**Name** \_\_\_\_Guilherme Osorio\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

You have 80 minutes to complete the exam. Exam is worth 100 points total

* Exam is open-notes.
* You may access the internet.
* You may not communicate with others.
* You may not access messenger apps, chats, or forums (post questions, etc.).

**Associated Students Academic Integrity Statement**

*“I pledge that I have neither given nor received any unauthorized assistance on this examination”*

Gui Osorio\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MATCH THE TERM TO THE FOLLOWING STATEMENTS**

|  |  |
| --- | --- |
| **A** | **attribute** |
| **B** | **bit** |
| **C** | **byte** |
| **D** | **database** |
| **E** | **entity** |
| **F** | **field** |
| **G** | **record** |
| **H** | **table** |
| **I** | **tuple** |

1. A(n) \_\_G\_\_\_ is a logical grouping of related fields. **G - record**
2. In the data hierarchy, the smallest element is the \_\_B\_\_\_. **B - bit**
3. A(n) \_\_H\_\_\_ is a logical grouping of related records. **H - table**
4. A(n) \_\_F\_\_\_ is a logical grouping of characters into a word, a small group of words, or a complete number. **F - field**
5. Which database term refers to a row in a table? **I - tuple**
6. In a university's relational database, the student record contains information regarding the student's last name. The last name is a(n): **A - attribute**
7. A(n) \_\_\_\_D\_\_\_\_ is a logical group of related tables. **D - database**
8. A(n) \_\_\_\_\_\_\_\_E\_\_\_\_\_\_\_\_\_ is a person, place, or thing that can be identified in the users' work environment. **E - entity**

**Multiple Choice Questions**

**9. You have moved to a different apartment, but your electricity bill continues to go to your old address. The Post Office in your town has a problem with its data management, which is:**

A) Data redundancy

**B) Data inconsistency**

C) Data isolation

D) Data security

E) Data dependence

**10. \_\_\_\_\_ occurs when applications cannot access data associated with other applications.**

**A) Data isolation**

B) Data integrity

C) Data consistency

D) Data redundancy

E) Application/Data dependence

**11. \_\_\_\_\_ occurs when the same data are stored in many places.**

A) Data isolation

B) Data integrity

C) Data consistency

**D) Data redundancy**

E) Application/Data dependence

**12. \_\_\_\_\_ occurs when various copies of the data agree.**

A) Data isolation

B) Data integrity

**C) Data consistency**

D) Data redundancy

E) Application/Data dependence

**Application Questions**

**For this part you will need to download the files**

**HARKINS\_0321.accdb  
emloyees21.xlxs**

**READ EACH QUESTION CAREFULLY and CREATE a QUERY that produces an answer to the question. After executing the queries you will need to WRITE THE ANSWERS ON THIS EXAM as well as saving each answer in your database file as QUESTION\_NUMBER. *When you are completed with your exam you will need to email all your files (access, word, excel) to*** [***carlr@sandiego.edu***](mailto:carlr@sandiego.edu)**.**

**13. SELECT QUERY (10 points)**

What movie had the worst ticket sales and what were the sales?

| **QUESTION\_13** | |
| --- | --- |
| **movie\_name** | **sales** |
| LONG SHOT | $10.00 |
| BOHEMIAN RHAPSODY | $10.00 |

**14. SELECT QUERY (10 points)**In week 9, what movie had the highest sales? What was the sales amount?

| **QUESTION\_14** | |
| --- | --- |
| **movie\_name** | **sales** |
| STAR WARS THE RISE OF SKYWALKER | $3,922,993.00 |

**15. COMPOUND QUERY (10 points)**In week 30, in zone 4, what movie had the highest sales? What was the sales amount?

| **QUESTION\_15** | |
| --- | --- |
| **movie\_name** | **sales** |
| LES MISERABLES | $9,806.00 |

**16. COMPOUND QUERY (10 points)**

In week 10, in zone 1, what movie had the **lowest** sales? What was the sales amount?

| **QUESTION\_16** | |
| --- | --- |
| **movie\_name** | **sales** |
| THE FIRM | $802.00 |

**17. COMPOUND QUERY (10 points)**

In week 17, in zone 7, what theater had the highest sales? What was the sales amount?

| **QUESTION\_17** | |
| --- | --- |
| **theater\_name** | **sales** |
| FASHION VALLEY | $10,303.00 |

**18. AND/OR QUERY (10 points)**

Run a query that shows all the movies that reported ticket sales under $112,000 and ticket sales over $350,000 for week 39. Write the name of the movies and their sales amounts.

**19. PARAMETER QUERY (10 points)** *(use the parameter box feature as shown in class to bring up a prompt that allows the user the enter in a specific movie name and week number and display’s the highest sales for that week)*

What theater in week 41 had the highest sales for the movie “DONS PLUM”?

| **QUESTION\_19** | |
| --- | --- |
| **theater\_name** | **sales** |
| FASHION VALLEY | $9,209.00 |

**20 IMPORT AND QUERY (18 points)**  
Download the excel file called employees21 and import the worksheet with the employee data into the movie access database as a new table. Make certain to be aware of DATA TYPES (HINT THEATER ID IS LONG INTEGER) name the table as employees and make it ‘related’ to the other applicable table(s).

Then, run a query that returns a list of the first name, last name, and theater of all the “manager” for theater zone =”4”. Sort Ascending by Last Name and write the first FIVE records returned (first, last, theater) below.

| **QUESTION\_20** | | |
| --- | --- | --- |
| **first\_name** | **last\_name** | **theater\_name** |
| Austin | Denworth | ARCADIA |
| Andrew | Ferguson | CENTERPOINT |
| Connor | Gaffney | ARCADIA |
| wendi | george | ARCADIA |
| Matthew | Gillingham | CENTERPOINT |

**EXTRA CREDIT IMPORT AND CALCULATE (5 points)**

From the previous employees2103.xls file import the sheet that contains the hours and import is a table called hours. Then using the imported employee table and the hour table you just imported create a query that shows how much each type of employee is paid for a specific theater and week. Your query should consist of the following fields:

THEATER\_ID, WEEK\_ID, WEEK\_END\_DATE, EMPLOYEE TITLE, PAY\_AMOUNT

***(****HINT you will have to calculate the PAY\_AMOUNT field which is done using the following code* ***pay\_amount:[employees.rate]\*[hours.h\_worked]***

Run the query using a prompt for the user to enter in for theater\_ID =’4’ and week = “24”. ***ANSWER WILL BE IN DATABASE***