This question paper consists of 8 questions and 5 printed pages.

Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐

CERTIFICATE IN COMPUTER APPLICATIONS

(Computer Applications)

(712)

Day and Date of Examination ....

Signature of Invigilators 1. ....

2. ....

___

General Instructions :

1. Candidate must write his/her Roll Number on the first page of the question paper.

2. Please check the question paper to verify that the total pages and total number of questions contained in the paper are the same as those printed on the top of the first page. Also check to see that the questions are in sequential order.

3. Making any identification mark in the answer-book or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.

4. Write your Question Paper Code No. 53/VOC/O, Set ☐A☐ on the answer-book.

CERTIFICATE IN COMPUTER APPLICATIONS

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Time : 2 Hours]   [Maximum Marks : 40

Note : *All* questions are compulsory. Marks are indicated against each question.

1. Fill in the blanks (Write answer in your answer-book) :   ½×15=7½

(a) _____ library function of the C gives the square root of the given number.

(b) In C _____ conversion character means type of data item is string.

(c) In _____ data processing, the loss of data is minimized.

(d) A/An _____ application is the part of the system that user applies to interact with data.

(e) _____ means arranging the data in alphabetical order.

(f) A/An _____ query changes data in a table.

(g) _____ are the pre-designed styles which can be applied to fix the style of different parts of the report in a different way.

(h) _____ flowchart describes the data flow for a data processing system.

(i) The _____ information system is based on the pre-assumption that the data and information are used by more than one system in the organization.

(j) A/An _____ is the central node in the network.

(k) _____ errors are often hard to find.

(l) The _____ statement in C is used to bypass the remainder of the current pass through a loop.

(m) _____ translator can detect both compilation-type errors and execution-type errors line by line.

(n) A collection of components that work together to realize some objectives forms a _____.

(o) The _____ study is the first stage of system development life cycle.

2. Write True (*T*) or False (*F*) for the following statements/Fill in the blanks (Write answer in your answer-book) : ½×15=7½

(a) INSERT INTO is a DML statement.

(b) Database is a collection of fields.

(c) There are four types of data models generally used for Database Management.

(d) MS-Access is a member of Microsoft Visual Studio.

(e) Selecting multiple fields at one time is not possible in MS-Access.

(f) In network model, relationship among the data is represented by links.

(g) Data redundancy is not possible in DBMS.

(h) The _____ operator in C permits two different expressions to appear in situation where only one expression would ordinarily be used with the FOR statement.

(i) _____ library function of the C gives the power of x^y.

(j) _____ is the escape sequence used to give new line.

(k) Graphical representation of a system's data and how the process transforms the data is known as _____.

(l) A/An _____ is the name which is placed horizontally in a table.

(m) The number of fields in a table is called its _____.

(n) _____ is the maximum field size of byte under number data type.

(o) Multidimensional arrays are processed in the same manner as one-dimensional arrays on an element by element basis.

3. Answer the following questions : 1×3=3

(a) Define tuple and field.

(b) Name one DDL statement and one DML statement of SQL.

(c) Define any *two* properties of relational data model.

4. Answer the following questions : 3×2=6

    (a) Write any *two* advantages of decentralized data processing system.

    (b) Draw a flowchart for the following algorithm :
        (i) Prompt the user to read a numeric value of four digits
        (ii) Store the value into year
        (iii) If year is divisible by 4, print leap year

5. Find the output of the following program : 3

```
#include<stdio.h>
void main( )
{
int n=622;
while (n!=0)
{
r=n% 10;
printf("%d", r);
n=n/10;
}
}
```

6. What do the following declarations denote? Explain each line separately : 3

    (a) int r;

    (b) char school [9] = "National";

    (c) float x = 0;

7. Write a program in C language to input a three-digit number from the user and calculate, print the sum of the digits of a given number, e.g., 964=9+6+4=19   5

OR

Write a program in C language to read a string from the user. Calculate and print the length of the string without using library function.   5

8. Answer the questions on the basis of the following table :

EMP

Emp Id	Name	Job	Salary in ₹
101	Aman	Asst. Manager	15,000·00
102	Ajay	Manager	25,000·00
103	Geeta	Asst. Manager	15,000·00
104	Sunita	Office Asst.	4,000·00

(a) Write a structure for the above table.

(b) Write a query to select the Emp Id and Name of all the employees whose salary is less than ₹ 10,000.

(c) Write a query to select the Emp Id and Job of all the employees who are Asst. Managers.   5

OR

The following table shows tapes in a movie library :

Movie ID	Title	Rating	Copies	Cost in ₹
A001	Titanic	3	4	4,000·00
B002	Evil Dead	2	2	3,000·00
C003	Gandhi	5	10	45,000·00
D004	Jurassic Park	6	7	50,000·00
E005	Ahat	3	5	6,000·00

(a) Write SQL command to create the above table and name its Movie Tapes.

(b) Write a query to display Movie ID, Title and Copies of all the tapes where Copies are more than 4 and cost is more than ₹ 6,000·00.   5

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