ACTIVITY CODE:1903042021

(B.Sc.) 6th Semester (Honours) Examination, October 2020

Subject: Computer Science

Course ID: 61516 Course Code: SH/CSC/603/DSE -3

Course Title: Information Security

Full Marks: 15 Time: 1 Hr.

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

1. Answer *any Five* of the following questions: (1 x 5 = 5)

a) What is firewall?

b) Define cryptography.

c) Define steganography.

d) What is encryption?

e) Define virus.

f) What is diffusion?

g) What is hacking?

h) What is MAC?

i) What is residual risk?

j) Define digital signature.

UNIT II

2. Answer *any five* of the following questions: (2 x 5= 10)

a) What are the functions of information security?

b) What is a threat?

c) What are the threats to Information Security?

d) What are the properties of hashing functions?

e) What is Proxy firewall?

f) Write down the various forms of attacks.

g) Define Cipher text.

h) What are the characteristics of information?

i) Differentiate between attack and threat

j) Define security policy.

ACTIVITY CODE:1903043021

(B.Sc.) 6th Semester (Honours) Examination, October 2020

Subject: Computer Science

Course ID: 61516 Course Code: SH/CSC/603/DSE -3

Course Title: Introduction to Data Science

Full Marks: 15 Time: 1 Hr.

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

1. Answer *any Five* of the following questions: (1 x 5 = 5)

a) Which data object in R is used to store and process categorical data?

b) How can you load and use csv file in R?

c) How do you get the name of current working directory in R?

d) What is R Base package?

e) How do you install a package in R?

f) What is the output of runif(5)?

g) How to get a list of all the packages installed in R?

h) What does unlist() do?

i) Define PCA

j) What is maximum likelihood estimation?

UNIT II

2. **Answer *any two* of the following questions:** **(2 x 5= 10)**

a) What are different ways to call a function in R?

b) What is reshaping of data in R?

c) How can you add dataset in R?

d) What is the difference between frame and matrix in R?

e) How missing values are represented in R?

f) How missing impossible values are represented in R?

g) How do you import data in R language?

h) What is selection bias?

i) Define regression

j) Define SVM