

① SELECT employee_id, name, salary_with_default
 IFNULL(salary, 0) AS salary_with_default
 FROM employees;

employee_id	Name	department	salary	← outcome
1	Alice	HR	5000	
2	Bob	IT	0	
3	Charlie	Null	7000	
4	Dana	Finance	0	

② SELECT employee_id, name, department_name
 IFNULL(department, 'Not Assigned') AS department_name
 FROM employees;

employee_id	Name	departments	← outcome
1	Alice	HR	
2	Bob	IT	
3	Charlie	Not assigned	
4	Dana	Finance	

③ SELECT order_id, customer_id
 FROM orders
 WHERE customer_id IS NULL;

order_id	customer_id	← outcome
103	NULL	

④ SELECT order_id, customer_id, delivery_status
 IFNULL(delivery, 'Pending') AS delivery_status
 FROM orders;

order_id	customer_id	delivery_date	← outcome
101	201	2024-12-01	
102	202	Pending	
103	NULL	2024-12-03	

⑤ SELECT student_id, name, final_grade
 IFNULL(grade, 0) AS final_grade
 FROM students;

student_id	Name	grade
1	Ethan	85
2	Maya	0
3	Olivia	90

→ outcome

⑥ SELECT
 COUNT* AS Non-graded-count
 FROM students
 WHERE grade IS NULL;

Non-graded-count
Maya

→ outcome

⑦ SELECT product_id, name, final_price
 IFNULL(price*, 0) AS final_price.
 FROM products;

product_id	name	price	discount	final-price
501	keyboard	25	0	25
502	Mouse	15	5	14.25
503	Monitor	100	0	100

→ outcome

⑧ SELECT
 COUNT* AS missing_email-count
 FROM customers
 WHERE email IS NULL;

missing_email-count
1 Linda
3 Nia

⑨ SELECT Customer_id, name, email_display
 IFNULL (email, 'No email') AS email_display
 FROM customers;

Customer_id	Name	Email	→ outcome
1	Linda	No email	
2	Joseph	Joseph@gmail.com	
3	Nia	No email	

⑩ SELECT payment_id, method_display, status
 IFNULL (method, 'unknown') AS ~~method~~^{method} - display
 FROM payments;

Payment_id	method	Status	→ outcome
301	Credit	Null	
302	PayPal	Success	
303	Unknown	Failed	

⑪ SELECT item_id, item_name, quantity_checked
 IFNULL (quantity, 0) AS quantity_checked
 FROM inventory;

Item_id	Item_name	Quantity	→ outcome
1	Pen	0	
2	Notebook	150	
3	Eraser	0	

⑫ SELECT employee_id,
 COALESCE(bonus, commission) AS First-available-reward
 FROM Employees_Extra;

Employee_id	First-available-reward	→ outcome
1	300	
2	100	
3	Null	

(13) SELECT

COUNT As NO_ROOM_COUNT

FROM Classes

WHERE ID IS NULL;

NO_ROOM_COUNT
11 Maths
13 English

← outcome

(14)

SELECT student_id, date, attendance_status

IFNULL(attendance, 'Not marked') AS attendance_Status

FROM Attendance;

student_id	date	status
1	2025-04-01	Not marked
2	2025-04-01	Present
3	2025-04-01	Absent

← outcome

(15)

SELECT account_id,

COALESCE(account_type, 'Unknown') AS type_display,

COALESCE(Balance '0') AS balance_checked

FROM Bank_Accounts;

account_id	type_display	balance_checked
A1	Saving	0
A2	Unknown	5400
A3	Unknown	2000

← outcome

(16)

SELECT project_id, title, start_date_display

IFNULL(project, 'TBD') AS start_date_display

FROM projects.

Project_id	Title	start_date_display
1	Website Revamp	2025-01-15
2	Mobile App	TBD
3	Data Migration	2025-06-01

← outcome

DATE Function Questions

① SELECT emp_id, name, hire_date

DATEADD(MONTH, 6, hire_date) AS hire_plus_6_months

FROM Employees;

emp_id	Name	hire_date	hire_plus_6_months
1	Alice	2020-01-15	2020-07-15
2	Bob	2021-06-10	2021-12-10
3	Charlie	2023-03-22	2023-09-22

② SELECT student_id, name,

DATEDIFF(DAY, dob, CURRENT_DATE) AS age_in_days

FROM Students;

student_id	Name	dob	Age_in_days
101	Maya	2005-08-10	7377 days
102	Ethan	2004-12-01	7634 days
103	Sierma	2006-03-15	7155 days

③ SELECT event_id, event_name

DATEDIFF(DAY, current_DATE, event_date) AS days_remaining

FROM Events;

event_id	event_name	event_date	days remaining
1	Seminar	2024-06-15	-486
2	Workshop	2025-09-01	-42
3	Hackathon	2025-01-20	-266

④ SELECT invoice_id, issue_date, due_date

DATEDIFF(DAY, issue_date, due_date) AS days_Between

FROM Invoices;

Invoice_id	Issue_date	Due_date	Days_Between
501	2025-03-10	2025-03-25	15
502	2025-04-01	2025-04-15	14
503	2025-04-10	2025-04-20	10

⑨ SE

DA

FR

br

⑤ SELECT course-id, name

TO-CHAR(Start-date, 'Month YYYY') AS Formatted-date
FROM course;

course-id	Name	Formatted-date
201	SQL Basics	May 2025
202	Python	June 2025

⑩

⑥ SELECT member-id, Start-year, Start-month, Start-day
DATE FROM PARSE(Start-year, Start-month, Start-day) AS Full-start-date
FROM membership

member-id	Full - Start - date
1	2023 - 05 - 10
2	2022 - 11 - 25

⑦ SELECT sub-id, plan

DATEDIFF(YEAR, 1, Renewal-date) AS extended_renewal_date
FROM subscriptions

sub-id	Plan	Renewal-date	extended-renewal-date
11	Basic	2025-01-01	2026-01-01
12	Premium	2025-03-15	2026-03-15

⑧ SELECT order_id, order_date

CURRENT_DATE() AS Today-date

DATEDIFF(Day, order-date, current_DATE()) AS daysSinceOrder
FROM orders;

order-id	order-date	Today-date	days-Since-order
1001	2025-04-15	2025-04-18	181
1002	2025-04-10	2025-04-13	186

⑨ SELECT training-id, topic, training-date
 DATE_PART('Year', training-date) AS training-year
 FROM Trainings;

training-id	topic	training-date	training-year
1	Safety	2025-01-10	2025
2	Compliance	2025-02-20	2025

⑩ SELECT post-id, title,
 DATE_PART('hour', Published-on) AS hour_published,
 DATE_PART('minute', Published-on) AS minute_published

FROM Blog_Post

post-id	title	hour_published	minute_published
1	SQL Tips	10	15
2	Data Cleaning	16	45

⑪ SELECT driver-id, license-expiry
 DATEDIFF(day, CURRENT_DATE, license-expiry) AS days-left

FROM Drivers

driver-id	license-expiry	days-left
301	2025-08-10	-64
302	2023-12-31	-652

⑫ SELECT message-id, sent-timestamp,
 CURRENT_TIMESTAMP AS current-timestamp,
 DATEDIFF(second, sent-timestamp, current-timestamp) AS second-since-

FROM Messages

message-id	sent-timestamp
1	2025-04-19 09:32:45
2	2025-04-19 23:59:57

(12) SELECT return_id, return_date
 DATEADD(date, 15, return_date) AS restock_date
 FROM Returns

return_id	return_date	restock_date
901	2025-04-05	2025-04-20
902	2025-04-01	2025-04-16

(14) SELECT assign_id
 TO_DATE(assign_on, 'YYYY-MM-DD')
 FROM Assigner;

assign_id	assigned_on_date
1	2025-03-01
2	2025-03-05

(15) SELECT meeting_id
 TO_CHAR(schedule_time, 'MM DD YYYY at HH:MIN PM'
 AS Formatted_meeting_time
 FROM meetings;

meeting_id	Formatted_meeting_time
1	April 19 2025 at 2:00 PM
2	April 19 2025 at 9:30 AM