

KENDRIYA VIDYALAYA SANGATHAN
FIRST PERIODIC TEST, 2019

Subject: Computer Science
Class: XI

Max. Marks: 40
Time : 1:30 Hrs.

Note: 1. All the questions are compulsory.
2. Answer the questions after carefully reading the text.

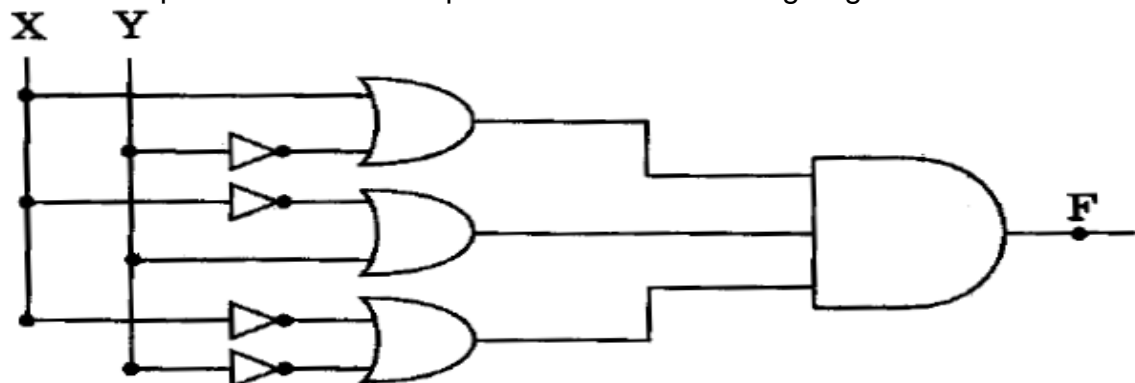
Q1. What is UNICODE? What is its significant? 2

Q2. Name the law shown below and verify it using a truth table. 2
 $A + B.C = (A+B).(A+C)$

Q3. Draw logic circuit diagram for the following expression: 2
 $Y = ab + b'c + c'a'$

Q4. Prove algebraically $X.Y + X'.Z + Y.Z = X.Y + X'.Z$ 2

Q5. Write the equivalent Boolean expression for the following Logic Circuit : 2



Q6. What is difference between an interpreter and a compiler? 2

Q7. What is the difference between RAM and ROM? 2

Q8. What do you mean by Literals? Explain with example. 2

Q9. What is the function of memory? What are its measuring units? 2

Q10. Arrange the following memory units in ascending order of their size 2
 Byte, kilo byte, tera byte, peta byte, nibble, bit, giga byte, zetta byte

Q11. Explain briefly the functions of Operating System? 2

Q12. Convert the following base of number system: 4X1.5=6

- (i) $(1010100.011)_2 = (\dots\dots\dots)_{10}$
- (ii) $(3674)_8 = (\dots\dots\dots)_2$
- (iii) $(72905)_{10} = (\dots\dots\dots)_{16}$
- (iv) $(B2F)_{16} = (\dots\dots\dots)_8$

- Q13.** What are the basic Units of computer? Explain the functions of each unit briefly. 2
- Q14.** What are the advantages and disadvantages of Python programming language? 2
- Q15.** Write a program in Python to calculate area and circumference of circle. If radius of circle input by user through keyboard. 2
- Q16.** Write a program in Python to find out simple interest if Principle amount, rate and time are input form keyboard. 2
- Q17.** Write a program in Python to convert temperature given in Fahrenheit to Celsius. 2
- Q18** Predict the output: 2

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(a)  x, y=20,60
      y, x, y=x, y-10, x+10
      print(x, y)
```

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(b)  a, b=12,13
      c, b=a*2,a/2
      print(a, b, c)
```
