

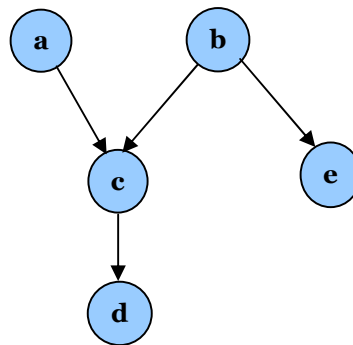
In the Name of God, The Compassionate, The Merciful

Name :

Student ID# :

Statistical Pattern Recognition
Department of Computer Engineering
Quiz #10 (Graphical Models) – Spring 2011

Q. Consider a Bayesian Network with the below structure :



Further assume that each variable takes only 2 values {1, 0}.

- a) Prove that **a** and **e** are independent.
- b) Find $P(c=1|e=1)$ based on the probability distribution of the nodes given their parents.