

Group A Task – 11/06/2025

1. A system requires a Program Counter (PC) that can address every memory location in a memory of certain size. If you know the number of memory locations, how can you determine the minimum number of bits required for the PC?
2. What is a SIM register? Describe its role in the 8085 microprocessor.
3. Describe the 8255A general purpose programmable peripheral device. In your description, highlight its attributes, operational modes and a control word for one of the operational modes.
4. Differentiate counters from timers.

NB:

- *Do basic formatting and editing of your work i.e. consistent fonts and font sizes.*
- *Your Student ID or Student IDs (those working in groups) should be the name of the file you submit.*