

# UNIVERSITY

# 2018/2019ACADEMIC YEAR

# SECOND SEMESTER EXAMINATION FOR THE FIRST YEAR SECOND SEMESTER BACHELOR OF SCIENCE IN INFORMATION SCIENCES

# COURSE CODE: INS 1204 COURSE TITLE: PROCEDURAL PROGRAMMING

DATE : 26<sup>TH</sup> APRIL 2019 TIME: 8.30- 10.30 AM

## INSTRUCTIONS: SECTION A IS COMPULSORY ATTEMPT TWO QUESTIONS IN SECTION B

### QUESTION ONE (30 MARKS)

a.	Define the	following	terms	as	used	in programming	( 4 marks)
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- i. Linker
- ii. Compiler
- iii. Interpreter
- iv. Assembler
- b. Write a program to add all integers from 1 to 100 (6 marks)
- c. Write a program to find gross salary of an employee (5 marks)
- d. Write a program to find the greatest number in 3 numbers (5 marks)

### **QUESTION TWO (20 MARKS)**

a) What is the output of the following?

(2 marks)

```
for (i=0;i<4;i++)
{ for (j=2;j<5;j++)
    {if (j==2)
    break;
    if (i==1)
    continue;
    printf("i=%d j=%d",I,j);
    }
}</pre>
```

 b) Write a program that uses loops to produce the following: (5 marks)

2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25

c) Write a program that uses an *if* statement with logical OR to validate the users input to be in the range 1-10
 (5 marks)

- d. Define an interpreter and explain the difference between a compiler and an interpreter.
   (4 marks)
- a) Using qualifiers write a program to show the sizeof
  - i. Short int
  - ii. Int iii. Long int

THREE

(4 marks)

#### QUESTION (20 MARKS)

a. Write a program to print the following stars Sequence (5 marks)

*	
**	
***	
****	
****	
 	/ -

b. Write a program to print Fibonacci series up to 100 (5 marks)

- c. Write a Program to find factorial of a number (5 marks)
- d. Define an operator and using examples explain the following operators.

( 5 marks)

- i. Bitwise operator
- ii. Comma operator
- iii. Logical operator
- iv. Relational operator

### **QUESTION FOUR (20 MARKS)**

a. Write a program to use bitwise AND operator between the two integers.

(5 marks)

b. Program to display series and find sum of 1+3+5+... +n.

.....( 5 marks)

c. Write a program to display the first 10 multiples of 5 on a single line

(5 marks)

d. Program to show sum of 10 elements of array & show the average ( 5 marks)

//END