

## Final Exam

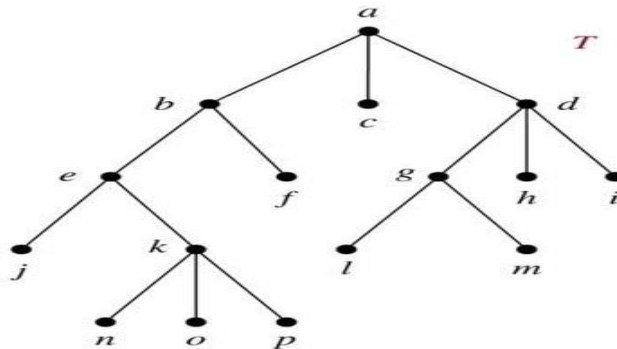
Course Code: CSE 2105

Course Title: Discrete Mathematics

Total Marks: 20

**Instructions:** 1. Read the questions carefully and answer accordingly.  
2. Answer all questions.  
3. Time : 10:00 am – 11:00 am

1. What is the value of the prefix expression  $3\ 2\ *\ 2\ \uparrow\ 5\ 3\ -\ 8\ 4\ /\ * - ?$  5
2. What is the ordered rooted tree that represents the expression  $((x+2)\ \uparrow\ 3) * (y-(3+x)) - 5?$  5
3. Draw these graphs. 5
  - I.  $K_{6,2}$
  - II.  $Q_3$
4. Answer these questions about the rooted tree illustrated. 5



- i) Which vertices are internal?
- ii) Which vertices are leaves?
- iii) Which vertices are children of j?
- iv) Which vertices are ancestors of m?
- v) Inorder traversal.