

**Tribhuvan University**  
**Faculty of Humanities & Social Sciences**  
**OFFICE OF THE DEAN**

**2020**

**Bachelor in Computer Application**  
**Course Title:** C Programming  
**Code No:** CACS151  
**Semester:** II

**Full Marks: 60**  
**Pass Marks: 24**  
**Time: 3 hrs**

*Candidates are required to answer all the questions in their own words as far as possible.*

**Group B**

**Attempt any SIX questions.**

**[6×5=30]**

2. What are keywords? Explain the compiling process of C program. [1+4]
3. Differentiate between iteration and recursion. [5]
4. Define an array? Write program to generate the following output using loop. [1+4]  

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```
5. Define operator. Explain any four types of operators available in C ? [1+4]
6. Why function is required in C programming? Write a program to find smallest number from the array using function. [1+4]
7. Why DMA is used in C language? Write a program to enter age of 20 students and count age between 18 and 25 from the array using DMA function. [1+4]
8. Write a C program to generate following output using graphics functions. [5]

**Group C**

**Attempt any TWO questions.**

**[2×10=20]**

9. What is union? Write a C program to enter **bid, title, price, pages** of 100 book into structure variable called **book** and sort them in descending order on the basis of their title with use of pointer. [2+8]
10. What is the use of data file in C? Write a C program to accept 100 numbers from user and store them in **odd.txt** file (if number is odd) or **even.txt** file (if number is even) then display odd numbers reading from **odd.dat** file. [1+9]
11. What do you mean by System Design Tools? Explain any four system design tools with suitable example. [2+8]