



**Princess Sumaya University for Technology**  
**Computer Engineering Department**  
**22440: Microprocessor Lab**

**Experiment 9: The 8251 Intel Programmable Communication Interface**

Refer to the provided datasheet of the 8251 to understand its architecture and operation, then use it to solve the following problem.

**Lab Assignment:**

Construct a circuit and write an assembly program to send the byte 55h on the transmission line of the 8251 chip in the following settings:

- Number of stop bits: 2 bits
- Parity generation: enabled/even
- Character length: try both 5 and 8 bits.
- Baud rate factor: 16