

University of Sargodha

M. Sc. I. T, First Term Exam 2014

Subject: Information Technology

Paper: Programming Fundamentals (CMP: 2122)

Time Allowed: 2:30 Hour

Maximum Marks: 60

Note: Objective part is compulsory. Attempt any four questions from subjective part.

Objective Part

Q.1. Write short answers of the following on your answer sheet. (2*12)

- i. What is the difference between while and do-while loops?
- ii. What is struct keyword in C?
- iii. Why main function is necessary in each C program?
- iv. What is the use of compiler in C language?
- v. Convert following algebraic equation into C expression $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
- vi. What is flow-chart?
- vii. What is continue statement?
- viii. What is function prototype in C?
- ix. Give 2-dimensional C array declarations of different types.
- x. What is pass by reference in C? Give suitable example.
- xi. What is the relationship between C pointers and arrays?
- xii. What is switch statement?

Subjective Part (9 x 4)

- Q.2. Develop a C program to sort array of following data: 78, 23, 45, 12, 60, 67, 32.
- Q.3. Develop a C program to read the temperature of a week on daily basis, and print the temperature in ascending order.
- Q.4. Develop a C program to calculate the cube value of number given by a user.
- Q.5. Draw flow-chart and develop a C program to find class average grade (with counter controlled repetition).
- Q.6. Write a function to calculate the factorial of any integer number given by user and use this function into a C program.
- Q.7. Write a program that has a structure to store Date (day, month, year), create two Date type variables, use these variables to store two dates and display these dates.