



Name: _____
Signature: _____
Roll # & Class: _____

The Islamia University of Bahawalpur

Department of CS&IT

Baghdad-ul-Jadeed Campus

Class: _____
Paper: Mid Term

Paper: Programming Fundamentals
Course Code: _____

Objective-Type (Maximum Marks 10, Maximum Time 10 minutes)

Q1: Encircle the most appropriate choice. Cutting overwriting is not allowed. You can perform rough work (if required) on the back side of this sheet.

1.1: The _____ of a set of integers is the sum of the integers divided by the number of integers

- a)** median **(b)** mode **(c)** average **(d)** sum

1.2: If we want to find the maximum integer from a list of 50 integers, then the most suitable choice of input data to our algorithm is _____

- a)** 50 integer variables **(b)** 50 float variables **(c)** 51 integer variables **(d)** array of size 50

1.3: If we want to use set of real numbers in C/C++ program then we have to use _____ data type

- a)** int **(b)** unsigned int **(c)** float **(d)** real

1.4: What would be the most appropriate C/C++ statement if we want to choose, “non negative” values of a variable x _____

- a)** $x \geq 0$ **(b)** $x > 0$ **(c)** $x \leq 0$ **(d)** $x < 0$

1.5: Symbols like > and < are known as _____ operators

- a)** comparison **(b)** arithmetic **(c)** logical **(d)** case

1.6: Which one is **NOT** a programming language

- a)** Python **(b)** C++ **(c)** Java **(d)** MS word

1.7: If $a > b$ is false, then which of the following is always true?

- a)** $a < b$ **(b)** $a \geq b$ **(c)** $a == b$ **(d)** $a \leq b$

1.8: C language is a _____ of C++

- a)** subset **(b)** superset **(c)** power set **(d)** branch

1.9: Quadrilateral is a _____ sided figure

- a)** two **(b)** three **(c)** four **(d)** five

1.10: Which one is **NOT** a C/C++ language compiler _____

- a)** Turbo C **(b)** Borland C **(c)** GCC **(d)** Virtual Machine



Name: _____
Signature: _____
Roll # & Class: _____

The Islamia University of Bahawalpur

Department of CS&IT

Baghdad-ul-Jadeed Campus

Class: _____
Paper: Mid Term

Paper: Programming Fundamentals
Course Code: _____

Subjective Type (Maximum Marks 20, Maximum Time 55 minutes)

Q2. Briefly discuss the followings. **(10 Marks)**

2(a) What is the difference between a compiler and an interpreter? **(2)**

2(b) For the C++ language, explain *for loop* statement by drawing its flow chart **(2)**

2(c) Discuss why we **can** or **can't** say that C/C++ are strongly typed languages **(2)**

2(d) What are the benefits of writing an algorithm of a problem first, and then translating it to a programming language source code? **(2)**

2(e) What is the difference between an *int* and a *float* data type in C/C++? **(2)**

Q3. Our problem is to find minimum integer from a list of n-integers. Write down different forms of algorithm to solve the given problem **(10 Marks)**

3(a) Describe Algorithm in Pseudocode **(2.5)**

3(b) Describe Algorithm in C++ **(2.5)**

3(c) Describe Algorithm in Flow chart **(2.5)**

3(d) Dry run the algorithm on your answer sheet when the input is {100, 45, 150, 60} **(2.5)**