


Format of Question paper-01

Name:			
Enrolment No:			
UPES End Semester Examination, May 2023			
Course: B.Tech. (BE)-II			Semester: II
Program: Data Structures in Biomedical Engineering			Time: 03 hrs.
Course Code: HSBE1003			Max. Marks: 100
Instructions: Attempt all questions.			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q1	What is the output of the following code snippet. <code>print (20**1 + (5 + 6)**(0 + 1))</code>	4	CO1
Q2	Comprehend basic logical operators used in Python.	4	CO2
Q3	Given the following snippet, find the output: X= 0001 1101 when X>>2	4	CO2
Q4	Differentiate between dictionary and list.	4	CO3
Q5	Define the attributes of numpy: 1)Ndim 2)Shape 3) Reshape 4) Size	4	CO4
SECTION B (4Qx10M= 40 Marks)			
Q6	Write the runnable Python Program which must include the following: 1- Input from the user with proper syntax 2- While loop 3- Conditional statement(s)	10	CO2
Q7	Define the following functions in Python: 1. enumerate() 2. range() 3. filter() 4. map() 5. reduce()	10	CO3
Q8	Define types of arrays with example.	10	CO3
Q9	Comprehend global variable with example.	10	CO1
SECTION-C (2Qx20M=40 Marks)			
Q10	What is queue in Python ? What are the basic operations performed on queue? Also write down the applications of queue.	20	CO3
Q11	Comprehend few common issues you encounter when working with large amounts of data?	20	CO4
OR			
Q11	How is the data visualization performed in Python? Also, provide the suitable example of data visualization.	20	CO4