*SH-III/Com. Sc.-305/SEC-1/19*

## B.Sc. 3rd Semester (Honours) Examination, 2019-20
## COMPUTER SCIENCE

**Course ID : 31515**                    **Course Code : SH-CSC-305/SEC-1**

Course Title: Programming in Python

**Time: 1 Hour 15 Minutes**                                **Full Marks: 25**

*The figures in the right hand side margin indicate marks.*
*Candidates are required to give their answers in their own words*
*as far as practicable.*

**1.** Answer *any five* questions:                                            1×5=5

   (a) What is flowchart?

   (b) What is top down programming approach? Give example.

   (c) What is decision table?

   (d) What is the use of '**' operator in python?

   (e) Name two types of scalar object python has.

   (f) How list are differ from tuple?

   (g) What is interpreter?

   (h) Write a python code segment to print 1 to 10 except 5 using 'for' statement.

**2.** Answer *any two* questions:                                            5×2=10

   (a) What is tuple? How the literal of tuple are written? Give example.

   (b) Explain with an example of while loop, break statement and continue statement.

   (c) Draw the flowchart to accept three distinct numbers, find greatest and show result.

   (d) Predict the output and justify your answer:

      (i) $-11\%9$

      (ii) $7\cdot7//7$

      (iii) (200-70)*10/5

      (iv) not "False"

      (v) 5*1**2.

**3.** Answer *any one* question:                                            10×1=10

   (a) Write a python program to initialize two matrices by taking data from the keyboard. Multiply them and show the result.

   (b) Write an algorithm to check whether a given number is prime or not. Write a python program to print first *n* prime numbers.

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**31515/16659**                                                **Please Turn Over**

## B.Sc. 3rd Semester (Honours) Examination, 2019-20

## COMPUTER SCIENCE

**Course ID : 31515**              **Course Code : SH-CSC-305/SEC-1**

Course Title: Unix/Linux Programming

**Time:  1 Hour 15 Minutes**                                    **Full Marks:  25**

*The figures in the right hand side margin indicate marks.*

*Candidates are required to give their answers in their own words
as far as practicable.*

**1.** Answer *any five* questions:                                   1×5=5

(a) What is the difference between Linux and Unix?

(b) What is bash shell?

(c) Write full form of GUI and CLI?

(d) What are kind of permissions in Linux?

(e) What are environment variables?

(f) How can you append one file to another in Linux?

(g) What is the different file systems used in Linux?

(h) Can we use Linux OS through windows OS? How?

**2.** Answer *any two* questions:                                   5×2=10

(a) What are the purposes of following commands in Unix : grep, cat, Is, who, date.

(b) Explain briefly different shells used in different Linux operating systems.

(c) Write a bash shell script to find sum of odd numbers between 1 to 20.

(d) Why Linux considered as more secured than other OS.

**3.** Answer *any one* question:                                   10×1=10

(a) Explain some Linux Distros along with their usage.

(b) Write a shell script to check whether a given number is prime of not. Write a shell program to check whether a given number is palindrome or not.

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