Academic year: 2017-2018   Subject : Programming 1   Semester: 1   Day and Date: *Saturday 10/02/2018*

Level: *1*   Examiner: *Dr.Mohammed Bamatraf*   Department: IT/CS

Duration: 2:00 *hrs*   **A**

Q1. Choose the correct answer اختر إجابة واحدة صحيحة فقط (15 marks):

1. *in-valid* python expression ?
A. x+2=3   B. if I in range (1,4,1):   C. x += 2+2.5   D. PRINT ("Hello")

2. *Evaluate* (not(0 and (2 or 3))).
A. True   B. False   C. Un-evaluatable غير قابل للتقييم

3. Which of the following is *in-valid* comparison operator?
A. !=   B. ==   C. =   D. >=

4 *Lowest* Priority operator:
A. %   B. and   C. +   D. >=

5. *evaluate* the expression (4// (2 + 5)% 20) :
a. 0   b. 11   c. 7   d. Error

6. *evaluate* the expression ((4 & 2) << 1):
a. 4   b. 0   c. 0100   d. 0010

7. which of the following is *python keyword*:
a. FOR   b. Else   c. pycharm   d. False

8. for x in range(7,5,-1):
     print("Hello",end="")   will give *output* as:
a. HelloHello   b. HelloHelloHello   c. 7 and 6   d. no output

9. which of the following loops is *infinite loop* :
    a. while(22):   b. if (2<3):   c. for IF in range (2,3,4):   d. infinite=4*2

10. which of the following is a *programming language*:
a. microsoft   b. google   c. C#   d. BattleField 1.2

Q2. With the help proper example, briefly explain the following terms اشرح مع الاستعانة بمثال : (10 marks)

a. Flow chart
b. Algorithm
c. Interpreter
d. Arrays

Q3. Detect 4 Errors in the following code, state why! , وضح ٤ أخطاء بالكود أدناه مع توضيح السبب : (10 marks)

```
arr = (2, 3, 4, "ALI", 22, 13)
28 = a
for x in range(0, 10, 1):
    if (arr(x) % 2 == 0):
        print("ODD")
    else:
        print(EVEN)
    else:
        print ("Zero")
a="15"
b="5"
print (a//b)
```

COLLEGE OF COMPUTERS & INFORMATION TECHNOLOGY
FINAL EXAMINATION

Academic year: 2017-2018   Subject : Programming 1   Semester: 1   Day and Date: *Saturday 10/02/2018*
Level: *1*   Examiner: *Dr.Mohammed Bamatraf*   Department: IT/CS
Duration: 2:00 *hrs*   A

Q3. Trace the following codes, and show the output تتبع الخطوات ووضح ماهي المخرجات للأكواد التالية : (10 marks)

```
A.
x=6
while (x != 20):
        print (x,end=" ")
        x=x+5
```

```
B.
x=19
if (x//10==1):
        print (x)
else:
        print (x%10)
print ("Good Bye")
```

Q4. Answer *any five* of the following : (25 marks)

a. Draw the flow-chart and write the program to read 3 numbers and print the maximum.

b. Write a program to read two number and print them sorted in ascending order, اقرأ عددين وأظهرهم مرتبين تصاعديا

c. Using *while loop* , write a python program to read 10 numbers and print them in reverse

باستخدام عبارة while اقرأ ١٠ أعداد وأظهرهم متسلسلة عكس الادخال

d. Write a program to print odd numbers between 90 and 70 in descending order تنازليا من الأكبر إلى الأصغر

e. Write a program to check if a given number is prime or not.

f. Write a program to define array of 5 names, then:

    a. print the list individual name per line , اطبع الأسماء كل اسم بسطر على حده

    b. Print the size of the array,

    c. add one more name to the array. اضف اسم إلى المصفوفة

g. write a program to print factorials of numbers between any given range. مضروب الأعداد ضمن مدى معطى

Good Luck....