





KATHMANDU UNIVERSITY  
End Semester Examination[C]  
January, 2018

Level : B.E.  
Year : II  
Time : 2hrs. 30 mins.

JAN. 08, 2018  
Course : COMP 201  
Semester : II  
F. M. : 40

SECTION "B"

[6Q × 4 = 24 marks]

Attempt *ALL* questions.

1. Discuss error detection code for 3 bits data. [4]
2. Differentiate between direct addressing mode and indirect addressing modes. What is the primary purpose of using addressing modes? [2+2]
3. Briefly discuss the Arithmetic and logical unit (ALU). Include a block diagram of basic architecture while answering this question. [4]
4. Describe the instruction cycle for the basic computer with a flowchart showing its operation? [4]
5. With necessary figures, explain daisy chain method of interrupt handling? [4]
6. Illustrate the working mechanism for multiplication algorithm for signed magnitude number with a typical example of your choice. [4]

SECTION "C"

[2Q × 8 = 16 marks]

Attempt *ALL* questions.

7. Discuss floating point representation. Briefly explain the significance of arithmetic shifting. Design a 2 by 2 array multiplier. [3+3+2]
8. Draw the flowchart of Booth's algorithm. Discuss interrupt cycle of a basic computer. [4+4]

