

Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Computer Science and Technology
100 level 1st Semester Examination – Jul./Aug. 2016
CST105-3 Structured Programming



Part B

Instructions to candidates

Duration: One (01) hour

Number of questions: Two (02) essay /

Answer all questions

Mark allocation: 60

- 1.
- a. Write a pseudo code to calculate the weekly wages of an employee. The payment depends on wages per hour and the number of hours worked. Moreover, if the employee has worked for more than 40 hours then he gets twice the wages per hour for every extra hour that he has worked. (5 mark)
 - b. Draw a flowchart for the algorithm you have written in part a. (5 mark)
 - c. Explain the difference between Auto and Extern storage classes considering their accessibility and existence. (5 mark)
 - d. Briefly explain the process of variable declaration in C language. (5 mark)
 - e. What is the main difference between if-else and switch-case statements? (5 mark)
 - f. Define the Array data structure and the way of accessing its elements. (5 mark)
- 2.
- a. What is meant by passing parameters as value and reference into a function? (5 mark)
 - b. List the important points to be considered while calling a function. (5 mark)
 - c. What is a Generic Pointer in C language? (5 mark)
 - d. Explain the difference between binary and text files in C language considering internal and external representation of data. (5 mark)
 - e. Define the standard streams in C language. (5 mark)



- f. Find the syntax errors of the following program and rewriting the corrected program (highlight the corrected errors).

```
1. #include<stdio.h>;
2. int main()
3. {
4.     int a[];
5.     printf("%d","Enter a number:");
6.     scanf("%d", a[0]);
7.     print("%d", a[0]);
8.     int* ptr=a[0]*a[0];
9.     return '0';
10.}
```

(5 mark)