

Amrita Vishwa Vidyapeetham
B.Tech. Degree CSE (AI) First Semester
Computational Engineering and Networking

19AIE101-Elements of Computing Systems-1 : Written Assignment 2 (Group-wise)

Max marks: 100

This evaluation aims at the following course outcome

CO2 Implement different combinational and sequential digital logic systems

Qn No	Question	Marks
1	Implement the following chip logic in HDL and test the chip using a hardware simulator. (The chip, its interface, and testing files are available in the project folder of nand2tetris software suite). Show the HDL code and output as a screenshot inside the word file or PDF or PPT.	
a)	ALU	30
b)	Inc16	5
c)	Bit (1-bit register)	5
d)	Register (16-bit register)	10
e)	RAM8, RAM64, RAM512, RAM4K, RAM16K	50

Instructions

You must include an explanation for all the chips in your own words. The answers can be uploaded as a single word file or PDF or PPT (Don't upload HDL file). You can upload the file one time only. So kindly ensure that you are uploading the correct file or not. The first page of the file should contain Group's identity information.

Link to upload word/PDF/PPT (One member in the team can upload. Do not upload zip folder)

https://amritavishwavidyapeetham-my.sharepoint.com/personal/g_jyothishlal_cb_amrita_edu/_layouts/15/onedrive.aspx?p=26&s=aHR0cHM6Ly9hbXJpdGF2aXNod2F2aWR5YXBIZXR0YXN0bXkuc2hhcmVwb2ludC5jb20vOmY6L2cvcGVyc29uYWwvZ19geW90aGlzaGxhbF9jYl9hbXJpdGFfZWRR1L0V1ampLMElhVmY1S2hNMjNaOXU4T0gwQlR5Qkp5bXNKNDdFUDG1PblhaXzUycXc