PRIYADARSHINI COLLEGE OF ENGINEERING, NAGPUR

DEPARTMENT: Artificial Intelligence and Data Science

CAT-II (2023-24) Odd Sem

SEMESTER: B.Tech. VII
SUBJECT: Python Programming
DURATION: 1 Hr 30 Min

DATE : 19/10/2023
SUBJECT CODE: BTECH_AI&DS-704T
MAX MARKS: 35

Note:
1) All questions are Compulsory.
2) All questions carry marks as indicated.
3) Assume suitable data whenever necessary.

Que. No.	Question	Marks	CO	BL
Que 1. A	I. NumPy arrays can be a) Indexed b)Sliced c)Iterated d)All of the mentioned	1	CO3	1
	II.What is the purpose of NumPy in Python? a)numeric calculation b)Scientific computing c)Both a &b d)None of the mentioned	1	CO3	1
B	Write a programme to draw a line in a diagram from position (0,0) to position (6,250)in Python.	5	CO3	2
C	Interpret Data Visuvalization with Seaborns in Python.	7	CO3	2
	OR			
Que 2. A	I.Amongst which of the following is / are used to analyze the data in pandas. a)DataFrame b)Series c) a&b d) None	1	CO3	1
	II. A series object is size mutable. a)True b)False	1	CO3	1
B	Differentiate between Numpy and Pandas	5	CO3	2
C	Justify Data Visuvalization with Matplotlib in Python.	7	CO3	3
Que 3. A	I.How to add the mailing feature in the Flask Application? a)Pip install Flask b)Pip install Flask -Mail c)install Flask Mail d)pip Flask -Mail	1	CO4	1
	II.Flask is a a)Miniframework b)Microframework c)Nanoframwork d)Paraframework	1	CO4	1
B	State the Benefit of using Flask framework.	5	CO4	1

	c	Differnece between Django and Flask .	7	CO4	2
		OR			
Que 4.	A	I.Who developed Flask? a) Armin Ronacher b) James Ghosling c) Denis Richey d) All of the mentioned	1	CO4	1
		II. Flask is a framework for_____. a) Mobile development b) Web developement c) Cloud Developement d) none of the mentioned	1	CO4	1
	B	What is flask framework and explain in details.	5	CO4	2
	C	Interpret Flask Extension for database integration Concept in Python.	7	CO4	2
Que 5.	A	I. Machine Learning is subset of which of the following? a) Artificial Intelligence b)Deep Learning c)Data Learning d)None	1	CO5	1
		II. which of the following is the type of Regression Algorithms. a) Linear b) Logisticc) Polynomial d) All of the above	1	CO5	1
	B	Distinguish between Supervised And Unsupervised learning.	5	CO5	2
		OR			
Que 6.	A	A _____ problem is when the output variable is a category a) Classification b) Regression c) Clustering d) All of the mentioned	1	CO5	1
		II.In what type of Machine Learning Labeled dataset used a) Supervised learning b) Unsupervised c) Reinforcement d) none of the mentioned	1	CO5	1
	B	Justify Regression Algorithms in Python	5	CO5	2