University of Sargodha

BS 1ˢᵗ Term Examination 2015

Subject: Computer Science   **Paper: Programming Fundamentals (CMP:2122)**

Time Allowed: 2:30 Hours   Maximum Marks: 60

Objective Part   Compulsory

Note: Attempt all questions each question carry equal marks?   **(12*2=24)**

- i.   What is **Object** Code?
- ii.   What are **comments** and how to use them in a C program?
- iii.   Why we use **do-while** loop in C?
- iv.   What is variable **initialization** and why is it **important**?
- v.   What is the **Low level** language?
- vi.   List the different types of **control structures** in C?
- vii.   What is function **prototype**?
- viii. What is syntax error?
- ix.   What is the purpose of struct keyword in C?
- x.   What is the advantage of an **array** over individual **variables**?
- xi.   What are escape sequences?
- xii.   What is linker?

Subjective: (4*9=36)

Note: Attempt any four questions.

Q 2.   Write a program that takes year as input (type int) and then determines whether year is leap or not.

Q 3.   Write a program that displays the following output using **nested** loop.

```
   *
  ***
 *****
*******
```

Q 4.   Write a C program that **copies the content** of text file "**Book1.txt**" to other new file "Book2.txt".

Q 5.   Write a program that takes eight (8) elements (array) from the user. **Sort** the array in **ascending** order.

Q 6.   Write a C program to find **power** of a number using function **recursion**.

Q 7.   Write a program that defines a structure **Student** to store StdId (type int), StdRoll (type string) and **StdMarks** (type float). In main () declare array of structure variables (**size 2**), input records of two BSCS students and then display the records.