Quizzes: Chapter 02

1. The base of the decimal number system is _____.
   a. 2
   b. 8
   c. 10
   d. 16
   Correct Answer: (c)

2. The base of the binary number system is _____.
   a. 2
   b. 8
   c. 10
   d. 16
   Correct Answer: (a)

3. The base of the octal number system is _____.
   a. 2
   b. 8
   c. 10
   d. 16
   Correct Answer: (b)

4. The base of the hexadecimal number system is _____.
   a. 2
   b. 8
   c. 10
   d. 16
   Correct Answer: (d)

5. When converting a decimal integer to base b, we repeatedly _____ b.
   a. divide by
   b. multiply by
   c. add to
   d. subtract from
   Correct Answer: (a)

6. When converting a decimal fraction to base b, we repeatedly ____b.
   a. divide by
   b. multiply by
   c. add to
   d. subtract from
   Correct Answer: (b)

7. Which of the following representations is erroneous?
   a. $(10111)_2$
   b. $(349)_8$
   c. $(3AB)_{16}$
   d. 256
   Correct Answer: (b)

8. Which of the following representations is erroneous?
   a. $(10211)_2$
   b. $(342)_8$
   c. $(EEE)_{16}$
   d. 145
   Correct Answer: (a)

9. Which of the following representations is erroneous?
   a. $(111)_2$
   b. $(346)_8$
   c. $(EEG)_{16}$
   d. 221
   Correct Answer: (c)

10. Which of the following representations is erroneous?
   a. $(110)_2$

b. $(141)_8$
c. $(EF)_{16}$
d. 22A
Correct Answer: (d)

11. Which of the following is equivalent to 12 in decimal?
    a. $(1110)_2$
    b. $(C)_{16}$
    c. $(15)_8$
    d. None of the above
    Correct Answer: (b)

12. Which of the following is equivalent to 24 in decimal?
    a. $(11000)_2$
    b. $(1A)_{16}$
    c. $(31)_8$
    d. None of the above
    Correct Answer: (a)