

**FAKIR CHAND COLLEGE**  
**ELECTRONIC SCIENCE – GENERAL - 2020**  
**Practical (3A+3B)**  
**Full Marks-25+25**

**Answer any one question**

1. Draw the circuit to study forward and reverse characteristics of zener diode and to study the line regulation of the zener diode voltage regulator. What is percentage regulation?
2. Draw the circuit to study input and output static characteristics of a transistor in CE mode. What are different hybrid parameters of a transistor?
3. Draw the circuits to study non-inverting amplifier and a differential amplifier using OPAMP.

**Answer any one question**

4. Draw the circuit diagrams of a Half Adder and Full Adder using NAND gates.
5. Construct a full adder using 2 half adders and an OR gate.
6. Construct a 4:1 MUX using NAND gates and write its truth table.