

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.