

Task 9: Backing up and Recovery in

College management system database.

Aim: - To Backing up and Recovery to College management system database.

College Management database

Scenario 1: Recovering a Noarchive log database with Incremental Backups.

Step 1: Backup College Management Database.

SQL

```
BACKUP DATABASE [college-Management-DB].  
TO DISK = 'C:\Backups\collegeDB-full.bak'  
WITH NOFORMAT, NOINIT,  
NAME = 'FULL College Management Database Backup',  
SKIP, REWIND, NOUNLOAD, STATS = 10;
```

Step 2: Create Incremental Backup.

```
BACKUP DATABASE [college-Management-DB].  
TO DISK = 'C:\Backups\collegeDB-Incremental.bak'  
WITH DIFFERENTIAL, NOFORMAT, NOINIT,  
NAME = 'Incremental college management  
Database Backup',
```

```
SKIP, REWIND, NOUNLOAD, STATS = 10;
```

Step 3: Simulate Data Loss.

```
DELETE FROM Students WHERE Department-ID  
= 'ESE';
```

Step 4: Restore full Backup.

```
RESTORE DATABASE [College-Management-DB]  
FROM DISK = 'C:\Backups\CollegeDB-full.bak'  
WITH REPLACE;
```

Step 5: Apply Increment Backup

```
RESTORE DATABASE [College-Management-DB]  
FROM DISK = 'C:\Backups\CollegeDB-Incremental.bak'
```

WITH REPLACE;

Step 6: Recover Database.

```
RECOVER DATABASE [College-Management-DB];
```

Step 7: Bring Database online.

```
ALTER DATABASE [College-Management-DB] SET ONLINE;
```

Scenario 2: Restoring the server Parameter file.

Step 1: Backup SPFILE.

```
BACKUP SERVER PARAMETER FILE TO FILE = 'C:\  
Backups\CollegeDB-SPFILE.bak';
```

Step 2: Simulate SPFILE Loss.

Step 3: Restore SPFILE

```
STARTUP MOUNT;
```

```
RESTORE SERVER PARAMETER FILE FROM FILE =  
'C:\Backups\CollegeDB-SPFILE.bak';
```

```
SHUTDOWN;
```

```
STARTUP;
```

Scenario 3: Performing Recovery with a Backup Control File.

Step 1: Backup Control file.

Backup. CONTROLFILE TO FILE = 'C:\Backups\
CollegeDB - Controlfile.bak';

Step 2: Simulate control file Cor.

Step 3: Restore Control file.

STARTUP MOUNT;
RESTORE CONTROLFILE FROM FILE = 'C:\Backups\
CollegeDB - Controlfile.bak';

ALTER. CONTROLFILE REUSE;

Step 4: Recover. Database.

RECOVER. DATABASE USING. BACKUP CONTROLFILE;

Step 5: Open Database.

ALTER. DATABASE OPEN RESETLOGS;

VEL TECH	
EX NO	9
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	✓
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
SIGN WITH DATE	

Result:- Thus, the college management system database. is fully recovered using a backup control file executed successfully.