



# **SNS COLLEGE OF TECHNOLOGY**

*(An Autonomous Institution)*

*Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai*

*Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &*

*Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT)*

*COIMBATORE-641 035, TAMIL NADU*



## **DEPARTMENT OF MATHEMATICS**

### **UNIT V LAPLACE TRANSFORMS**

#### **BICYCLE THIEVES**

A friend of mine runs a bicycle shop and he narrated to me this following story: A man, who looked like a tourist, came to his shop one day and bought a bicycle from him for Rs. 350. The cost price of the bicycle was Rs. 300. So my friend was happy that he had made a profit of Rs. 50 on the sale. However, at the time of settling the bill, the tourist offered to pay in travellers cheques as he had no cash money with him. My friend hesitated. He had no arrangements with the banks to encash travellers cheques. But he remembered that the shopkeeper next door had such a provision, and so he took the cheques to his friend next door and got cash from him. The travellers cheques were made out for Rs. 100 each and so he had taken four cheques from the tourist totalling to Rs. 400! On encashing them my friend paid back the tourist the balance of Rs. 50. The tourist happily climbed the bicycle and pedalled away whistling a tune. However, the next morning my friend's neighbour, who had taken the travellers cheques to the bank, called on him and returning the cheques which had proved valueless demanded the refund of his money. My friend quietly refunded the money to his neighbour and tried to trace the tourist who had given him the bad cheques and taken away his bicycle. But the tourist could not be found. How much did my friend lose altogether in this unfortunate transaction?