



# **PES UNIVERSITY, Bangalore**

(Established under Karnataka Act No. 16 of 2013)

## **Department of Computer Science & Engineering**

### **Digital Design and Computer Architecture**

#### **Q&A – Boolean Algebra, Identities - 1**

1. Ben Bitdiddle will enjoy his picnic on sunny days that have no ants. He will also enjoy his picnic any day he sees a hummingbird, as well as on days where there are ants and ladybugs. Write a Boolean equation for his enjoyment (E) in terms of sun (S), ants (A), hummingbirds (H), and ladybugs (L).

Ans:  $E = (S \text{ and } (\text{not } A)) \text{ or } H \text{ or } (A \text{ and } L)$