## INFORMATION REPRESENTATION

## **ASSIGNMENTS**

- 1. Convert 1111 0110 from base 2 to base 10
- 2. Convert 0111 1111 from binary to decimal
- 3. Convert 27 from base 10 to base 2
- 4. Convert 62cd from hexadecimal to base 2
- 5. Convert 0111 1000 1111 1100 from binary to base 16
- 6. Convert 0111 1110 1010 0111 from base 2 to hexadecimal
- 7. Convert 223 from base 10 to binary
- 8. Convert 10 from octal to binary
- 9. Convert d214 from base 16 to binary
- 10. Convert 0111 1110 1000 1111 from binary to hexadecimal
- 11. Convert 77 from base 8 to base 10
- 12. Convert 11101010 from base 2 to base 16
- 13. Convert 51 from base 10 to base 2
- 14. Convert 100101 from base 2 to base 16
- 15. Convert 1111000 from base 2 to base 16
- 16. Convert 23 from base 8 to base 10
- 17. Convert 1001110 from base 2 to base 10
- 18. Convert 31 from base 16 to base 10
- 19. Convert 246 from base 10 to base 2
- 20. Convert 89 from base 16 to base 2
- 21. Convert 176 from base 10 to base 2
- 22. Convert 10110100 from base 2 to base 10
- 23. Convert 1101 from base 2 to base 16
- 24. Convert 1011000 from base 2 to base 10
- 25. Convert 110110011 from base 2 to base 8
- 26. Convert 7 from base 8 to base 2
- 27. Convert ad from base 16 to base 2
- 28. Convert 73 from base 8 to base 10
- 29. Convert 49 from base 16 to base 2
- 30. Convert 11011101 from base 2 to base 8

- 31. Convert 10 from base 2 to base 16
- 32. Convert 10011000 from base 2 to base 16
- 33. Convert 10001101 from base 2 to base 8
- 34. Convert ad from base 16 to base 10
- 35. Convert 41 from base 16 to base 2
- 36. Convert ff from base 16 to base 2
- 37. Convert 27 from base 8 to base 10
- 38. Convert 11110101 from base 2 to base 10
- 39. Convert 10110101 from base 2 to base 10
- 40. Decode the following ASCII message.

- 41. What base is being used if the letters A, B, C, D, E, or F appear as digits?
- 42. convert  $(110011)_2$  to decimal.
- 43. convert (1011.101)<sub>2</sub> into decimal.
- 44. convert  $(51)_{10}$  into binary
- 45. Example: convert (F4C)<sub>16</sub> into decimal.
- 46. Convert 01101<sub>2</sub> to octal
- 47. Convert 001100110<sub>2</sub> to octal
- 48. Convert 1011<sub>2</sub> to octal
- 49. Convert 11110001<sub>2</sub> to octal
- 50. What is ASCII CODE and where its used and why?
- 51. What is unicode?
- 52. How many bits are used to represent Unicode, ASCII, UTF-32, and UTF-8 characters?
- 53. What scripts does Unicode support?
- 54. Why is there more than one Unicode encoding?
- 55. Can I store Unicode data in a non-Unicode System?
- 56. What's the difference between ASCII and Unicode?
- 57. What's the difference between Unicode and UTF-8?
- 58. Are Web sites using Unicode right now?
- 59. What is the difference between ASCII, ISCII (Indian) and Unicode?
- 60. What is ISCII?