

## T.Y.B.Sc Computer Science

### Data Science

1	Discuss security concerns with respect to your data?
2	Discuss various ways to authenticate data in data science?
3	the role of data analysis in data science
4	role of hypothesis in inferencing
5	Explain following with respect to EDA <ul style="list-style-type: none"><li>• Correlation Analysis</li><li>• Handling Missing Data:</li><li>• Descriptive Statistics</li><li>• Identify Outliers:</li><li>• Data Visualization:</li></ul>
6	Justify the role of hypothesis in data science with suitable example
	importance of graphs in data science. Provide suitable example.
	working of pie chart, line chart with python code by considering suitable data
	Identify the need of histogram in representing data in data science.
7	Explain Business layer and various components of business layer
8	Outline various functional and non-functional requirements of any research work associated with data science.
9	Discuss various Phases of CRISP-DM.
10	Explain advantages and disadvantages of CRISP-DM
11	Explain activities managed by Audit control layer in data science framework
12	Explain in detail the function of Operational Management Layer
13	Define Data Science Framework. Explain the Homogeneous Ontology for Recursive Uniform Schema.
14	State and explain the top layers of data science framework.
15	Give an overview of the functions of Audit, Balance, and Control Layer
16	Explain Data structures used in the functional layer of the ecosystem
17	Justify the role of Data lake
18	Justify the role of Ontology in data science.
19	Find the benefits of using Ontology in data science
20	Evaluate the role of RDF(resource description framework) by considering RDF triplets and example.
21	Explain role of Web ontology language
22	Explain importance of AWS open data in data science research

23	Explain importance of Genomics Data
24	Write a note on AWS dataset
25	Compare NOSQL and RDBMS
26	Explain features of NOSQL
27	Compare BSON and JSON
28	how one can create document using MongoDB and basic operations like find and explain in brief.

Questions Marked with color ; solve them

Questions marked with provide Python code along with sample data (bar, pie, histogram, line graphs) along with explanation of each line