# Healthcare Data Analysis – Intern Questionnaire

## Section A: Data Understanding

1. 1. What are the key columns in this dataset, and what type of data does each contain (e.g., numerical, categorical, date)?
2. 2. Identify and explain any inconsistencies or formatting issues (e.g., capitalization in names).
3. 3. Are there any missing or duplicate values in the dataset? How would you handle them?

## Section B: Patient Demographics

1. 4. What is the average age of the patients in the dataset?
2. 5. What percentage of the patients are male vs. female?
3. 6. Which blood type is the most common among patients?

## Section C: Medical Trends

1. 7. What are the top 3 most common medical conditions among the patients?
2. 8. Which medication is most frequently prescribed per medical condition?
3. 9. How many patients were admitted as “Urgent”, “Emergency”, or “Elective”? Show this as a chart.
4. 10. Are there any patterns in test results by medical condition (e.g., are Cancer patients more likely to have abnormal results)?

## Section D: Hospital & Doctor Insights

1. 11. Which hospital has treated the most patients?
2. 12. What is the average billing amount by hospital?
3. 13. Identify the doctor(s) who have treated the most patients and calculate their average patient billing.

## Section E: Insurance & Billing

1. 14. Which insurance provider covers the highest number of patients?
2. 15. Which admission type has the highest average billing cost?
3. 16. What’s the range (min–max) of billing amounts for patients with “Normal” vs “Abnormal” test results?

## Section F: Date Analysis

1. 17. Which month had the highest number of admissions?
2. 18. Calculate the average length of stay (Discharge Date - Admission Date).
3. 19. Are longer stays associated with higher billing? Explain with a scatter plot.

## Section G: Bonus (Storytelling & Visualization)

1. 20. Based on your analysis, tell a compelling story:  
    - What kind of patients are most commonly admitted?  
    - Which hospitals or doctors handle critical cases more frequently?  
    - What opportunities exist to reduce costs or improve care?