Class XII – Informatics Practices
Sample Paper

Q - 1 What is character encoding system?   (1)
Q – 2 Devika says that the following numbers indicate an address   (1)
         192.154.12.23
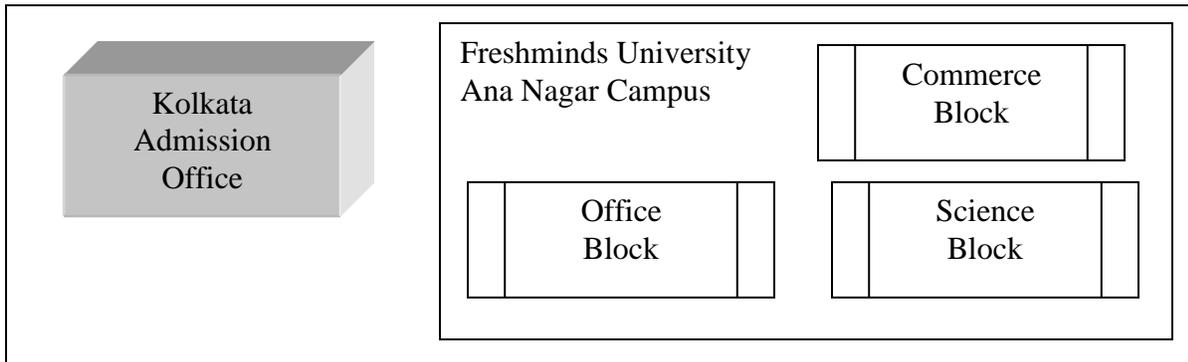What is the above address called? To which object/device it is assigned
Q – 3 Identify the type of topology from the following: (2)
    (i)   In it, each node is connected with the help of a single co-axial cable.
    (ii)   In it, each node is connected with the help of independent cable with the help
             of a central switching (communication controller).
Q – 4 Explain: a) Spoofing   b) Ogg Vorbis   (2)
Q – 5 Diagrammatically show how would you connect 6 PCs, 1 Server, 1 printer and 2 scanners
in Star topology.   (2)
Q – 6 Freshminds University of India is starting its first campus in Ana Nagar of South India
with its center admission office in Kolkata. The university has 3 major blocks comprising of
Office Block, Science Block and Commerce Block in the 5 KM area Campus.   (2)

Expected wire distances between various locations:

Office Block to Science Block	90m
Office Block to Commerce Block	80m
Commerce Block to Science Block	15m
Kolkatta Admission office to Ana Nagar campus	2450km

Expected number of computers to be installed at various locations in the University is as follows:

Office Block	10
Science Block	140
Commerce Block	30
Kolkata Admission office	8

    (i)   Suggest the authorities, the cable layout with topology amongst various blocks inside
             university campus for connecting the blocks.
    (ii)   Suggest the communication medium to be used along with its type.

Q – 2 Answer the following questions:

  (a) How many selection mode are supported by JList box in netbeans. Name them.   (2)

  (b) What is the purpose of default clause in a Switch Statement? What happens in its

absence?   (2)

  (c) What happens when you try to call a local variable outside its procedure? Justify with

reason?   (2)

  (d) Which HTML tags are used to insert a table and adding rows to it with column headings?

Give example.   (2)

  (e) Mention the purpose of each of the following HTML tags   (2)

, <LI.>, <A>,<FORM>

Q – 3 Answer the following questions:

a) Hriday has created a table, later on he realized that primary key should be applied to column A instead of column B. Help him to do the same by writing appropriate SQL statements to make required changes.   (2)

b) There are two table T1 and T2 in a database. Cardinality and degree of T1 are 26 and 12 respectively. Cardinality and degree of T2 are 34 and 11 respectively. What will be the degree and cardinality of their Cartesian product?   (2)

c) What is the use of having clause in a query?   (2)

d) Explain the difference between inner join and outer join.   (2)

e) What is the purpose of COMMIT and ROLLBACK statement?   (2)

f) What do you mean by referential integrity? Explain any two rules covered under it.

                                                     3

g) Explain any three numeric functions.   3

Q – 3 Design the following web page in HTML.   (5)

Q – 4 Answer the following questions:

a)   What will be the output of the following code: (2)
```
int a=5, b=10;
for(int i=1; i<=2;i++)
{
System.out,println("Line 1="+ a++ +"&" + b--);
System.out,println("Line 2="+ ++b + "&" + a+3);
}
```

b)   Analyze the following program segment and determine how many times the body of loop
     will be executed. (Show the working also)   (2)
```
int x=5, y=50;
while (x<=y)
{
y = y/x;
System.out.println(y);
}
```

c) . Manager of **Bachat Bank** has developed a java form for finding EMI to be paid by
customers against repayment of loan. Loan interest rates are(Yearly) –   (8)

Loan Type	Interest Rate
Car Loan.	14.5 %
Personal Loan	13.25 %
Education Loan	11.75 %

1. Write code to make the textfields for EMI(txtemi) and Interest Rate(txtrate)as
   uneditable.

2. When the user clicks the *CmdCalcEMI*button, the total payable EMI should be calculated and displayed in the **txtemi** text box. To calculate EMI, firstly calculate compound interest using formula $ci=p*(1+r/100)^t$. Add compound interest to loan amount and divide by time   (in months).

3. Write the code for **CmdExit** button to stop the application.

4. Write the code for*CmdClear* command button to clear all the text boxes, option buttons. Also cursor should point on **txtLoanAmt**text box.