**POORNIMA UNIVERSITY, JAIPUR.**

**END SEMESTER EXAMINATION, April 2023**

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|  | **4BT2103** | Roll No. | Total Printed Pages: 2 |
| **4BT2103** |  |
| B. Tech. II Year IV-Semester (Back) End Semester Examination, April 2023  **(AI)** | |
| **BAI04103: Python Programming** | | | |

# Max. Time: **3** Hours. Max. Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

# **1.----------------------------------------------** **2.-----------------------------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | Is it necessary to appy Indentation in python programming? Justify your opinion with suitable example. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Elaborate the steps to install Anaconda in windows | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.2** | **(a)** | Have you heard the library Beautiful soup .what is the purpose of it in python? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | What is the need of Pandas library in Data Analysis? Justify its role with proper example. | **(6)** | **Analysing** |
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|  |  | **UNIT-II (CO2)** |  |  |
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| **Q.3** | **(a)** | You are working in a software company and you manager assign a task that you need to develop a python script to check if string ends with one of the strings from a list? | **(6)** | **Analysing** |
|  |  |  |  |  |
|  | **(b)** | You are the student of B. Tech IV sem and your faculty give you a task to create Python script which includes a function named fun\_pangrams to check whether a string is a pangram or not.  Note: Pangrams are words or sentences containing every letter of the alphabet at least once. For example: "The quick brown fox jumps over the lazy dog". | **(6)** | **Applying** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.4** | **(a)** | Suppose a coding completion is there and you took participate in it and you need to create a list, remove the element at index 4 and add it to the 2nd position and at the end of the listOriginal list [34, 54, 67, 89, 11, 43, 94]List After removing element at index 4 [34, 54, 67, 89, 43, 94]List after Adding element at index 2 [34, 54, 11, 67, 89, 43, 94]List after Adding element at last [34, 54, 11, 67, 89, 43, 94, 11].please provide solution for given problem. | **(6)** | **Evaluating** |
|  |  |  |  |  |
|  | **(b)** | Suppose there is a coding completion and you participated in this event and a question that you need to be solve is as given: Suppose there two python sets, update the first set with items that exist only in the first set and not in the second set. | **(6)** | **Evaluating** |
|  |  |  |  |  |
|  |  | **UNIT-III (CO3)** |  |  |
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| **Q.5** | **(a)** | Take inputs from user to make a list. Again take one input from user and search it in the list and delete that element, if found. Iterate over list using for loop. | **(6)** | **Applying** |
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|  | **(b)** | You need to takes a list from user and returns a new list that contains all the elements of the first list minus all the duplicates. | **(6)** | **Evaluating** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.6** | **(a)** | Justify that while loop play an important role in programming and provide the appropriate solution for the code given below  – Repeatedly print the value of the variable xValue, decreasing it by 0.5 each time, as long as xValue remains positive.  – Print the square roots of the first 25 odd positive integers.  – Repeats a block of code as long as the user indicates they want it to. | **(6)** | **Evaluating** |
|  |  |  |  |  |
|  | **(b)** | Write a program to find greatest common divisor (GCD) or highest common factor (HCF) of given two numbers. | **(6)** | **Evaluating** |
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|  |  | **UNIT-IV (CO4)** |  |  |
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| **Q.7** | **(a)** | Define a class Beverage Decorator which is instantiated with a beverage object and contains two methods: get cost which adds the cost of the decorator to the total drink cost and get description which updates the description of the drink. | **(6)** | **Applying** |
|  |  |  |  |  |
|  | **(b)** | Write a python script to display Even number lines from the text file. | **(6)** | **Applying** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.8** | **(a)** | What is the role of constructor in classes .Create a class person and initialize the object with parameterise constructor | **(6)** | **Applying** |
|  |  |  |  |  |
|  | **(b)** | You are a team member of python group and need to create a program in python to count the number of lines from a text file "count.txt" which is not starting with any preposition.  Example: If the file "count.txt" contains the following lines:  A boy is playing there.  There is a playground.  An aeroplane is in the sky.  The sky is pink.  Alphabets and numbers are allowed in the password.  The function should display the output as 2.please suggest solution to your team. | **(6)** | **Evaluating** |
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|  |  | **UNIT V (CO5)** |  |  |
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| **Q.9** | **(a)** | Aditi has used a text editing software to type some text. After saving the article as WORDS.TXT, she realised that she has wrongly typed alphabet J in place of alphabet I everywhere in the article.  Write a function definition for JTOI() in Python that would display the corrected version of entire content of the file WORDS.TXT with all the alphabets "J" to be displayed as an alphabet "I" on screen.  Note: Assuming that WORD.TXT does not contain any J alphabet otherwise.  Example:  If Aditi has stored the following content in the file WORDS.TXT:  WELL, THJS JS A WORD BY JTSELF. YOU COULD STRETCH THJS TO BE A SENTENCE  The function JTOI() should display the following content:  WELL, THIS IS A WORD BY ITSELF. YOU COULD STRETCH THIS TO BE A SENTENCE | **(6)** | **Evaluating** |
|  |  |  |  |  |
|  | **(b)** | How to create a module in python and what is the advantage to create module in python. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.10** | **(a)** | Justify the importance of lambda function in python and how we can differentiate regular function with lambda function | **(6)** | **Analysing** |
|  |  |  |  |  |
|  | **(b)** | Explore the various list operations | **(6)** | **Remembering** |