2112N1034

Candidate's Seat No :_____

EMBA Sem-1 (Rep) Examination
IISe-EMS4
Basic Programming & Digital Transformation

Time : 2-30 Hours]

December-2024

[Max. Marks : 70

Instructions:

- *Question no 1 to 4 carry 14 marks each, with both the questions mentioned in question 1 to 4 of 7 marks each.*
- *Question no. 5 carries 14 marks (each question of 2 marks). Out of the 10 questions, attempt any seven.*

Question 1

i.   What is the difference between high-level language and low-level language? What is the difference between compiled language and interpreted language? Is python a high-level or low-level language?

ii.   What is syntax? Give an example. What is debugging? What is the full form of IDE?

OR

i.   What is the Length of the following list?
mixed list = [1, 'apple', 3.14, True]
Write the syntax for creating the above list in Python.
What are the data types of the individual elements in the list assumed by Python?

ii.   What is the difference between Lists and Tuples? In which datatype Key-Value pairs can be stored?
What will be the output of the following code?

```
my_list = ["Mango", "Banana", "Apple", "Orange",
"Coconut"]

print(my_list[2])
```

Question 2

i.   What is Object-Oriented Programming (OOP)? How classes are different than objects? Is Python an OOP language?

ii.   What are the advantages of OOPs? Name two IDEs for Python.

OR

i.   Define algorithm. Give some real-world examples of algorithm. How algorithm can be visualized?

ii.   Define syntax error and logical errors. Write down few measures to avoid syntax and logical errors.

P.T.O.

Question 3

i. Write a note on the applications of Python. Write a python script to display the sentence "This is an examination."

ii. What is variable? What is data type? What is the difference between integer and float? Consider the following code and write the final value of "myvariable".

```
myvariable = 10
myVariable = 20
myvariable = 12
myVariable = 24
```

OR

i. State which of the following variables are valid in Python and justify your statement. "Customer_id", "customerid1", "1customerId", "customer-id", "id Customer".

ii. Say, you are given a task to write a computer program for classifying the object on the basis of their color (Red or Blue). Draw a neat flowchart for the program.

Question 4

i. What is the full form of "HTML" and "CSS"? What is the difference between external stylesheets and inline styling? Which tag is used for a paragraph in HTML?

ii. Write a note on sustainable web development. Write the names of five web browsers.

OR

i. What is the full form of "SQL" and "CSV"? Name five spreadsheet software.

ii. Write short notes on Descriptive Statistics vs. Inferential Statistics. Write down their differences.

Question 5

Attempt any seven out of ten.

1. The extension of a Python script file is
   - i. .py
   - ii. .txt
   - iii. .python
   - iv. .csv

2. The data type _____ may have values "True" and "False".
   - i. Integer
   - ii. Float
   - iii. Boolean
   - iv. None of the above

3. Which of the following enables a function to generate output for external use?
   - v. return
   - vi. break
   - vii. generate
   - viii. output

4. Polymorphism is a feature of Python. (True/False).

5. Indention is mandatory for Python coding. (True/False).

6. In Python, files are required to be opened in "w" mode to write data in it. (T/F).

7. Which process is conventionally denoted with a oval symbol in a flowchart?

8. Which variables are accessible from anywhere in the script or module?

9. Which company produced "Azure Cloud Service"?

10. Which data type should be used for text in Python?