1. What is Data Science?

A)Data science is the study of data to extract meaningful insights for business. It is a multidisciplinary approach that combines principles and practices from the fields of mathematics, statistics, artificial intelligence, and computer engineering to analyze large amounts of data. This analysis helps data scientists to ask and answer questions like what happened, why it happened, what will happen, and what can be done with the results.

1. Importance of statistics in Data Science?  
   A) It enables you to see trends in any data easily; it enables you to analyze the data effectively; it enables you to reach better and more accurate conclusions. In ML statistical knowledge allows you to fully understand the effectiveness of your models based on the evaluation.
2. What is Data engineering?
3. Data engineering is the practice of designing and building systems for collecting, storing, and analyzing data at scale. It is a broad field with applications in just about every industry. Organizations have the ability to collect massive amounts of data, and they need the right people and technology to ensure it is in a highly usable state by the time it reaches data scientists and analysts.

4. What is Data visualization?

A) Data visualization is the practice of translating information into a visual context, such as a map or graph, to make data easier for the human brain to understand and pull insights from. The main goal of data visualization is to make it easier to identify patterns, trends and outliers in large data sets.

5. What is Data cleaning?

A) Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset.

6. What is python and why we use it?

A) Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis. Python is a general-purpose language, meaning it can be used to create a variety of different programs and isn't specialized for any specific problems.

7. What is Data in statistics?

A) Definition. Data are measurements or observations that are collected as a source of information. There are a variety of different types of data, and different ways to represent data.

8. What is statistcs?

A) Statistics is the study and manipulation of data, including ways to gather, review, analyze, and draw conclusions from data. The two major areas of statistics are descriptive and inferential statistics.

9. What is mathematics ?

A)***Mathematics*** is the science and study of quality, structure, space, and change. Mathematicians seek out patterns, formulate new conjectures, and establish truth by rigorous deduction from appropriately chosen axioms and definitions.

10. What is computer Science?

A) Computer Science is the study of computers and computational systems. Unlike electrical and computer engineers, computer scientists deal mostly with software and software systems; this includes their theory, design, development, and application.

Principal areas of study within Computer Science include artificial intelligence, computer systems and networks, security, database systems, human computer interaction, vision and graphics, numerical analysis, programming languages, software engineering, bioinformatics and theory of computing.

11. What is programming language?

A) A programming language is a **computer language** that is used by **programmers (developers) to communicate with computers**. It is a set of instructions written in any specific language ( C, C++, Java, Python) to perform a specific task. A programming language is mainly used to **develop desktop applications, websites, and mobile applications**.