Sri Lanka Institute of Information

Technology



Lab Submission

Lab sheet No 06

**IT24100011**

**Jayanandana S.D.S**

**Probability and Statistics - IT2120**

B.Sc. (Hons) in Information Technology

**Exercise**

1)

i. What is the distribution of X?

Answer: *X* ∼ Binomial (*n*=50, *p*=0.85)

ii. What is the probability that at least 47 students passed the test?

A screenshot of a computer

Description automatically generatedAnswer:

2)

i. What is the random variable (X) for the problem?

Answer: The number of customer calls received in a given hour

ii. What is the distribution of X?

Answer: *X* ∼ Poisson (*λ*=12)

iii. What is the probability that exactly 15 calls are received in an hour?

A screenshot of a computer program

Description automatically generatedAnswer: