

POKHARA UNIVERSITY

Level: Bachelor

Semester – Spring

Year: 2020

Program: BE

Full Marks: 70

Course: Programming in C

Pass Marks: 31.5

Time: 2 hrs.

Candidates are required to answer in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

Section - A: (5×10=50)

- Q. N. 1 Judge efficiency of algorithm and flowcharting over program development process. 4+6
Draw a flowchart to find out the grade of student when the marks of four subjects are given. The method of assigning grade is as:

Percentage	Grade
More than or equal to 85	A
Less than 85 and more than or equal to 70	B
Less than 70 and more than or equals to 55	C
Less than 55 and more than or equal to 45	D
Less than 45 and more than or equal to 32	E
Less than 32	F

- Q. N. 2 Arrays are static in nature, meaning they are of fixed size. This produces shortage or wastage of memory. Does C language offer some techniques to make them dynamic? Illustrate with suitable program. 10
- Q. N. 3 C language has some built-in functions in the header file string.h for string manipulation. Explain different types of string handling function with example. 10

OR

Function supports code reusability. Do you agree with this statement? Support your answer with a suitable program.

- Q. N. 4 Difference between entry controlled loop and exit controlled with suitable example. 5+5
WAP to find sum of n natural number using recursion.
- Q. N. 5 Discuss the role of file handling technique in C programming. An organization has a file named “staff.txt” that has 10 records of staffs having their id, name and salary. Using the concept of structure, you are required to write a program to ask the details of three more staffs and add them in the file. Also, finally you need to display all the records and the total salary paid by the organization. 3+7

Section - B: (1×20=20)

- Q. N. 6 Design a menu driven program having following options: 4×5
1. Read a string and print it reversely.
 2. Input two nos. and perform as four function (+, -, *, /) calculator
 3. Read the matrix of 4*4 and find the largest element in the matrix.
 4. Exit.

Note: Use of separate function to each option entertains full marks.