

**Report of Data Visualization in Microsoft Power BI,
Organized Department of Computer Science
Shri Vijaysinha Yadav College, Peth Vadgaon
2024-2025**

Name of Activity:	Data Visualization in Microsoft Power BI
Date and time of	03/02/2025 to 18/03/2025 10.00 to 11.00am
Activity conducted:	Department of Computer Science(Lab 1)
Traget Group:	Student of B.Sc. III
Name of Organizers:	Dept. of Computer Science Shri Vijaysinha Yadav College Peth Vadgaon
Name of Resource Person:	Mrs. Nirmale.S.A Miss. Kshirsagar V.D Miss. Dhavale .K.G
Platform used:	Offline

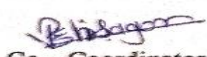
Short Description of activity conducted:

Department of Computer Science conducted a Five weeks Short Term course from 03/02/2025 To 18/03/2025 in offline mode before the commencement of regular classes. Data Visualization in Microsoft Power BI course teaches how to use the power BI platform to analyze, visualize and share data and this course also helpful to enhance the student skills relating. The course covered fundamental Concepts, practical application, and Hands on exercises to equip participants with essential skills in Data Visualization in Microsoft Power BI.

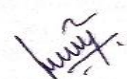
The short-term course is organized by Asst. prof Kshirsagar V.D Under the guidance of HOD of computer science Nirmale.S.A . And Asst. prof Kshirsagar V.D and Dhavale .K.G also give their contribution in the from conducting theory lecture and practical which present in syllabus.

PHOTO PLATE




Co - Coordinator


Head
Department of Computer Science
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.
Head of the Department


I/C Principal
I/C Principal
Shri Vijaysinha Yadav College,
Peth Vadgaon, Tal. Hatkanangal,
Dist. Kolhapur.

Student's Notice

Shri Vijaysinha Yadav College, Peth Vadgaon

Department of Computer Science

Organizing short term course on

“Data Visualization in Microsoft Power BI”

We are glad to inform you that computer science department conducting a short term course on “Data Visualization in Microsoft Power BI” for B.Sc. Students. Duration of this course was 01/02/2025 to 28/02/2025. all Participants will be apply for this course after course completed we organize internal and external Tests of 50 Marks. The course will be free of cost and the students will be given a certificate after passing the exam. For further information, please contact to Miss. Kshirsagar.V.D.


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Shri Vijaysinha Yadav College, Peth Vadgaon

Accredited by NAAC with 'A+' Grade

Short-Term Course

By

Department of Computer Science



Introduction to Data Visualization in Microsoft Power BI

Every year different activities are conducted by B.Sc. department for students. One of them is this certificate course. Data Visualization in Microsoft Power BI is a business intelligence tool that helps users analyze and visualize data to make informed decisions. We have started this short-term course for the student, students should be familiar with it and when the student goes for a job, this certificate can be useful for him.

About Syllabus:-

A designing, using Data Analysis Expression Microsoft Power BI syllabus typically covers the fundamentals of connecting to various data sources, data transformation and modeling, creating visualizations, designing, using Data Analysis Expression for complex calculations, and sharing insights within the Power BI application and real-world scenarios to build data-driven decision-making skills.

- Understanding the Power BI interface.
- Creating relationships between tables, defining data types, using Power Query to transform and shape data.
- Use data Visualizations.
- Working with SQL database and database source.

Course Structure:

1. Introduction to Power BI, Introduction to Business Intelligence (BI), Power BI Components
2. Installation of Power BI Desktop Process of creating reports in Power BI
3. Using files(excel, csv, pdf etc.) as a data source Working with SQL database and database source Extracting data from folders and databases
4. Visualizing Data with Power BI, Advanced Visualization and Techniques.
5. Data Preparation and Transformation.

Course Outcomes:

- 1) Visual representation: Converts data into easily understandable visuals like bar charts, line graphs, pie charts, and maps.
- 2) Interactive exploration: Users can drill down into data, filter by different parameters, and explore different aspects of the data dynamically.
- 3) Business insights: Helps identify key trends, outliers, and relationships within data to inform strategic decisions.
- 4) Data connectivity: Integrates with various data sources, including internal databases, cloud services, and external data feeds.

Eligibility of Course :-

Students of B.Sc part III for this course

Course Duration:-

The duration of this course will be 30 hours out of which 20 hours will be lectures and 10 hours will be practicals.

Course Medium:-

The teaching method for this course will be both English and Marathi but the exam will be in English only. There will be 20 multiple choice questions and 40 marks and 10 marks will be practical work.

Syllabus Structure:-**Data Visualization in Microsoft Power BI****Module 1-****INTRODUCTION TO POWER BI**

- 1.1 Introduction to Power BI
- 1.2 Introduction to Business Intelligence (BI)
- 1.3 Why Power BI
- 1.4 Power BI Components
- 1.5 Introduction of Power BI Desktop
- 1.6 Installation of Power BI Desktop
- 1.7 Process of creating reports in Power BI

Module 2-**DATA EXTRACTION AND TRANSFORMATION**

- 2.1 Data Sources in Power BI
- 2.2 Using files (excel, csv, pdf etc.) as a data source
- 2.3 Working with SQL database and database source
- 2.4 Extracting data from folders and databases

Module 3-**CLASSIFICATION AND CLUSTERING**

- 3.1 Classification: classification problems, Evaluation of classification models, Bayesian methods, Logistic regression
- 3.2 Clustering: Clustering methods, Partition methods, Hierarchical method, Evaluation of clustering model

Study Methods:-

1. Guided by expert teachers
2. Internal Evaluation
3. Practicals in Computer Lab

Evaluation Process:-

- 8.1 Internal Evaluation -10 Marks
- 8.2 Final Exam-40 Marks

Credits:-

- 2 Credits For this course

Contacts:-

Co-coordinator

Miss.Kshirsagar.V.D

Shri. Shahu Shikshan Prasarak Seva Mandal, Peth Vadgaon

Shri Vijaysinha Yadav College, Peth Vadgaon

Department of Computer Science

CERTIFICATE COURSE IN (MICROSOFT POWER BI)

Academic Year: 2024-2025

Register Student List

Sr.No	Name of students	Class
1	Chougule Shivprasad Sanjay	B.Sc. III
2	Dalavi Neha Atul	B.Sc. III
3	Dongare Snehal Sunil	B.Sc. III
4	Gurav Sandhya shivaji	B.Sc. III
5	Kekare sanika Rangrao	B.Sc. III
6	Khot sayali gajanan	B.Sc. III
7	Mane satyaprakash Bhimsen	B.Sc. III
8	Mulani Saniya Maheebub	B.Sc. III
9	Mulik Sanika dattatray	B.Sc. III
10	Nilaje Shreyasha Mahesh	B.Sc. III
11	Parit sanjana Chandrakant	B.Sc. III
12	Patil Rutuja Rajendre	B.Sc. III
13	Mulla samina Ilal	B.Sc. III
14	Patil Pruthviraj Tanaji	B.Sc. III
15	Patil Harshvardhan Santhosh	B.Sc. III
16	Patil Tejas Rajendra	B.Sc. III
17	Patil Archana Dhondiram	B.Sc. III
18	Patil Sujal Subhash	B.Sc. III
19	Powar Snehal Mahesh	B.Sc. III
20	Relekar Anuja Chandrakant	B.Sc. III
21	Shelar Sakshi Mahesh	B.Sc. III
22	Shinde Manas Anil	B.Sc. III
23	Teware Pooja Amol	B.Sc. III
24	Momin Wasim Ayub	B.Sc. III
25	Patil Pavan aravind	B.Sc. III
26	Bedag samina Maimuddin	B.Sc. III

Data Visualization in Microsoft Power BI

Test

50 Marks

1. What is the recommend method to share your reports?

1. Publish them to the Power BI service
2. Create a PDF of the report and share the PDF with others
3. Copy the PBIX file to a file folder, and give coworkers access to that folder
4. None

2. What symbol would you use for multiplication in Power BI in DAX formula ?

1. +
2. –
3. /
4. *

3. types of data modeling in Power BI that use data analysis Expressions and similar

Similar to Excel Formulas.

1. Query
2. DAX
3. Model
4. None

4. DAX6.Berikut contoh LOGICAL Functions di CAX, kecuali _____

1. OR
2. IF
3. SUMX
4. NOT

5. Creates the connection between Power BI cloud based data and the source

Located on premises _____

1. Report view
2. Query editor
3. Power BI service
4. Gateway

6. A collection of software services, apps ,and connectors to turn unrelated sources of data into coherent insights_____
1. Power BI
 2. Power service
 3. Query Editor
 4. Visual Market Place
7. The following are example of the AGGREGATION function except
1. Logical Functions
 2. Aggregation Function
 3. Semua benar
 4. Date Function
8. Which is the SQLexpression used to count the value in a table
1. SUM
 2. COUNT
 3. AVERAGE
 4. NONE
9. A customer may purchase Make only one oval
1. One to many
 2. Many to one
 3. Many to One
 4. One to One
10. The topic of discussion of Power BI Session
1. Data Collection
 2. Introduction to DAX
 3. Data Preparation
 4. Overview
11. A function that can only work on numeric fields is _____
1. ISNUMBER
 2. AVERAGE
 3. CONCATENATE
 4. AND
12. Which is used to calculate the data in each row
1. Calculated row
 2. Mcasure
 3. Counting
 4. Calculated colum
13. Contains transaction data or facts of business process_____
1. Fact table
 2. Query table
 3. Dimension table
 4. Power BI table

14. Which of these values would be matched using syntax LIKE"%apple"
1. Start apple
 2. Ban apple
 3. Peach apple
 4. All o mentioned above
15. What DAX function can be used to return a value in a column if conduction is met?
1. If
 2. VLOOKUP
 3. SUM
 4. COUNT
16. What expression is used to indicate the table where value be esrched from?
1. WHERE
 2. FROM
 3. TABLE
 4. SELECT
17. What is the power BI file format?
1. .xlsx
 2. .pbi
 3. .pbix
 4. .xls
18. Which of the illustrates a many to one relationship?
1. Many banana trees planted in more than
 2. Many banana trees planted in a garden
 3. Many garden having no a banana trees
 4. Many banana trees planted in in a garden
19. Which of these values would be matched using syntax LIKE"%apple"
5. Start apple
 6. Ban apple
 7. Peach apple
 8. All o mentioned above
20. The topic of discussion of Power BI Session
5. Data Collection
 6. Introduction to DAX
 7. Data Preparation
 8. Overview



Shri Shahu Shikshan Prasarak Seva Mandals

Shri Vijaysinha Yadav College, Peth Vadgaon



Department of Computer science

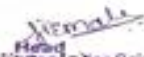
Certificate of achievement

Name :Patil Tejas Rajendra

For Successfully Completing

Certificate Course in (Data Visualization in Microsoft Power BI)

Date : 3/02/2025 TO 18/03/2026


(~~Head~~ **Head**)
Shri Vijaysinha Yadav College
Peth Vadgaon, Tal. Narkhaangali,
Dist. Kolhapur.
Head, Dept. of Computer Science


(**Dr. Ashok Chavan**)
I/C Principal
I/C Principal
Shri Vijaysinha Yadav College,
Peth Vadgaon, Tal. Narkhaangali,
Dist. Kolhapur.