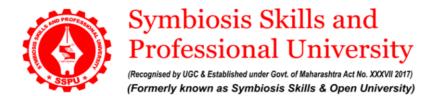
[6]



Future Ready Skills Training Certificate Course in Machine Learning Engineer End Course Skill Examination

(Batch-M1)

Slip No. M1_2

Duration: 3 Hr. Max. Marks: 50

Marks	Signature of Internal Examiner	Signature of External examiner
50		

Instructions:

- 1. Read the questions carefully and perform experiment/task accordingly.
- 2. Save your file with your name (ML1_Name)
- 3. Get checked program output/software output by examiner
- 4. Show all work to the examiner.
- Q.1) Read two different .csv files 'User Usage.csv' & 'User device.csv'. Use the statistical skills to answer the following questions. [15 Marks]
- a) Perform any suitable method to combine these datasets (concat/Merge/ Join). Apply data pre-processing techniques on given data set.
 - b) Analyse your data using exploratory data analysis. [6]
 - c) Draw your conclusions and comment on your findings. [3]
- Q.2) Based on the above data frame, Use the programming skill to answer the following questions. [15 Marks]
 - a) Create the basket for discount on Monthly MB: [6]

Monthly MB	Discount to attract users	
Upto 50 MB	10% extra on monthly MB usage	
51 MB- 1000 MB	4% extra on monthly MB usage	
1001MB - 15000MB	3% extra on monthly MB usage	
15001MB - 30000MB	2% extra on monthly MB usage	

b) Create the new column "Message" having message for user as mentioned below:

"Greetings, Your Monthly used data is 50MB. You will get 55 MB data to use for the next month."

[3]

- c) Find
- i) Which platform user uses highest Monthly_mb used.
- ii) Least used device.
- iii) Count of the IOS users
- Q.3) Find the following data set. Observe all the variables and data values given in the data set. Using the machine learning skill answer the following questions [20 Marks]

DATA SET: Glass Data Set

This data is the result of a chemical composition of the glass. Based on chemical composition type of glass is defined.

Attribute Information is as mentioned below:

1. Id number: 1 to 214

2. RI: refractive index

3. Na: Sodium (unit measurement: weight percent in corresponding oxide, as

are attributes 4-10)

- 4. Mg: Magnesium
- 5. Al: Aluminum
- 6. Si: Silicon
- 7. K: Potassium
- 8. Ca: Calcium
- 9. Ba: Barium
- 10. Fe: Iron
- 11. Type of glass: (class attribute)
 - -- 1 building_windows_float_processed
 - -- 2 building_windows_non_float_processed
 - -- 3 vehicle_windows_float_processed
 - -- 4 vehicle_windows_non_float_processed (none in this database)
 - -- 5 containers
 - -- 6 tableware
 - -- 7 headlamps

Using a suitable machine learning technique, develop a suitable model to predict, if glass can be used for household purpose.