**TECH QUIZ**

**ROUND 1**

**SLOT 1**

1. The gain of an amplifier can be controlled by the \_\_\_\_\_\_\_\_\_\_ resistor.
2. The sum of several voltages in a closed circuit can be obtained by using the \_\_\_\_\_\_\_\_\_\_\_\_ law.
3. Number of valence electrons in a silicon atom are \_\_\_\_\_\_\_\_\_\_\_.
4. By replacing the feedback resistor in an inverting amplifier with a capacitor and an inductor we obtain the \_\_\_\_\_\_\_\_\_\_ circuit.
5. Clamping circuits are the ones which inserts a \_\_\_\_\_\_\_\_\_ in the signal.
6. The ASCII equivalent of $ is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. An 8-bit register will have \_\_\_\_\_\_\_\_\_\_ flip-flops.
8. Relation between α and ß is \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. The reverse saturation current in a Silicon Diode is \_\_\_\_\_ than that of Germanium Diode.
10. The multiplexer is also known as \_\_\_\_\_\_\_\_\_\_\_.

**ROUND 1**

**SLOT 2**

1. The resistance of series RLC circuit is doubled and inductance is halved then bandwidth becomes \_\_\_\_\_\_\_\_\_\_\_\_.
2. This circuit consists for two parallel RC circuits and an operational amplifier connected to the collector of a transistor.
3. Kirchhoff’s second law is based on law of conservation of \_\_\_\_\_\_\_\_\_\_.
4. The 2’s complement of 11011010 is \_\_\_\_\_\_\_\_\_\_\_\_.
5. The time required for the gate to change its output is called as \_\_\_\_\_\_\_\_\_\_\_\_\_.
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a device which converts BCD to seven segment.
7. The reverse saturation current in a Silicon Diode is \_\_\_\_\_ than that of Germanium Diode.
8. This is the circuit which is connected in such a way that the current amplified by the first transistor is further amplified by the second transistor.
9. The current out of an ideal current source is \_\_\_\_\_\_\_\_\_\_.
10. The DC Current Gain of a Transistor is \_\_\_\_\_\_\_\_\_\_\_.
11. The most commonly used semiconductor element is \_\_\_\_\_\_\_\_\_\_.
12. This multivibrator does not require any trigger.
13. Identify the filter.

