

CSE-3105 (Microprocessors and Micro-controller)

Date: 02 July 2020

Topics of Lecture 21, Lecturer 22 and Lecture 23:

- Q1.** What is meant by interfacing? Why interfacing is important for computer operations?
- Q2.** What are the purposes of using IN and OUT instructions for interfacing the microprocessor with peripheral devices?
- Q3.** Define port number or port address with example.
- Q4.** Define port addressing? Write the differences between fixed port addressing and variable port addressing?
- Q5.** Explain various formats of IN and OUT instructions with fixed and variable port addressing for transferring 8 bit and 16 bit data.
- Q6.** Write the differences between isolated I/O and memory mapped I/O interfacing techniques with memory management.
- Q7.** Explain an example of basic input interface and basic output interface with circuit diagram.
- Q8.** What is handshaking or pooling? How can you perform handshaking operation between microprocessor and printer? Explain briefly with necessary assembly code.
- Q9.** What is Programmable Peripheral Interface (PPI)? What are the uses of it?
- Q10.** Draw the pin out diagram of 82C55 PPI and explain the functions of each pin.
- Q11.** How many groups are available in 82C55 PPI and which ports are combined in which group?
- Q12.** How can you select different ports and command register by using A_0 and A_1 pins of 82C55PPI?