Interview Questions on SQL are based on following two tables, Employee Table and Employee Incentive Table.

**Table Name : Employee EMP\_ID As PRIMARY KEY**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | SALARY | JOINING\_DATE | DEPARTMENT | | |
| 1 | Venkatesh | S | 100000 | 08/28/2015 | | BANKING | | |
| 2 | Ragavi | P | 75000 | 08/28/2015 | | | BUSINESS | |
| 3 | Gopinath | C | 50000 | 03/02/2016 | | | PHARMA | |
| 4 | Dinesh | G | 50000 | 03/02/2016 | | | INSURANCE | |
| 5 | Saibabu | E | 40000 | 07/08/2017 | | | SOFTWARE | |
| 6 | Hasan | S | 29000 | 07/08/2017 | | | MANUFACTURING | |
| 7 | Divya | P | 33000 | 07/08/2017 | | | HEALTHCARE | |
| 8 | Aravindan | R | 40000 | 07/08/2017 | | | HEALTHCARE | |
| 9 | Sathish | MD | 45000 | 03/02/2016 | | | AUTOMOBILE | |
| 10 | Prasanth | PKP | 34000 | 03/02/2016 | | | INSURANCE | |
| 11 | Vijay | R | 25684 | 03/02/2016 | | | BUSINESS | |
| 12 | Sivakumar | K | 54789 | 03/02/2016 | | | SOFTWARE | |

**Table Name : Incentives**

|  |  |  |
| --- | --- | --- |
| **EMPLOYEE\_REF\_ID** | **INCENTIVE\_DATE** | **INCENTIVE\_AMOUNT** |
| 1 | 01-FEB-16 | 5000 |
| 2 | 01-FEB-16 | 3000 |
| 3 | 01-FEB-17 | 4000 |
| 1 | 01-JAN-17 | 4500 |
| 2 | 01-JAN-17 | 3500 |

**SQL Queries Interview Questions and Answers on "SQL Select" - Examples**

1. **Get all employee details from the employee table**

**select\*from emptable;**

**2. Get First\_Name,Last\_Name from employee table**

**select FIRST\_NAME,LAST\_NAME from emptable;**

**3.Get First\_Name from employee table using alias name “Employee Name”**

**select FIRST\_NAME as EMPLOYEE\_NAME from emptable;**

4. **Get First\_Name from employee table in upper case**

**select upper(FIRST\_NAME) FROM emptable;**

5. **Get First\_Name from employee table in lower case**

**select upper(FIRST\_NAME) FROM emptable;**

6. **Get unique DEPARTMENT from employee table**

**select distinct DEPARTMENT FROM emptable;**

7. **Select first 3 characters of FIRST\_NAME from EMPLOYEE**

**SELECT substring(FIRST\_NAME ,1,3) FROM emptable;**

8. **Get position of 'a' in name 'ragavi' from employee table**

**Select position(‘a’in “Ragavi”);**

9. **Get FIRST\_NAME from employee table after removing white spaces from right side**

**SELECT RTRIM (FIRST\_NAME) FROM emptable;**

10. **Get FIRST\_NAME from employee table after removing white spaces from left side**

**SELECT LTRIM (FIRST\_NAME) FROM emptable;**

11. **Get length of FIRST\_NAME from employee table**

**SELECT length(FIRST\_NAME) FROM emptable;**

12. **Get First\_Name from employee table after replacing 'a' with '$'**

**select replace(FIRST\_NAME,'a','$') From emptable;**

13. **Get First\_Name and Last\_Name as single column from employee table separated by a '\_’**

SELECT concat(FIRST\_NAME,'\_' ,LAST\_NAME) FROM emptable;

14. **Get FIRST\_NAME ,Joining year,Joining Month and Joining Date from employee table**

**Select FIRST\_NAME,JOINING\_DATE from emptable;**

**Database SQL Queries Interview Questions and answers on "SQL Order By"**

**15. Get all employee details from the employee table order by First\_Name Ascending**

**select \*from emptable order by FIRST\_NAME**;

**16. Get all employee details from the employee table order by First\_Name descending**

**select \*from emptable order by FIRST\_NAME desc;**

**17. Get all employee details from the employee table order by First\_Name Ascending and Salary descending**

**select \*from emptable order by FIRST\_NAME asc,SALARY desc;**

**SQL Queries Interview Questions and Answers on "SQL Where Condition" - Examples**

**18. Get employee details from employee table whose employee name is “Dinesh”**

**select \*from emptable where FIRST\_NAME like "Dinesh";**

**19. Get employee details from employee table whose employee name are “Dinesh” and “Roy”i**

**select \*from emptable where FIRST\_NAME in ("Dinesh","Roy");**

**20. Get employee details from employee table whose employee name are not “Dinesh” and “Roy”**

select \*from emptable where FIRST\_NAME not in ("Dinesh","Roy");

**SQL Queries Interview Questions and Answers on "SQL Wild Card Search" - Examples**

**21. Get employee details from employee table whose first name starts with 's'**

**select \*from emptable where FIRST\_NAME like "s%";**

**22. Get employee details from employee table whose first name contains 'v'**

**select \*from emptable where FIRST\_NAME like "%v%";**

**23. Get employee details from employee table whose first name ends with 'n'**

**select \*from emptable where FIRST\_NAME like "%n";**

**SQL Queries Interview Questions and Answers on "SQL Pattern Matching" - Examples**

**24. Get employee details from employee table whose first name ends with 'n' and name contains 4 letters**

**select \*from emptable where FIRST\_NAME like "\_\_\_n";**

**25. Get employee details from employee table whose first name starts with 'J' and name contains 4 letters**

**select \*from emptable where FIRST\_NAME like "J\_\_\_";**

**26. Get employee details from employee table who’s Salary greater than 60000**

**Select FIRST\_NAME From EMPTABLE where SALARY>60000;**

**27. Get employee details from employee table who’s Salary less than 80000**

**Select FIRST\_NAME From EMPTABLE where SALARY<80000;**

**28. Get employee details from employee table who’s Salary between 50000 and 80000**

**Select FIRST\_NAME from emptable where (SALARY>50000 || SALARY <=80000);**

**29. Get employee details from employee table whose name is venkatesh and ragavi**

**select \*from emptable where FIRST\_NAME IN ("Venkatesh","Ragavi");**

**SQL Queries Interview Questions and Answers on "SQL DATE Functions" - Examples**

**30. Get employee details from employee table whose joining year is “2015”**

**select \*from emptable where extract(year from JOINING\_DATE)=2015;**

**31. Get employee details from employee table whose joining month is “January”**

**select \*from emptable where extract(month from JOINING\_DATE)=01;**

**32. Get employee details from employee table who joined before January 1st 2017**

**select \*from emptable where JOINING\_DATE<("20170101");**

**33. Get employee details from employee table who joined after January 31st 2016**

**select \*from emptable where JOINING\_DATE>("20160131");**

**35. Get Joining Date and Time from employee table**

**select JOINING\_DATE from emptable;**

**36. Get Joining Date,Time including milliseconds from employee table**

**37. Get difference between JOINING\_DATE and INCENTIVE\_DATE from employee and incentives table**

**38. Get database date**

**Select now();**

**SQL Queries Interview Questions and Answers on "SQL Escape Characters" - Examples**

**39. Get names of employees from employee table who has '%' in Last\_Name. Tip : Escape character for special characters in a query.**

**40. Get Last Name from employee table after replacing special character with white space**

**SQL Queries Interview Questions and Answers on "SQL Group By Functions" - Examples**

**41. Get department,total salary with respect to a department from employee table.**

**SELECT DEPARTMENT,SUM(SALARY) TOTAL\_SALARY FROM emptable GROUP BY DEPARTMENT;**

**42. Get department,total salary with respect to a department from employee table order by total salary descending**

**SELECT DEPARTMENT, sum(SALARY) TOTAL\_SALARY FROM emptable GROUP BY DEPARTMENT ORDER BY TOTAL\_SALARY DESC;**

**SQL Queries Interview Questions and Answers on "SQL Mathematical Operations using Group By" - Examples**

**43. Get department,no of employees in a department,total salary with respect to a department from employee table order by total salary descending**

**SELECT DEPARTMENT,COUNT(FIRST\_NAME),SUM(SALARY) TOTAL\_SALARY**

**FROM emptable GROUP BY DEPARTMENT ORDER BY TOTAL\_SALARY DESC;**

**44. Get department wise average salary from employee table order by salary ascending**

**SELECT DEPARTMENT,AVG(SALARY) AVGSALARY FROM emptable GROUP BY DEPARTMENT ORDER BY AVGSALARY ASC;**

**45. Get department wise maximum salary from employee table order by salary ascending**

**SELECT DEPARTMENT,MAX(SALARY) MAXSALARY FROM emptable GROUP BY DEPARTMENT ORDER BY MAXSALARY ASC;**

**46. Get department wise minimum salary from employee table order by salary ascending**

**SELECT DEPARTMENT,MIN(SALARY) MINSALARY FROM emptable GROUP BY DEPARTMENT ORDER BY MINSALARY ASC;**

**47. Select no of employees joined with respect to year and month from employee table**

**48. Select department,total salary with respect to a department from employee table where total salary greater than 800000 order by Total\_Salary descending**

**SELECT DEPARTMENT,SUM(SALARY) TOTAL\_SALARY FROM emptable GROUP BY DEPARTMENT HAVING SUM(SALARY) >800000 ORDER BY TOTAL\_SALARY DESC;**

**SQL Queries Interview Questions and Answers on "SQL Joins" - Examples**

**49. Select first\_name, incentive amount from employee and incentives table for those employees who have incentives**

**50. Select first\_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000**

**51. Select first\_name, incentive amount from employee and incentives table for all employes even if they didn't get incentives**

**52. Select first\_name, incentive amount from employee and incentives table for all employees even if they didn't get incentives and set incentive amount as 0 for those employees who didn't get incentives.**

**53. Select first\_name, incentive amount from employee and incentives table for all employees who got incentives using left join**

**54. Select max incentive with respect to employee from employee and incentives table using sub query**

**Advanced SQL Queries Interview Questions and Answers on "Top N Salary" - Examples**

**55. Select TOP 2 salary from employee table**

**56. Select TOP N salary from employee table**

**57. Select 2nd Highest salary from employee table**

**58. Select Nth Highest salary from employee table**

**SQL Queries Interview Questions and Answers on "SQL Union" - Examples**

**59. Select First\_Name,LAST\_NAME from employee table as separate rows**

**select FIRST\_NAME from emptable union select LAST\_NAME from emptable;  
60. What is the difference between UNION and UNION ALL ?**  **UNION will eliminate duplicate records in the result set while UNION ALL will include all duplicate rows too**.

**"Advanced SQL Queries Interview Questions and Answers"**

**61. Select employee details from employee table if data exists in incentive table ?**

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**62. How to fetch data that are common in two query results ?**

**It will check if each record in the first query matches with the each record in the second query**

**63. Get Employee ID's of those employees who didn't receive incentives without using sub query ?**

**64. Select 20 % of salary from venkat , 10% of Salary for gopi and for other 15 % of salary from employee table**

**65. Select Banking as 'Bank Dept', Insurance as 'Insurance Dept' and Services as 'Pharma Dept' from employee table**

**66. Delete employee data from employee table who got incentives in incentive table**

**67. Insert into employee table Last Name with " ' " (Single Quote - Special Character)**

**INSERT INTO emptable (LAST\_NAME) VALUES ('TEST''');**

**68. Select Last Name from employee table which contain only numbers**

**69. Write a query to rank employees based on their incentives for a month**

**70**. **Update incentive table where employee name is 'Dinesh'**