Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

INTERNATIONAL CENTRE FOR APPLIED SCIENCES
END SEMESTER THEORY EXAMINATION - DECEMBER 2022
III SEMESTER B.Sc. (Applied Sciences) in Engg.

INTRODUCTION TO DATA ANALYTICS WITH PYTHON [ICS 235 - S2]

Marks: 50   **Duration: 180 mins.**

Answer all the questions.

Missing data, if any, may be suitably assumed

1)

A) How is data visualization used for business decision-making? [any 5 well-explained points]   (2.5)

B) Define a python function to check whether a number (user-defined) is prime or nonprime. The function raises an exception if the argument is not a number. Call the function by call by user-specified value and print the result, and accept the exception in case the user inputs non-integer data.   (5)

C) Attempt the following: (2.5)
i) Which one is not a reserved word: a) pass b) in c) export d) and
ii) Return type of input() _____
iii) print(13//5)_____
iv) Run time error is called as _____
v) print(type(True))_____

2)

A) Write python code to create the following DataFrame. Insert a new column 'Mean' and assign mean column values to 'Mean'.   (2.5)

	one	two
a	1.0	4.0
b	2.0	3.0
c	3.0	2.0
d	4.0	1.0

B) Write Python program: (5)
i) to replace whitespaces with an underscore and vice versa .
ii) to extract year, month and date from an url.
iii) to separate and print the numbers of a given string.
iv) to find all three, four, five characters long words in a string.

v) to find all words which are at least 4 characters long in a string.