



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
(ONLINE)
SEMESTER II
SESSION 2019/2020**

COURSE NAME : COMPUTER PROGRAMMING
COURSE CODE : BIT 10303
PROGRAMME CODE : BIT
EXAMINATION DATE : JULY 2020
DURATION : 3 HOURS
INSTRUCTION : 1. ANSWER ALL QUESTIONS.
2. THE STUDENTS SHOULD UPLOAD THE ANSWER BOOKLET (PDF/WORD FORMAT) WITHIN 30 MINUTES AFTER EXAMINATION PERIOD.

THIS QUESTION PAPER CONSISTS OF FIVE(5) PAGES

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Q1 Based on **Figure Q1**. Write program segment using for loop that sums the odd values from the array `list` and display the value of sum. For example, the sum for this list would be 121 (53+21+47).

| List | | | | |
|---------|---------|---------|---------|---------|
| list[0] | list[1] | list[2] | list[3] | list[4] |
| 32 | 16 | 53 | 21 | 47 |

Figure Q1

(10 marks)

Q2 Answer **Q2(a)** and **Q2(b)** based on case study in **Figure Q2**.

A BFF Design sells **five (5)** different types of shoes namely as shoes 1, shoes 2, shoes 3, shoes 4 and shoes 5. The supervisor need to keep daily sales of each type of shoes and total daily sales using the program that you are asked to develop. In your program should able read the sales for each type of shoes, display the sales for each type of shoes and calculate the total daily sales with two floating numbers.

Here is an example of an output:

```

/*supervisor will input the total sales for each shoes
of sales*/

Shoes 1 Sales: RM 250.50
Shoes 2 Sales: RM 100.70
Shoes 3 Sales: RM 350.50
Shoes 4 Sales: RM 400.30
Shoes 5 Sales: RM 180.00

Sales of each type of shoes

Sales for Shoes 1: RM 250.50
Sales for Shoes 2: RM 100.70
Sales for Shoes 3: RM 350.50
Sales for Shoes 4: RM 400.30
Sales for Shoes 5: RM 180.00

Total Daily Sales : RM 1282.00
    
```

Figure Q2

(a) Write a program segment to declare an array to store input sales from the supervisor.

(2 marks)



(b) Write a program segment to read the input sales into the array using `for...loop` in a day.

(4 marks)

(c) Calculate total daily sales using `for...loop` in a day.

(2 marks)

(d) Display using `for...loop` for sales in a day for all shoes.

(4 marks)

(e) Display total daily sales in a day in two floating numbers.

(2 marks)

(f) Write a complete program that compile the answer for **Q2(a)-Q(e)**.

(4 marks)

Q3 (a) Write a program segment using structure for student record that consist of student number, name and mark. (Hint: student number is integer and start from 1).

(4 marks)

(b) Based on answer in **Q1(a)**, declare array variable to store 5 student records.

(2 marks)

(c) Based on answer in **Q1(b)**, write a program segment to read the record of 5 students.

(6 marks)

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(d) Write a program segment to calculate the percentage of student mark. The full mark is 50. (3 marks)

(e) Write a program segment to print or display student record (student number, name and mark) only for odd student number. (5 marks)

Q4 Based on **Figure Q4** answer the following questions.

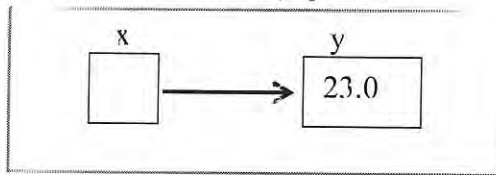


Figure Q4

(a) Declare variable x (2 marks)

(b) Declare variable y (2 marks)

(c) Assign variable y to variable x . (2 marks)

(d) 10.67 is assign to y , what the value of $*x$. (2 marks)

(e) Print the value of variable y through variable x (3 marks)

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Q5 Question **Q5(a)** and **Q5(b)** are based on the scenario in **Figure Q5**.

The manager of a land surveyor company decides to develop a payroll system for their staff. The system should contain information about all staffs, departments and their salary.

Figure Q5

- (a) Create a structure for employee and department. An employee structure should store employee's name, his salary, and hiring date. A department structure should store department manager, department staff, and profit
(10 marks)
- (b) Write two function namely `GetData()` and `FindAvg()`. `GetData()` is designed to collect employee's information as such in **Q5(a)**. `FindAvg()` function will receive one array of type `struct Employee` and an integer that gives the size of the array. `FindAvg()` will then return those employees' average salary.
(10 marks)

- END OF QUESTIONS -

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