UG/4th Sem/COMP./19 (Pr.)

2019

B.Sc.

** th Semester Examination

COMPUTER SCIENCE (Honours)

Paper - GE4P

[Practical]

Set - II

Full Marks: 20

Time: 3 Hours

The figures in the margin indicate full marks.

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

Illustrate the answers wherever necessary.

PYTHON PROGRAMMING LAB

Answer any one question (on lottery basis)

 $15 \times 1 = 15$

- 1. Write a program to check whether a year in leap year or not.
- 2. Write a program to generate Fibonacci Series.

[Turn Over]

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- 3. Write a program to find the GCD of two integers.
- 4. Write a program of Linear search.
- 5. Write a program of Binary search.
- 6. Write a program to find the largest and smallest among there integers.
- 7. Write a program of Bubble sort.
- 8. Write a program of insertion sort.
- 9. Write a program of selection sort.
- 10. Write a program to check whether the given integer is prime or not.

PROGRAMMING IN VB/GAMBAS LAB

Answer any *one* question (on lottery basis)

 $15 \times 1 = 15$

- 1. Print a table of numbers from 5 to 15 and their squares and cubes.
- 2. Print the largest among three numbers.
- 3. Read n numbers. Count the number of negative, positive numbers and zeros in the list.

- 4. Read a single dimensional array and find the sum and average of these numbers.
- 5. Read a two dimensional array. Find sum of the contents of the concerned 2-D array.
- 6. Find the largest element of an array of 10 numbers.
- 7. Find the smallest and second smallest of an array of 10 numbers.
- 8. Check a given integer whether prime or not.
- 9. A person deposits Rs. 1000 in a fixed account yielding 5% interest. Compute the amount in the account at the end of each year for n years.

INFORMATION SECURITY AND CYBER LAWS LAB

Answer any one question (on lottery basis)

 $15 \times 1 = 15$

 Demonstrate the use of any open source steganography tool to hide data in a cover image.
 Find the maximum size of the data that you can hide in the chosen cover image.

[Turn Over]

- Crack the password of the current windows admin account using 'John the Ripper' password unlocking tool.
- 3. Demonstrate the use of the following networking commands:
 - (i) ipcogfig
- (ii) nslookup

(iii) tracert

(iv) whois

- (v) netstat
- 4. Run a full vulnerability test against a target using nmap/zenmap.
- 5. Write a script to encrypt a plain text into Caesar cipher. Again decrypt back the cipher into plain text.
- 6. Demonstrate how Burp proxy lets you intercept, insepect and modify the raw traffic passing between your browser and a target application.
- 7. Write a script to demonstrate Rail Fence cipher.
- 8. Demonstrate how you can send a protected word document via internet.

[PNB - 2, Viva-voce - 3]