INTERNAL ASSESMENT 2022
KANDI RAJ COLLEGE
DEPARTMENT OF PHYSICS
SEMESTER: 6ᵗʰ   **STREAM: General (Program Course)**

PHY-G-DSE-T-02 (DIGITAL, ANALOG CIRCUITS AND INSTRUMENTATION)

Answer any five questions: **5×2=10**

1. What are the advantages of Digital circuit over analog circuit?

2. Convert the decimal number 23.65 to its binary equivalent.

3. Subtract the binary number 100110 from 111011 using 2's complement method.

4. Draw and explain the AND gate using Diodes.

5. Why NOR gate is called a universal gate? Explain.

6. Draw the input and output Characteristics of a CB mode transistor.

7. Simplify the Boolean expression $\overline{A}BC + A\overline{B}C + AB\overline{C} + ABC$.

PHY-G-SEC-T-04 (RADIATION SAFETY)

Answer any five questions: 5 X 1 = 5

1. What is the full form of MRI ?

2. Give an example of pair-production ?

3. State two biological effects of ionizing radiation?

4. What is Bremsstrahlung.

5. What is the relationship between rad and Gy ?

6. Define binding energy of an atom ?

7. "GM counter can not detect neutrons." Why