1001111110.11101)_2 &= \\ &= (100011001010.1001)_2 \end{aligned}$$

$$\begin{aligned} \text{e) } (1010010111.0101)_2 - (111010111.11011)_2 &= \\ &= (10111111.01111)_2 \end{aligned}$$