

IT24101821

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Lab Sheet 06

```
1  #(1)
2  #1
3  setwd("C:\\Users\\it24101821\\Desktop\\IT24101821")
4  #2
5  dbinom(40,44,0.92)
6  #3
7  pbinom(35,44,0.92,lower.tail = TRUE)
8  #4
9  1- pbinom(37,44,0.92,lower.tail = TRUE)
10 pbinom(37,44,0.92,lower.tail = FALSE)
11 #5
12 pbinom(42,44,0.92,lower.tail = TRUE)-pbinom(39,44,0.92,lower.tail = TRUE)
```

```
> #(1)
> #1
> setwd("C:\\Users\\it24101821\\Desktop\\IT24101821")
> #2
> dbinom(40,44,0.92)
[1] 0.1979776
> #3
> pbinom(35,44,0.92,lower.tail = TRUE)
[1] 0.007252274
> #4
> 1- pbinom(37,44,0.92,lower.tail = TRUE)
[1] 0.9412233
> pbinom(37,44,0.92,lower.tail = FALSE)
[1] 0.9412233
> #5
> pbinom(42,44,0.92,lower.tail = TRUE)-pbinom(39,44,0.92,lower.tail = TRUE)
[1] 0.6025556
```

```
14 #(2)
15 #1
16 #Number of babies bron in a hospital on given day
17
18 #2
19 #Poisson distribution
20 #Here ,random variable x has poisson distribution with lamda=5
21
22 #3
23 dpois(6,5)
24
25 #4
26 ppois(6,5,lower.tail = FALSE)
```

```

> #(2)
> #1
> #Number of babies born in a hospital on given day
> #2
> #Poisson distribution
> #Here ,random variable x has poisson distribution with lamda=5
> #3
> dpois(6,5)
[1] 0.1462228
> #4
> ppois(6,5,lower.tail = FALSE)
[1] 0.2378165

```

```

29 #Exercise
30 #1
31 #i.Binomial distribution
32 ##ii
33 1-pbinom(46,50,0.85,lower.tail = TRUE)
34
35 #2
36 #i.Number of calls per hour
37 #ii.Poisson distribution.
38 #iii
39 dpois(15,12)
40

```

```

> #Exercise
> #1
> #i.Binomial distribution
> ##ii
> 1-pbinom(46,50,0.85,lower.tail = TRUE)
[1] 0.04604658
> #2
> #i.Number of calls per hour
> #ii.Poisson distribution.
> #iii
> dpois(15,12)
[1] 0.07239112
> dpois(15,12)
[1] 0.07239112

```