# DELHI TECHNOLOGICAL UNIVERSITY

# PROBABILITY AND STATISTICS (MC-205)

# **PRACTICAL FILE**



**SUBMITTED TO:** 

PROF. JAMKHONGAM TOUTHANG

**SUBMITTED BY:** 

**NITYA MITTAL** 

(2K19/MC/089)

## <u>INDEX</u>

S. No.	Name of Experiment	Page	Date	Signatur e
1	IMPORTING DATA INTO SPSS FROM TEXT AND MICROSOFT EXCEL FILES			
2	(a) MERGING OF FILES (b) SPLITTING OF FILES			
3	PICTORIAL REPRESENTATION OF DATA			
4	DISTRIBUTION OF CURVES			
5	DESCRIPTIVE STATISTICS FOR DATA IN SPSS			
6	CORRELATION AND REGRESSION			
7	HYPOTHESIS TESTING			
8	t-TEST			
9	CHI-SQUARE TEST			
10	ANOVA			

## **EXPERIMENT 2**

- (a) Splitting of Files
- (b) Merging of Files

#### **SOURCE CODE:**

#### 1. Merging Data from Two Files

```
avghours<- data.frame(sports=c("Basketball","Badminton","Table Tennis","Lawn Tennis","Football"), avg_hours= c(2,3,2,1.5,3.5))

numofstudents<-data.frame(num_of_students= c(10,23,65,35,16))

sports<- cbind(avghours,numofstudents)

new<- cbind(sports=c("Cricket"), avg_hours=c(4),
num_of_students=c(34))

total<-rbind(sports,new)
```

#### 2. Splitting Data from File

```
spt<- split(total, total$num_of_students)</pre>
```

#### **OUTPUT:**

#### 1. Merging Data from Two Files

```
> avghours
    sports avg_hours
1 Basketball 2.0 1 10
2 Badminton 3.0 2 23
3 Table Tennis 2.0 3 65
4 Lawn Tennis 1.5 4 35
5 Football 3.5 5 16
> 
> sports
             sports avg_hours num_of_students
1 Basketball 2.0 10
2 Badminton 3.0
3 Table Tennis 2.0
4 Lawn Tennis 1.5
5 Football 3.5
                                                            23
                                                            65
                                                            35
                                                            16
>
> new
sports avg_hours num_of_students
[1,] "Cricket" "4" "34"
>
             sports avg_hours num_of_students
1 Basketball 2
2 Badminton 3
3 Table Tennis 2
4 Lawn Tennis 1.5
5 Football 3.5
6 Cricket 4
                                                             23
                                                            35
                                                            16
>
```

#### 2. Splitting Data from File

```
> spt
   sports avg_hours num_of_students
1 Basketball 2
$`16`
 sports avg_hours num_of_students
5 Football 3.5
$`23`
 sports avg_hours num_of_students
2 Badminton 3
 sports avg_hours num_of_students
6 Cricket 4
$`35`
    sports avg_hours num_of_students
4 Lawn Tennis 1.5
    sports avg_hours num_of_students
3 Table Tennis 2
```