



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

ASSIGNMENT
B.Sc.6th Semester 2020
Mathematics (Major)
Paper:MM 602 : Discrete Mathematics and Graph Theory

Date: Sept, 2020

Due date-

Max mark: 20

All questions are compulsory

1. (a) Solve the recurrence relation

$$a_n - 7a_{n-1} + 10a_{n-2} = n \cdot 4^n, n \geq 2$$

(5)

- (b) Using generating function, solve the recurrence relation

$$a_n - a_{n-1} - 6a_{n-2} = 0; a_0 = 2, a_1 = 1$$

(5)

2. (a) State and prove Handshaking theorem

(5)

- (b) Draw graphs of any adjacency matrix and incidence matrix

(5)

Best wishes