

Hall Ticket Number:

--	--	--	--	--	--	--	--	--

IV/IV B.Tech (Regular / Supplementary) DEGREE EXAMINATION**July, 2021****Eight Semester****Time: Three Hours****Computer Science and Engineering****Application Programming Using Python****Maximum: 60 Marks***Answer ALL Questions from PART-A.**(12X1 = 12 Marks)**Answer ANY FOUR questions from PART-B.**(4X12=48 Marks)***Part - A**

1. Answer all questions

(12X1=12 Marks)

- List any four Built –in Functions in Python
- Write any two differences between Break and Continue
- Write any four string functions in python
- Define a Dictionary in python
- Define Encapsulation
- Define Data Model
- List different supervised learning algorithms
- Write any two differences between classification and regression
- Define Core Point in DBSCAN?
- Write any two differences between Supervised and Unsupervised Learning
- Write steps involved in Preprocessing
- What is Entropy?

Part - B

2. a) What is a String? Write a python program that print the count of the number of letters in a string 6M
 b) Write a python program to print the following patterns

(i) 5 5 5 5 5 (ii) 1
 4 4 4 4 2 3
 3 3 3 4 5 6
 2 2 7 8 9 10
 1

6M

- Describe features and advantages of python 6M
 - Write a python program that print the count of number of letters, words, and lines in a file 6M
- Define a Tuple? Why Tuples are called Immutable? What makes a Tuple different from a List? 6M
 - What is user defined function in python? How can we pass parameters for user defined function? 6M
- Define List? With suitable examples explain built-in functions of List 6M
 - Write python program(s) to demonstrate the various file I/O operations. 6M
- Define Machine Learning. Explain different types of Machine Learning? 6M
 - Explain k-Nearest Neighbor algorithm with suitable example 6M
- Define Supervised Learning. Explain Linear Regression algorithm with suitable example 6M
 - Find the Simple Linear Regression equation for the following data using Least Squares method 6M

X	17	13	12	16	14	16
Y	94	73	59	93	85	66

- Define Unsupervised Learning. Discuss challenges in unsupervised Learning 6M
 - Define Clustering. Explain k-means algorithm with suitable example 6M
- If Epsilon is 1.5 and min_point is 3, what are the clusters that DBSCAN would discover with the following 16 examples: (0, 0), (1, 0), (1, 1), (2, 2), (2, 3), (3, 3), (3, 6) (4, 1) (4, 3), (5, 1), (7, 1), (7, 5), (7, 6), (8, 2), (8, 3), (8, 5). Draw the 10 by 10 space and represent the discovered clusters and the samples in each of the clusters 12M



Scheme of Valuation

Unit-I

- 2a) definition -2M**
 - Program-4M**
- b) (i) program-3M**
 - (ii) program-3M**
- 3a) features of python-4M**
 - Advantages-2M**
- b) program- count of letters- 2M**
 - count of words-2M**
 - count of lines-2M**

Unit-II

- 4a) Definition-2M**
 - Reason- 2M**
 - Difference-2M**
- b) create a table-2M**
 - Insert data-2M**
 - Drop Table-2M**
- 5a) Definition-2M**
 - Example programs- 4M**
- b) Lifecycle-3M**
 - example program-3M**

Unit-III

- 6a) Definition- 2M**
 - Types-4M**
- b) Algorithm- 4M**
 - example- 2M**
- 7a) Definition-2M**
 - Algorithm & example- 4M**
- b) reason-2M**
 - Justification- 4M**

Unit-IV

- 8a) Definition-2M**
 - Challenges-4M**
- b) Definition-2M**
 - Algorithm & example- 4M**
- 9a) Definition-2M**
 - Algorithm- 4M**
- 9b) Definition-2M**
 - Program-4M**