|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DAY** | **TOPIC / SUB – TOPIC** | **RPK / OBJECTIVES** | **TEACHER – LEARNER ACTIVITIES** | **T/LSM** | **CORE POINTS** | **EVALUATION / REMARKS** |
| Thursday | BIPOLAR TRANSISTORS | **RPK**Students know the formation and working principles of PN junction diode.**Objectives**By the end of the lesson, the student will be able to;* explain the principles of operation of the three configurations of bipolar transistor
* explain the biasing ofNPN and PNP transistors.
* draw the configurations of a bipolar transistor.
* connect theconfigurations of atransistor.
 | Secure the attention of students by asking them their experiences during the vacation.Discuss the principles of operation of each of the three configurations of bipolar transistor.Group students to discuss the biasing of NPN and PNP transistor.Assist students to draw the three configurations of a bipolar transistor CC, CB and CE.Demonstrate to students the various methods of connectingconfigurations of a transistor circuit.Go over the salient points and allow students to ask questions. | Chalkboard illustrationRealia (an assortment of transistors) | **Transistor**: A transistor is a three terminal device formed by connecting two PN junction semiconductors. The three configurations of the transistor are **Common – Emitter**, **Common – Base**, **Common – Collector**.**Biasing of Transistors:** The transistor is bias as; Active, cut – off or Saturation.**Transistor Configurations:** | 1. Explain how a BJT is formed.
2. Explain the operation of the three configurations of the transistor.
3. explain the condition that will bias the NPN transistor as;
4. Active
5. Cut – off
6. Saturation

4. Draw the three configurations of the NPN transistor clearly showing the input and output voltages. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DAY** | **TOPIC / SUB – TOPIC** | **RPK / OBJECTIVES** | **TEACHER – LEARNER ACTIVITIES** | **T/LSM** | **CORE POINTS** | **EVALUATION / REMARKS** |
| Friday | UNIPOLAR TRANSISTORS | **RPK**Students know the formation and working principles of PN junction transistor (BJT).**Objectives**By the end of the lesson, the student will be able to;* identify the symbols ofJFET.
* explain the principlesof operation of JFET
* draw the symbol forJFET
 | Start the lesson by asking students to explain the working principles of Bipolar Junction Transistor.Assist students to identify circuit symbols of P channel and N channel JFET.Discuss with students the principles of operation of JFETGroup students to discuss the difference between JFET andBipolar Junction Transistor. Help students to draw the symbol for JFET.Go over the salient points and allow students to ask questions. | Chalkboard illustrationRealia (an assortment of JFET) | **JFET**: This is a type unipolar transistor that are voltage-controlled in that they do not need a biasing current. It has three terminals namely; **gate, drain and source.****Types of JFE Transistors**N – ChannelP – Channel **Principles of operation**Electrons flow from the source to the drain terminal by the application of voltage at the gate terminal.JFET is voltage – controlled device while BJT is current – controlled device.**Symbols of JFET:** | 1. Explain the working principles of JFET
2. Differentiate between JFET and BJT
3. Differentiate between the N – channel and P – channel JFET

4. Draw the circuit symbol of JFET clearly showing the Source, Drain and the Gate terminals. |