**Supplemental CA1 2021**

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***Background: You have been employed by SDCC Libraries to administer their database. As their Database Administrator on the first day you have been tasked with the following***:

**Question 1 [15 Marks]**

Create a Library Manager user with the following characteristics:

a)

Username: LIBMGR

Password: LIBMGR

Temp Tablespace: TEMP

Default Tablespace: LIBRARY (create this tablespace if it does not already exist)

Status : Unlocked

b) Grant: Create Session, Create table privileges to this user

c) Grant: Enterprise Manager Administration privileges to this user.

d) Ensure the Quota for the library tablespace for this user is unlimited.

**Insert Relevant Screen Shots in correct spaces below:**

|  |  |
| --- | --- |
| **a.** |  |
| **b.** |  |
| **c.** |  |
| **d.** |  |

**Question 2[10 Marks]**

For this section, you may be logged in as user **sys** or **LIBMGR**.

Create a table in the library tablespace for books with the following structure:

*Books(book\_id number, book\_name varchar2(50), book\_type varchar2(20), primary key(book\_id))*

|  |  |  |
| --- | --- | --- |
| **Book\_id** | ***Book\_name*** | ***Book\_type*** |
| *1* | *Spiderman* | *Childrens* |
| *2* | *Gone Girl* | *Fiction* |
| *3* | *Two Brothers* | *History* |

**\*Note create the table structure only no need to include any data in the table.**

***Insert the SQL to create the table here:***

 CREATE TABLE "SYS"."BOOKS" ( "BOOK\_ID" NUMBER NOT NULL , "BOOK\_NAME" VARCHAR2(50) NOT NULL , "BOOK\_TYPE" VARCHAR2(20) NOT NULL , PRIMARY KEY ("BOOK\_ID") VALIDATE ) TABLESPACE "LIBRARY"

**Question 3 [15 Marks]**

Create the following:

1. Create a profile, STANDARD, using all defaults, except that Idle time is set to 15 minutes.
2. Create a senior librarian role, SENIOR\_LIBRARIAN which can Select, insert, update and delete on the book table created in Question 2.
3. Create librarian role, LIBRARIAN, which can only select from the book table.

**Insert screen shots (as many as needed to show the creation of these profiles as above:**

|  |  |
| --- | --- |
| **a.** |  |
| **b.** |  |
| **c.** |  |

**Question 4 [20 Marks]**

Create two users, using LIBRARY and TEMP as the default and temporary tablespaces for both users:

SKELLY / SKELLY: A Senior Librarian

EBYRNE / EBYRNE:  A Librarian

Apply the relevant profile and roles to these users and test them to ensure they are operating correctly e.g. that the librarian can only select on the books table.

|  |  |  |
| --- | --- | --- |
| **NAME** | **SQL** | **Screen Shot(s)** |
| SKELLY | CREATE USER "SKELLY" PROFILE "DEFAULT" IDENTIFIED BY "\*\*\*\*\*\*\*" DEFAULT TABLESPACE "LIBRARY" TEMPORARY TABLESPACE "TEMP" ACCOUNT UNLOCK  GRANT "CONNECT" TO "SKELLY"  GRANT "SENIOR\_LIBRARIAN" TO "SKELLY" |  |
| EBYRNE | CREATE USER "EBRYNE" PROFILE "DEFAULT" IDENTIFIED BY "\*\*\*\*\*\*\*" DEFAULT TABLESPACE "LIBRARY" TEMPORARY TABLESPACE "TEMP" ACCOUNT UNLOCK  GRANT "CONNECT" TO "EBRYNE"  GRANT "LIBRARIAN" TO "EBRYNE" |  |

**Question 5[20 Marks]**

Ensure you have enough REDO LOG files in each group and ensure they are multiplexed (as best as possible in this VM environment)

1. How many redo log files are in each group?

|  |
| --- |
| 1 |

1. Add a new member to Group 1, called redo01x.log, and place it in the Flash Recovery Area, in a new folder called onlinelogs.

/home/oracle/app/oracle/flash\_recovery\_area/orcl/onlinelogs/redo01x.log

Insert screenshot below.

|  |
| --- |
|  |

1. Are the members of Group 1 multiplexed? How do you know?

|  |
| --- |
|  |

1. Write the SQL that would force a log switch

|  |
| --- |
|  |

**Question 6 [20 Marks]**

Create an ONLINE or HOT backup of the entire database.

Insert the relevant screens below. Include ALL screens you used.











