



SRI RAMAJAYAM GLOBAL SENIOR SECONDARY CBSE SCHOOL

Chapter - 2 (03.07.2020)

STD: XI

TIME: 01.30 Hrs

SUBJECT: COMPUTER SCIENCE

TOTAL MARKS: 50

General Instructions:

- All questions are compulsory.
- Section A: Q.no. 1 to 10 - Multiple choice questions (MCQs) and carry 1 mark each.
- Section B: Q.no. 11 to 20 - Fill in the blank questions and carry 1 mark each.
- Section C: Q.no. 21 to 26 - Short answer questions and carry 2 marks each.
- Section D: Q.no. 27 to 33 - Long answer questions and carry 3 marks each. (any 6)

Time Allotment:

Section A:	10 Minutes (1x1=10)	1 minute per each Question.
Section B:	15 Minutes (1x1.5=15)	1.5 minute per each Question.
Section C:	24 Minutes (6x4=24)	4 minutes per each Question.
Section D:	36 Minutes (6x6=36)	6 minutes per each Question.
5 Minutes for checking and presentations.		

Total Time = 90 Minutes (1.30 Hrs)

Section - A

I. Multiple choice questions (MCQs)

10X1=10

- Which of the following is not a positional number system?
 - Roman Number System
 - Octal Number System
 - Binary Number System
 - Hexadecimal Number System
- The value of radix in binary number system is _____
 - 2
 - 8
 - 10
 - 1
- Which amongst this is not an octal number?
 - 645
 - 234
 - 876
 - 123
- The cumulative addition of the four binary bits (1 + 1 + 1 + 1) gives
 - 1111
 - 111
 - 100
 - 1001
- Convert in to decimal: $(214)_8 = \underline{\hspace{2cm}}?$
 - $(140)_{10}$
 - $(141)_{10}$
 - $(142)_{10}$
 - $(130)_{10}$
- $(170)_{10}$ is equivalent to $(170)_{10}$ is equivalent to _____
 - $(FD)_{16}$
 - $(DF)_{16}$
 - $(AA)_{16}$
 - $(AF)_{16}$
- The input hexadecimal representation of 1110 is _____
 - 0111
 - E
 - 15
 - 14

8. Convert the binary equivalent 10101 to its decimal equivalent.

a) 21

b) 12

c) 22

d) 31

9. Which of the following is not a binary number?

a) 1111

b) 101

c) 11E

d) 000

10. Which of the following is the correct representation of a binary number?

a) $(124)_2$

b) 1110

c) $(110)^2$

d) $(000)_2$

Section - B

II. Fille in the Blanks

10X1=10

11. The binary addition $1 + 1 + 1$ gives _____

12. The value of radix in octal number system is _____

13. The hexadecimal digits are 1 to 0 and A to _____

14. Convert the binary number 11001 to decimal. The answer is _____

15. Full form of MSB _____

16. Complete the sequence of following binary numbers: 100, 101, 110, _____, _____, _____.

17. Decimal number system with _____ unique symbols.

18. Complete the sequence of following binary numbers: 100, 101, 110, _____, _____, _____.

19. Add the binary numbers: $101 + 110 =$ _____

20. Complete the sequence of following hexadecimal numbers: 17, 18, 19, _____, _____, _____.

Section – C

III. Answer the following questions

6x2=12

21. What are the basic cases of Binary addition?

22. Convert $(266)_{10}$ to Octal.

23. Convert $(372)_8$ to Decimal.

24. Convert $(423)_{10}$ to Hexadecimal.

25. Convert $(356)_{16}$ to Decimal.

26. Convert $(1010111010)_2$

Section – D

IV. Answer the following questions (any 6)

6x3=18

27. Define:

- i. Binary Number System
- ii. Octal Number System
- iii. Decimal Number System
- iv. Hexadecimal Number System

28. Convert the following decimal numbers to binary:

- i) 84 ii) 100

29. Convert the following binary numbers to decimal:

- i) 10010 ii) 10010101

30. Convert the following binary numbers to octal:

- i) 11001 ii) 10011101

31. Convert the following octal numbers to binary:

- i) 7642 ii) 7015

32. Convert the following hexadecimal numbers to binary:

- i) A07 ii) 7AB4

33. Add the following binary numbers:

- i) 1011101 and 101101 ii) 11110.11 and 1011.01

*****All the Best*****

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