DAX Code and Explanations

1. Total Employees

```
COUNT(DimEmployee[EmployeeID])
```

Explanation: This formula counts the total number of employees.

2. Total Employees by Hire Date

```
TotalEmployeesDate =
CALCULATE (
    [Total Employees],
    USERELATIONSHIP (DimEmployee[HireDate], DimDate[Date])
)
```

Explanation: This formula calculates the total number of employees based on their hire date, using an active relationship between the DimEmployee table's HireDate column and the DimDate table's Date column.

3. Active Employees

```
Active Employees =
CALCULATE (
    [Total Employees],
    FILTER(DimEmployee, DimEmployee[Attrition] = "No")
)
```

Explanation: This formula calculates the number of employees currently working at the company (i.e., their attrition status is "No").

4. Inactive Employees

```
Inactive Employees =
CALCULATE (
    [Total Employees],
    FILTER(DimEmployee, DimEmployee[Attrition] = "Yes")
)
```

Explanation: This formula calculates the number of employees who have left the company (i.e., their attrition status is "Yes").

5. Inactive Employees by Hire Date

```
InactiveEmployeesDate =
CALCULATE (
    [Inactive Employees],
    USERELATIONSHIP (DimEmployee[HireDate], DimDate[Date])
)
```

Explanation: This formula calculates the number of employees who have left the company, based on their original hire date. It uses an active relationship between the DimEmployee table's HireDate and the DimDate table's Date column.

6. Attrition Rate

```
% Attrition Rate =
DIVIDE ([Inactive Employees], [Total Employees])
```

Explanation: This formula calculates the employee attrition rate, which is the percentage of employees who have left the company out of the total number of employees.

7. Attrition Rate by Date

```
% Attrition Rate Date =
DIVIDE([InactiveEmployeesDate], [TotalEmployeesDate])
```

Explanation: This formula calculates the attrition rate over time, using the time-based measures for inactive and total employees.

8. Average Salary

```
Average Salary =
AVERAGE (DimEmployee[Salary])
```

Explanation: This formula calculates the average salary of all employees.

9. Last Review Date

```
LastReviewDate =
IF (
    MAX(FactPerformanceRating[ReviewDate]) = BLANK(),
    "No Review Yet",
    MAX(FactPerformanceRating[ReviewDate])
)
```

Explanation: This formula displays the most recent review date for an employee. If an employee has not yet had a review, it will display "No Review Yet".

10. Next Review Date

```
NextReviewDate =
VAR reviewOrHire =
    IF (
        MAX(FactPerformanceRating[ReviewDate]) = BLANK(),
        MAX(DimEmployee[HireDate]),
        MAX(FactPerformanceRating[ReviewDate])
    )
RETURN     reviewOrHire + 365
```

Explanation: This formula calculates the anticipated date for the next performance review. It determines this by adding 365 days to the latest review date. If no review has occurred, it adds 365 days to the employee's hire date instead.