

Monthly Assessment Test

Subject: Information Technology

Time: 30Min

Python Programming

15 marks

- I. Write the following python programs - **5 marks (2.5 marks each)**
 - a. Write a program to print "Hello, How are you"?
 - b. Write a program that asks two people for their names; stores the names in variables called name1 and name2; says hello to both of them.
- II. Write the following python programs - **5 marks (2.5 marks each)**
 - a. Write a script that asks a user for a number. The script adds 3 to that number. Then multiplies the result by 2, subtracts 4, subtracts twice the original number, adds 3, then prints the result.
 - b. Write a python script that prints the following figure

```
\  |  /
 @   @
  *
 \ "" /
```

- III. Write the following python programs - **5 marks (2.5 marks each)**
 - a. Write a program that asks five times to guess the lucky number. Use a while loop and a count
 - b. Write program using a for loop so that it asks the user for five guesses for number 9 then stops. Use "break" to terminate the for loop as soon as the correct number "9" is guessed.

- IV. Use recursive method to find the largest prime factor of the number 60085146 (the answer is 193) – **5 Marks**

The prime factorization of 15 is 3×5 . The largest prime factor of 15 is 5.

The prime factorization of 50 is $2 \times 5 \times 5$. So the largest prime factor is 5.

The prime factorization of 100 is $2 \times 2 \times 5 \times 5$. So the largest prime factor is 5.

The prime factorization of 42 is $2 \times 3 \times 7$. So the largest prime factor is 7.

You have to find the prime factorization of the given number, and then figure out which one is the largest.