

SECTION 1: BUSINESS INTELLIGENCE CONCEPTUAL QUESTIONS

No.	Question	What Interviewer Checks
1	What is Business Intelligence (BI)? How does it help marketing decisions?	Understanding of BI purpose — turning raw data into actionable insights.
2	Explain the BI lifecycle or process flow in an organization.	Conceptual clarity (ETL → Data Warehouse → Visualization → Decision).
3	How does Power BI fit into the BI architecture?	Tool knowledge + connection to end-to-end data flow.
4	Differentiate between KPIs, metrics, and dimensions.	Understanding of dashboard design terminology.
5	Explain the difference between descriptive, diagnostic, predictive, and prescriptive analytics.	Understanding of analytics maturity stages.
6	What is the difference between data warehouse and data mart?	Concept of centralized vs domain-specific data storage.
7	How would you evaluate the success of a BI dashboard?	Storytelling + measurable impact (adoption, insight quality, speed).

SECTION 2: POWER BI-SPECIFIC QUESTIONS

No.	Question	Sample Good Answer
1	What are the key components of Power BI?	Power Query, Data Model, DAX, Visualization Layer, Power BI Service.
2	Difference between calculated columns and measures in Power BI?	Columns stored in model; measures calculated on demand — for optimization.
3	What is a relationship in Power BI? How do you handle many-to-many relationships?	Explain model relationships, cardinality, bridge tables.

4	What are DAX functions? Give 3 examples used in marketing dashboards.	CALCULATE(), FILTER(), TOTALYTD() — used for sales trends, campaign analysis.
5	How do you optimize Power BI report performance?	Aggregation tables, disable auto date/time, use measures, reduce visuals.
6	How can Power BI connect to SQL Server or Excel data?	Using “Get Data” → Connectors → Queries → Transform → Load.
7	How would you create a dashboard to analyze marketing campaign performance?	Explain visual choice: KPI cards (CTR, Conversion Rate), funnel chart, time series, slicers by region/campaign.
8	Explain row-level security (RLS) and its marketing use case.	Restricting regional data access for campaign managers.

SECTION 3: EXCEL & SQL ANALYTICS QUESTIONS

A. Excel-Based

No.	Question	Example
1	How would you analyze campaign ROI in Excel?	Using Pivot Tables + calculated fields (Revenue/Cost).
2	What is the use of VLOOKUP, INDEX-MATCH, and XLOOKUP?	Data merging for multi-source campaign analysis.
3	How would you use Excel dashboards for marketing analytics?	Dynamic charts + slicers + KPIs like CPC, CPA, CTR.

B. SQL-Based

No.	Question	Example
1	Write a query to find the top 5 customers by purchase amount.	SELECT CustomerID, SUM(Amount) AS Total FROM Sales GROUP BY CustomerID ORDER BY Total DESC LIMIT 5;
2	How do JOINS help in BI reporting?	Combining customer, campaign, and sales tables.

3	What is the difference between WHERE and HAVING clause?	WHERE filters rows; HAVING filters aggregated results.
4	How can you use SQL to prepare data for Power BI dashboards?	Data cleaning, aggregations, CTEs before connecting to BI layer.

SECTION 4: PYTHON FOR BI & ANALYTICS

No.	Question	Example / Concept
1	How can Python complement Power BI?	Pre-processing, data cleaning (pandas), ML model integration.
2	What are common libraries you've used?	pandas, numpy, matplotlib, seaborn.
3	Example: How would you use Python to calculate campaign CTR or conversion ratio?	(clicks/impressions)*100 across campaign dataframe using pandas.
4	How can Python help in automating report generation?	Using openpyxl or Power BI REST API for exports.
5	How can you import a Python visualization into Power BI?	By adding a Python visual and running code inside Power BI.

SECTION 5: BUSINESS & MARKETING DOMAIN QUESTIONS (Protiviti-Focused)

No.	Question	What They Expect
1	How can BI help in understanding customer behavior?	Segmentation, purchase trends, RFM analysis.
2	What KPIs would you track for a digital marketing campaign?	CTR, CPC, CPA, ROI, conversion rate, engagement rate.
3	How can you measure the effectiveness of different marketing channels?	Use Power BI to create cross-channel attribution dashboard.

4	How can predictive analytics support marketing decisions?	Forecasting sales or lead conversion probability.
5	Give an example of how you've visualized marketing data.	Campaign dashboard in Power BI – funnel + trend line + KPIs.
6	Suppose a campaign has high impressions but low conversions – what might be wrong?	Poor targeting, wrong messaging, website UX issues.
7	What is Customer Lifetime Value (CLV) and how can BI help calculate it?	Use SQL to calculate repeat purchase average × retention rate.

SECTION 6: CONSULTING & CASE-BASED QUESTIONS (Protiviti Style)

Scenario	What They Assess
You are given messy data from multiple campaigns. How would you approach cleaning and visualization?	Communication of ETL process and BI logic.
A client says their dashboard is slow. What steps will you take?	Performance optimization understanding.
If sales drop suddenly in Q2, how will you identify the root cause?	Analytical reasoning + drill-down strategy.
Explain a time you translated business needs into a BI solution.	Storytelling + business communication.
What would you do if your dashboard insights conflict with management's assumptions?	Consulting maturity, data-driven reasoning.

HR / SELF-REFLECTIVE QUESTIONS

Question	Tip for Answer
Why do you want to join Protiviti?	Emphasize exposure to analytics consulting, cross-industry projects, learning culture.

Why BI and not pure marketing?	Highlight interest in data-driven decision-making and visualization storytelling.
What BI project are you most proud of?	Describe your Power BI dashboard (mention KPIs, interactivity, insights).
How do you stay updated with BI trends?	Mention Power BI community, Kaggle, YouTube channels, LinkedIn learning.

SUGGESTED PROJECTS TO MENTION

Project Title	Tools	Description
Marketing Campaign Dashboard	Power BI, SQL	Analyzed ad performance data to track ROI and optimize channels.
Customer Segmentation	Python, Excel	Used K-Means to segment customers for targeted marketing.
Sales Forecast Dashboard	Power BI	Created time-series forecasting using DAX and Python.
Lead Conversion Funnel	Power BI, SQL	Designed funnel to track conversion at each stage.