

BCN1043 COMPUTER ARCHITECTURE & ORGANIZATION

Assessment: Mini Project Type: Group Lecturer:

Contents: Chapter 4-6

Final Percentage: 20%

INSTRUCTIONS:

- 1 You are required to complete the mini project in a team based on your own groups consists of 4 or 5 people
- 2 You are required to perform the following tasks:
 - a Choose a topic based on the list of equation given below: (Choose 1 equation from below)
 - i $Y = A + B - C$
 - ii $Y = A + B$, when $C=0$,
 $Y=A-B$, when $C=1$
 - iii $Y=(A+B)/C$
 - iv $Y=A*(B-C)$
 - v $Y = A-B-C$
 - vi $Y=A+B+C$

You are required to write a report concerning the equation you have chosen, consisting the information below:

- i **System Design:** Design a functional logic circuit using LogiSim
Must relate to the above equation
Label the component correctly (RAM,ROM,REGISTER)
- ii **Assembly Code:** Show the code to solve the selected equation Relate it to the system design above
- iii **Remarks :** Explain why do you choose the above topic
Explain the steps of how the calculation is performed
Describe any problems and limitation that occurred during the completion of the project.

The dateline of the assignment is on 25/12/2017 (for submission of PDF in Kalam including your logisim circuit file)

A Group Selfie Photo should be on the cover page with the students name and ID.

Don't Forget the group name and the report title!