

Birla Institute of Technology & Science, Pilani- KK Birla Goa Campus
II Semester 2015-2016
EEE/CS/INSTR F241- MICROPROCESSOR PROGRAMMING AND INTERFACING

Quiz 4 (Open Book)

Date: 18-03-2016

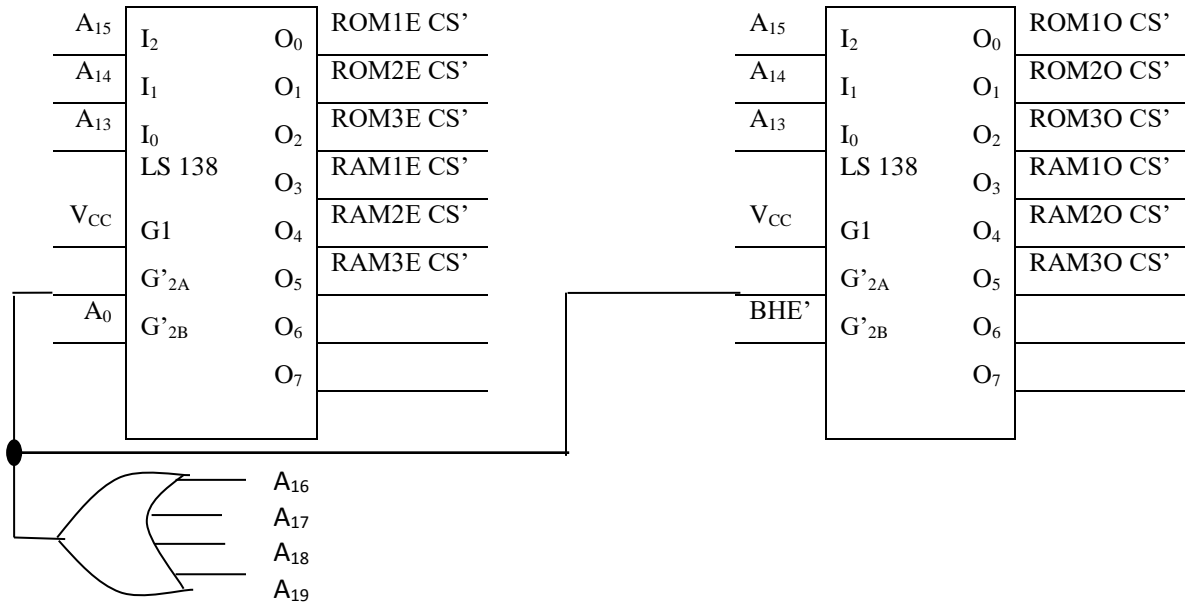
Max Marks: 10

Duration: 30 Mins

ID No.

Name:

1. The decoding logic (using absolute addressing) for an 8086 processor is shown below. This is the only decoding circuit in the computing system and the rest of the address lines are used with the memory chips.



Answer the following questions

- a) How much memory does the system have? [1]
48K
- b) How much of this memory is RAM? [1]
24K
- c) What is the size of the RAM and ROM Chips used? [2]
4K – RAM, 4K ROM
- d) What is the memory map? [6]

| Memory Chips | Address [Starting Address- Ending Address] | Memory Chips | Address [Starting Address- Ending Address] |
|--------------|--|--------------|--|
| ROM1 | 00000-01FFF | RAM1 | 06000-07FFF |
| ROM2 | 02000-03FFF | RAM2 | 08000-09FFF |
| ROM3 | 04000-05FFF | RAM3 | 0A000-0BFFF |