



লক্ষীমপুৰ তেলাহী কমলাবৰীয়া মহাবিদ্যালয়
LAKHIMPUR TELAHI KAMALABORIA COLLEGE
Azad, North Lakhimpur, Assam - 787031

ASSIGNMENT
B.Sc.2nd Semester 2020
Mathematics (Core)
Paper-C2.1 Real Analysis

Date: Sept, 2020

Due date-01/10/2020

Max mark: 50

All questions are compulsory

1. (a) Define range of a sequence and constant sequence (5)
(b) Define bounded sequence and show that a convergent sequence is bounded but converse is not true (2+8)
2. (a) Prove that every convergent $\langle x_n \rangle$ has unique limit (7)
(b) Define convergent and divergent series with example.State and Prove Bolzano Weierstrass Theorems for Sequences (2+10)
3. (a) Define Infinite Series,Convergence and divergence series (6)
(b) State and Prove Cauchy's general principle of convergence of series (10)

Best wishes