#### Answer 1:-

- Sometimes the fastest way to get an answer from our data is to perform a search over your data using natural language. The Q&A feature in Power BI lets us explore our data in our own words using natural language.
- Power BI Q&A is free and available to all users. In Power BI Desktop, report designers can use Q&A to explore data and create visualizations. In the Power BI service, everyone can explore their data with Q&A.
- Example: We can ask "which product is generating highest revenue" or "show me top 10 countries by sales"

#### Answer 2:-

The WFE cluster manages the initial connection and authentication process for Power BI, using AAD to authenticate clients and provide tokens for subsequent client connections to the Power BI service. Power BI also uses the Azure Traffic Manager (ATM) to direct user traffic to the nearest datacenter, determined by the DNS record of the client attempting to connect, for the authentication process and to download static content and files. Power BI uses the Azure Content Delivery Network (CDN) to efficiently distribute the necessary static content and files to users based on geographical locale.

### Answer 3:-

The Back-End cluster is how authenticated clients interact with the Power BI service. The Back-End cluster manages visualizations, user dashboards, datasets, reports, data storage, data connections, data refresh, and other aspects of interacting with the Power BI service. The Gateway Role acts as a gateway between user requests and the Power BI service. Users do not interact directly with any roles other than the Gateway Role. Azure API Management will eventually handle the Gateway Role.

<u>Answer 4</u>:- asp.net helps to embed a Power BI report into a .net core web app.

## <u> Answer 5</u>:-

	Power BI	Excel
<u>Data Import</u>	Power BI can import data from more than 80 sources.	Excel can import data from relatively few sources, approximately 25.
<u>Data Transformation</u>	It uses power query editor to transform data.	It also uses power query editor to transform data.

Modelling	It supports data modelling.	It also supports data modelling.
Reporting	Power BI has more visuals as compared to excel, so better reports can be prepared.	Excel has limited visuals . so reports are somewhat elementary as compared to reports generated by Power BI.
Server Deployment	It can be deployed by installing PowerBIReportServer.exe	It can be deployed using the "office online server".
<u>Cost</u>	Power BI desktop is completely free for lifetime. Power BI pro comes at a cost of 10 USD per month per user.	Excel cannot be used for free and comes with MS Office package at a cost of 5 USD per per month per user.

# Answer 6:- Power BI supports following data sources:-

- Excel Workbook(.xlsx)
- CSV(excel comma separated value)
- JSON(Java Script Object Notation)
- PDF(portable document format)
- Oracle database
- MySQL database
- IBM DB2 database
- SAP HANA database
- PostgreSQL database
- Snowflake
- Maria DB
- Google Big Query
- Azure Data lake Gen 1 or 2
- Google analytics
- Microsoft Exchange Online
- Salesforce Reports
- Azure DevOps
- Azure Cosmos database
- Adobe analytics
- Azure databricks
- Quickbase