COLUMB IC

COMSATS University Islamabad

Attock Campus

Department of Mathematics

Assignment # 02

Class: BSM-II **Subject:** Discrete Mathematics **Instructor:** Dr. Atiq ur Rehman **Due Date:** 17-04-2021 (2:00PM) **Course Code:** MTH211 **Marks:** 10

Instructions:

- Please name the PDF as a2-mth211-xyz, where xyz is last three digits of your registration number (e.g. if your registration number is fa20-bsm-051, then name the as a2-mth211-051) before submission.
- Similarity of a solution with other students may reduce your marks.
- Please make sure that the PDF is good before sending.
- Email PDF at atiq+mth211@cuiatk.edu.pk (any email address can be used for sending).

Question #1

Consider the relation $R = \{(1,3), (1,4), (3,2), (3,3), (4,4)\}$ on set $A = \{1,2,3,4\}$. Draw the directed graph of *R*.

Question #2

- (i) Give definition of the algorithm.
- (ii) Use Hornet's method (stepwise) to calculate f(5) if

$$f(x) = 2x^3 - 7x^2 + 4x - 15.$$

Academic Honesty Requirements:

You are encouraged to work with others in the completion of assignments, but it does not include copying and sharing your assignment to others. In sprit of academic honestly and current situation of COVID-19 pandemic, it is requested to write the following statement on your assignment.

> I have not shared or copy the assignment and I understand it well.