Answer Script

Question No. 01

1. Create the employee table without constraints

```
CREATE DATABASE mid_xm;

USE mid_xm;

CREATE TABLE employees(
   employee_id INT,
   first_name VARCHAR(30),
   last_name VARCHAR(30),
   email VARCHAR(50),
   phone_number CHAR(11),
   hire_date DATE,
   job_id INT,
   salary DECIMAL(10,2)
);
```

Question No. 02

2. Create the employee table with proper constraints

Answer No. 02

```
CREATE TABLE employees(
employee_id INT PRIMARY KEY,
first_name VARCHAR(30) NOT NULL,
last_name VARCHAR(30) NOT NULL,
email VARCHAR(50) NOT NULL UNIQUE,
phone_number CHAR(11) NOT NULL,
hire_date DATE DEFAULT(CURRENT_DATE()),
job_id INT,
salary DECIMAL(10,2) NOT NULL
);
```

Question No. 03

3. Show all of employee table

Answer No. 03

USE hr;

SELECT *

FROM employees;

Question No. 04

4. Show the first names and salaries of employee who has last name "king"

Answer No. 04

SELECT first_name, salary

FROM employees

WHERE last_name="king";

Question No. 05

5. Show the first names and last names of the employees who has salary greater than 2000

Answer No. 05

SELECT first_name, last_name

FROM employees

WHERE salary > 2000;

Question No. 06

6. Show the employee names and salaries who earns more than average salary.

Answer No. 06

SEIECT first_name, salary

FROM employees

WHERE salary > (SELECT AVG(salary) FROM employees);

Question No. 07

7. Group the employees using job id and show the average and max salary of each job id.

Answer No. 07

SELECT job_id, AVG(salary) as average_salary, MAX(salary) as max_salary FROM employees GROUP BY job_id;

Question No. 08

8. Sort the employee table ascending order according to salary and show 5th to 10th rows

Answer No. 08

SELECT *
FROM employees
ORDER BY salary ASC

LIMIT 6 OFFSET 4;

Question No. 09

9. Count the employees and total salary

Answer No. 09

SELECT COUNT(*) as total_employees, SUM(salary) as salary FROM employees;

Question No. 10 10. Draw an ERD of the HR database Answer No. 10 Departments Countries PK <u>department_id</u> PK <u>country_id</u> department_name HAS country_name manager_id fk region_id fk location_id Employees HAS PK <u>employee_id</u> HAS first_name last_name Locations HAS email PK <u>location_id</u> M phone_number streed_address Job History hire_date postal_code fk employee_id fk job_id city start_date salary state_province end_date fk/country_id commission_pct job_id manager_id ı department_id fk department_id HAS Μ HAS Regions PK <u>region_id</u> region_name Jobs PK job_id job_title min_salary max_salary