



Daffodil International University
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Final Examination, Summer 2021 @ DIU Blended Learning Center
Course Code: CSE112, Course Title: Computer Fundamental
Level: 1 Term: 1 Section: ALL
Marks: 40, Modality: Open Book Exam
Date: Thursday, September 2, 2021. Time: 09:00 AM-12:30 PM

1. (a) Write an algorithm for finding the sum, subtract, product and average of five inputting numbers. 5
 (b) Mr. Akbar Ali has bought three jackfruits of different weights (kg) from the market. 5
 Now draw a flowchart for finding the jackfruit of the maximum weight.

2. Find the output of the following C programs and justify your answer with necessary explanation. Also identify all the program segments with their purposes. 2.5 x 4 = 10

(a) <pre>// program a #include <stdio.h> void main() { float age, AgeInSeconds; printf("Enter your age:"); scanf("%f", &age); AgeInSeconds = 365 * 24 * 60 * 60 * age; printf("You have lived for %f seconds", AgeInSeconds); }</pre>	(b) <pre>#include <stdio.h> int main() { int k = 14, l = 12; if (l >= k) { l = k; k = l; printf("%d, %d\n", k, l); } return 0; }</pre>
(c) <pre>#include <stdio.h> int main() { int i; for(i=1; -1; i++) printf("%c ", i); return 0; }</pre>	(d) <pre>#include <stdio.h> int main() { int i; for(i=5; i<=20; i++) printf("i=%d\n", i); return 0; }</pre>

3. (a) Write a complete C program that finds real roots of a quadratic equation. 5
 (b) Identify each of the identifiers of the program that you have written in 3(a) with reason. 5

4. (a) International University maintains a unified grading system available in **Table1** for their students result processing. Prepare a program in C programming language for result calculation of the 10 students in a class for finding the grades of all courses taken in a semester. 5

(b) Write the syntax, flow-diagram and purpose of the selection control structure that is used in the C program written for 4(a).

5

Table 1: Unified Grading System

Numerical Grade	Letter Grade	Grade Point
80 – 100	A+	4.00
75 – 79	A	3.75
70 – 74	A-	3.50
65 – 69	B+	3.25
60 – 64	B	3.00
55 – 59	B-	2.75
50 – 54	C+	2.50
45 – 49	C	2.25
40 – 44	D	2.00
Less than 40	F	0.00