Here's a comparison table of **Date and Time Functions** used in **Microsoft SQL Server** and their **alternatives** in **MySQL**:

SQL Server Function	MySQL Alternative	Description
GETDATE()	NOW()	Returns the current date and time.
DAY()	DAY()	Extracts the day from a date.
MONTH()	MONTH()	Extracts the month from a date.
YEAR()	YEAR()	Extracts the year from a date.
DATEPART()	EXTRACT()	Extracts a specific part (e.g., year, month, day) from a date.
DATENAME()	DATE_FORMAT()	Returns the specified date part as a string (e.g., 'Monday', 'January').
DATETRUNC()	DATE_FORMAT() / TRUNCATE()	Truncates a date to a specific part (year, month, etc.).
EOMONTH()	LAST_DAY()	Returns the last day of the month for a specified date.
FORMAT()	DATE_FORMAT()	Formats a date/time value according to a specified format string.
CONVERT()	STR_TO_DATE() / DATE_FORMAT()	Converts a string to a date or a date to a string with a specified format.
CAST()	CAST()	Converts data from one type to another, such as from a string to a date.
DATEADD()	DATE_ADD()	Adds a specific time interval (e.g., days, months, years) to a date.
DATEDIFF()	DATEDIFF()	Returns the difference between two dates in terms of a specified time unit (days, months, years, etc.).
ISDATE()	STR_TO_DATE()	Checks whether a string is a valid date (though no exact equivalent in MySQL; STR_TO_DATE() can handle date parsing).

Key Differences:

- **SQL Server's FORMAT() vs MySQL's DATE_FORMAT()**: Both are used for formatting dates, but the syntax in MySQL is slightly different.
- **DATETRUNC() in SQL Server**: While MySQL doesn't have an exact DATETRUNC(), you can use DATE_FORMAT() or perform manual truncations using TRUNCATE().
- **ISDATE()**: SQL Server has ISDATE() to check if a value is a valid date, but in MySQL, you would typically use STR_TO_DATE() for date parsing.

This table should help you navigate equivalent date and time functions between **SQL Server** and **MySQL** for various operations.