Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script to keep track of number of times the web page has been accessed (Use Session Tracking).

[Marks 15]

Q. 2) Create 'Position_Salaries' Data set. Build a linear regression model by identifying independent and target variable. Split the variables into training and testing sets. then divide the training and testing sets into a 7:3 ratio, respectively and print them. Build a simple linear regression model.

[Marks 15]

Q. 3) Viva   **[Marks 05]**

Savitribai Phule Pune University
T.Y.B.Sc. (CS) Sem-VI(2019 Pattern) University Practical Examination, April 2025
CS-368- Web Technology II & Data Analytics

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1 Write a PHP script to change the preferences of your web page like font style, font size, font color, background color using cookie. Display selected setting on next web page and actual implementation (with new settings) on third page (Use Cookies).   **[Marks 15]**

Q. 2) Create 'Salary' Data set . Build a linear regression model by identifying independent and target variable. Split the variables into training and testing sets and print them. Build a simple linear regression model for predicting purchases.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

T.Y.B.Sc. (CS) Sem-VI(2019 Pattern) University Practical Examination, April 2025
CS-368- Web Technology II & Data Analytics

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script to accept username and password. If in the first three chances, username and password entered is correct then display second form with "Welcome message" otherwise display error message. [Use Session]   **[Marks 15]**

Q. 2) Create 'User' Data set having 5 columns namely: User ID, Gender, Age, Estimated Salary and Purchased. Build a logistic regression model that can predict whether on the given parameter a person will buy a car or not.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script to accept Employee details (Eno, Ename, Address) on first page. On second page accept earning (Basic, DA, HRA). On third page print Employee information (Eno, Ename, Address, Basic, DA, HRA, Total) [Use Session]   **[Marks 15]**

Q. 2) Build a simple linear regression model for Fish Species Weight Prediction.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Create XML file named "Item.xml"with item-name, item-rate, item quantity Store the details of 5 Items of different Types

[Marks 15]

Q. 2) Use the iris dataset. Write a Python program to view some basic statistical details like percentile, mean, std etc. of the species of 'Iris-setosa', 'Iris-versicolor' and 'Iris-virginica'. Apply logistic regression on the dataset to identify different species (setosa, versicolor, verginica) of Iris flowers given just 4 features: sepal and petal lengths and widths.. Find the accuracy of the model.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

T.Y.B.Sc. (CS) Sem-VI(2019 Pattern) University Practical Examination, April 2025
CS-368- Web Technology II & Data Analytics

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write PHP script to read "book.xml" file into simpleXML object. Display attributes and elements .
(simple_xml_load_file() function)   **[Marks 15]**

Q. 2) Create the following dataset in python & Convert the categorical values into numeric format.Apply the apriori algorithm on the above dataset to generate the frequent itemsets and association rules. Repeat the process with different min_sup values.   **[Marks 15]**

TID	Items
1	Bread, Milk
2	Bread, Diaper, Beer, Eggs
3	Milk, Diaper, Beer, Coke
4	Bread, Milk, Diaper, Beer
5	Bread, Milk, Diaper, Coke

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script to read "Movie.xml" file and print all MovieTitle and ActorName of file using DOMDocument Parser. "Movie.xml" file should contain following information with at least 5 records with values. MovieInfoMovieNo, MovieTitle, ActorName ,ReleaseYear   **[Marks 15]**

Q. 2) Download the Market basket dataset. Write a python program to read the dataset and display its information. Preprocess the data (drop null values etc.) Convert the categorical values into numeric format. Apply the apriori algorithm on the above dataset to generate the frequent itemsets and association rules.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a JavaScript to display message 'Exams are near, have you started preparing for?' (usealert box) and Accept any two numbers from user and display addition of two number .(Use Prompt and confirm box)   **[Marks 15]**

Q. 2) Download the groceries dataset. Write a python program to read the dataset and display its information. Preprocess the data (drop null values etc.) Convert the categorical values into numeric format. Apply the apriori algorithm on the above dataset to generate the frequent itemsets and association rules.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Create a HTML fileto insert text before and after a Paragraph using jQuery. [Hint : Use before( ) and after( )]

[Marks 15]

Q. 2) Create the following dataset in python & Convert the categorical values into numeric format.Apply the apriori algorithm on the above dataset to generate the frequent itemsets and association rules. Repeat the process with different min_sup values.   **[Marks 15]**

TID	Items
1	'eggs', 'milk','bread'
2	'eggs', 'apple'
3	'milk', 'bread'
4	'apple', 'milk'
5	'milk', 'apple', 'bread'

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a Javascript program to accept name of student, change font color to red, font size to 18 if student name is present otherwise on clicking on empty text box display image which changes its size (Use onblur, onload, onmousehover, onmouseclick, onmouseup)   **[Marks 15]**

Q. 2) Create the following dataset in python & Convert the categorical values into numeric format.Apply the apriori algorithm on the above dataset to generate the frequent itemsets and associationrules. Repeat the process with different min_sup values.   **[Marks 15]**

TID	Items
1	butter, bread, milk
2	butter, flour, milk, sugar
3	butter, eggs, milk, salt
4	eggs
5	butter, flour, milk, salt

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a Java Script Program to show Hello Good Morning message onload event using alert boxand display the Student registration from.   **[Marks 15]**

Q. 2) Create the following dataset in python & Convert the categorical values into numeric format.Applythe apriori algorithm on the above dataset to generate the frequent itemsets and association rules. Repeatthe process with different min_sup values.   **[Marks 15]**

TID	Items
1	{Apple , Mango , Banana}
2	{Mango , Banana , Cabbage , Carrots}
3	{Mango , Banana ,Carrots}
4	{Mango , Carrots}

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a Java Script Program to show Hello Good Morning message onload event using alert box and display the Student registration from.   **[Marks 15]**

Q. 2) Consider text paragraph.*So, keep working. Keep striving. Never give up. Fall down seven times, get up eight. Ease is a greater threat to progress than hardship. Ease is a greater threat to progress than hardship. So, keep moving, keep growing, keep learning. See you at work.* Preprocess the text to remove any special characters and digits. Generate the summary using extractive summarization process.

                                                                           [Marks 15]

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a Java Script Program to print Fibonacci numbers on onclick event.   **[Marks 15]**

Q. 2) Consider any text paragraph. Remove the stopwords. Tokenize the paragraph to extract words and sentences. Calculate the word frequency distribution and plot the frequencies. Plot the wordcloud of the text.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a Java Script Program to validate user name and password on onSubmit event.

                                                                                    [Marks 15]

Q. 2) Download the movie_review.csv dataset from Kaggle by using the following link
:https://www.kaggle.com/nltkdata/movie-review/version/3?select=movie_review.csv to perform
sentiment analysis on above dataset and create a wordcloud.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) create a student.xml file containing at least 5 student information   **[Marks 15]**

Q. 2) Consider text paragraph.*"""Hello all, Welcome to Python Programming Academy. Python Programming Academy is a nice platform to learn new programming skills. It is difficult to get enrolled in this Academy."""*Remove the stopwords.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a script to create "cricket.xml" file with multiple elements as shown below:
        <CricketTeam>

    <Team country="Australia">
                        <player>_____</player>
                        <runs>_____</runs>
                        <wicket>____</wicket>
        </Team>
        </CricketTeam>

Write a script to add multiple elements in "cricket.xml" file of category, country="India".   **[Marks 15]**

Q. 2) Build a simple linear regression model for User Data.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script to create student.xml file which contains student roll no, name, address, college and course. Print students detail of specific course in tabular format after accepting course as input.

[Marks 15]

Q. 2) Consider any text paragraph. Remove the stopwords.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours **Maximum Marks: 35**

Q. 1) Write a PHP script to create student.xml file which contains student roll no, name, address, college and course. Print students detail of specific course in tabular format after accepting course as input.

[Marks 15]

Q. 2) Consider any text paragraph. Preprocess the text to remove any special characters and digits. **[Marks 15]**

Q. 3) Viva **[Marks 05]**

Q. 1) Write a PHP script to create student.xml file which contains student roll no, name, address, college and course. Print students detail of specific course in tabular format after accepting course as input.

[Marks 15]

Q. 2) Consider the following dataset : https://www.kaggle.com/datasets/datasnaek/youtube-new?select=INvideos.csv
Write a Python script for the following :
  i.   Read the dataset and perform data cleaning operations on it.
  ii.   ii. Find the total views, total likes, total dislikes and comment count.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours **Maximum Marks: 35**

Q. 1) Write a script to create "cricket.xml" file with multiple elements as shown below:
      <CricketTeam>

   <Team country="Australia">
                 <player>____</player>
                 <runs>_____</runs>
                 <wicket>____</wicket>
   </Team>
   </CricketTeam>

Write a script to add multiple elements in "cricket.xml" file of category, country="India". **[Marks 15]**

Q. 2) Consider the following dataset : https://www.kaggle.com/datasets/seungguini/youtube-comments-for-covid19-relatedvideos?select=covid_2021_1.csv

Write a Python script for the following :

i.   Read the dataset and perform data cleaning operations on it.
ii.   ii. Tokenize the comments in words. iii. Perform sentiment analysis and find the percentage of positive, negative and neutral comments.. **[Marks 15]**

Q. 3) Viva **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script for the following: Design a form to accept a number from the user.Perform the operations and show the results.

  1) Fibonacci Series.
  2) To find sum of the digits of that number.

(Use the concept of self processing page.)   **[Marks 15]**

Q. 2) Consider text paragraph. """Hello all, Welcome to Python Programming Academy. Python Programming Academy is a nice platform to learn new programming skills. It is difficult to get enrolled in this Academy.""" Preprocess the text to remove any special characters and digits. Generate the summary using extractive summarization process.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script for the following: Design a form to accept a number from the user.Perform the operations and show the results.

      3) Fibonacci Series.
      4) To find sum of the digits of that number.
(Use the concept of self processing page.)   **[Marks 15]**

Q. 2) Build a logistic regression model for Student Score Dataset.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Create a XML file which gives details of books available in "Bookstore" from followingcategories.

           1) Yoga

           2) Story

           3) Technical

and elements in each category are in the following format

<Book>

           <Book_Title>---------------------</Book_Title>

           <Book_Author>-------------------</Book_Author>

           <Book_Price> --------------------</Book_Price>

</Book>

Save the file as "Bookcategory.xml"   **[Marks 15]**

Q. 2) Create the dataset . transactions = [['eggs', 'milk','bread'], ['eggs', 'apple'], ['milk', 'bread'], ['apple', 'milk'], ['milk', 'apple', 'bread']] **.**

Convert the categorical values into numeric format.Apply the apriori algorithm on the above dataset to generate the frequent itemsets and association rules.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**

Q. 1) Write PHP script to read "book.xml" file into simpleXML object. Display attributes and elements . (simple_xml_load_file() function)   **[Marks 15]**

Q. 2) Create the following dataset in python & Convert the categorical values into numeric format.Apply the apriori algorithm on the above dataset to generate the frequent itemsets and association rules. Repeat the process with different min_sup values.   **[Marks 15]**

TID	Items
1	Bread, Milk
2	Bread, Diaper, Beer, Eggs
3	Milk, Diaper, Beer, Coke
4	Bread, Milk, Diaper, Beer
5	Bread, Milk, Diaper, Coke

Q. 3) Viva   **[Marks 05]**

Q. 1) Write PHP script to read "book.xml" file into simpleXML object. Display attributes and elements .
(simple_xml_load_file() function)   **[Marks 15]**

Q. 2) Create the following dataset in python & Convert the categorical values into numeric format.Apply the apriori algorithm on the above dataset to generate the frequent itemsets and association rules. Repeat the process with different min_sup values.   **[Marks 15]**

TID	Items
1	Bread, Milk
2	Bread, Diaper, Beer, Eggs
3	Milk, Diaper, Beer, Coke
4	Bread, Milk, Diaper, Beer
5	Bread, Milk, Diaper, Coke

Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write PHP script to read "book.xml" file into simpleXML object. Display attributes and elements .(simple_xml_load_file() function).   **[Marks 15]**

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Q. 3) Viva   **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script to change the preferences of your web page like font style, font size, font color, background color using cookie. Display selected setting on next web page and actual implementation (with new settings) on third page (Use Cookies). **[Marks 15]**

Q. 2) Consider any text paragraph. Preprocess the text to remove any special characters and digits. **[Marks 15]**

Q. 3) Viva **[Marks 05]**

Duration: 3 Hours   **Maximum Marks: 35**

Q. 1) Write a PHP script to change the preferences of your web page like font style, font size, font color,background color using cookie. Display selected setting on next web page and actual implementation (with new settings) on third page (Use Cookies).   **[Marks 15]**

Q. 2) Create 'Salary' Data set . Build a linear regression model by identifying independent and target variable. Split the variables into training and testing sets and print them. Build a simple linear regressionmodel for predicting purchases.   **[Marks 15]**

Q. 3) Viva   **[Marks 05]**