

Computer Science Exam JIRI 2080

Time: 3 hrs Full Marks: 50

Write short answer of the given questions.

Group A

1. Answer the following questions in one sentence. [6×1=6]

- a) What is Tele-Communication?
- b) Which software is used to remove virus from Computer System?
- c) Write any two examples of IOT.
- d) Write two features of Database Management System.
- e) Define Module.
- f) What is keywords in C Programming?

2. Write appropriate technical terms for the following. [2×1=2]

- a) A Company which provides service of internet.
- b) The smallest unit to represent information on quantum Computer.

3. Write the full forms. [2×1=2]

- a) SMS
- b) WiFi

Group "B"

4. Answer the following questions. [9×2=18]

- a) What is Network Topology? Write types of Computer Network.
- b) What is Digital Footprint? Write any two importance of it.
- c) Define E-commerce with Example.
- d) What is firewall in Computer? Write two major uses of IT policy.
- e) Define Artificial intelligence. Write any two areas where artificial intelligence is used.
- f) What is Computerized database? Write any two benefits of it.
- g) What is table in DBMS? Write method to Construct table.
- h) What is Primary key? Write two advantages of it.
- i) Write any two difference between field name and record.

5. Write output of the following program. [2]

```
DECLARE FUNCTION SUM( )
CLS
PRINT SUM ( )
END
```

```
FUNCTION SUM( )
FOR I= 2 to 20 STEP 2
LET S=S+I
NEXT I
SUM = S
END FUNCTION
```

6. Rewrite the given program after correcting the bugs. [2]

```
DECLARE SUB ser( )
CLS
EXCUTE series
END
```

```
SUB ser( )
REM program to generate 10,10,20,30,50.....upto 50th terms.
A=10
Z=10
FOR tpr= 1 TO 50 STEP-10
DISPLAY A;Z;
A=A+Z
Z=A+Z
NEXT tpr
END series( )
```

7. Study the following program and answer the given questions. [2]

```
DECLARE FUNCTION COUNT(z$)
CLS
INPUT"ENTER A WORDS="; z$
END
```

```
FUNCTION COUNT(z$)
m=LEN(z$)
v$=UCASE$(z$)
FOR I = 1 TO m
v$=MID$(z$,I,1)
IF v$= "A","E","I","O","U" THEN
```

```
g=g+1
END IF
NEXT I
vowel =g
END FUNCTION
```

Questions:

- a) What is the name of the functions used in the above program.
- b) Write down the missing statement in the main module to execute the program.

Group "C"

8. Convert as instructed. [4×1=4]

- a) $(11)_2 + (111)_2 \times (101)_2 = (?)_2$
- b) $(1000011)_2 \text{ MOD } (11)_2 = (?)_2$
- c) $(225)_{10}$ into Hexa
- d) $(A9C)_{16}$ into Octal

9.

- a) Write a QBASIC program that asks length, breadth and height of a room and calculates its volume and perimeter. Create FUNCTION...END FUNCTION to find the volume and SUB...END SUB to calculate perimeter. [4]
- b) A sequential data file called "Marks.dat" contains Students name, address, Rollno, English, Nepali and Computer fields. Write a program to display all the contents of the data file. [4]

10. Write a program in C language that asks two numbers and find sum of them. [4]

OR

Write a program in C language to display 5,15,25,35,45.....upto 25th terms of the following series.