Week 9 Assignment 9

1. Consider a BJT circuit with grounded-emitter bias. If β = 100. If the base current is 1 mA, find the collector current, voltage across base-emitter, and the power dissipation in the transistor.

2. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

3. In a typical BJT circuit, if β = 100, the base current is 1 mA. If the collector-emitter voltage is 5 V, find the collector current and the voltage drop across the base-emitter.

4. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

5. A transistor is operating in the active region with a base current of 0.1 mA. If the collector-emitter voltage is 5 V, find the collector current and the voltage drop across the base-emitter.

6. In a BJT circuit with grounded-emitter bias, if β = 100, the base current is 1 mA, and the collector-emitter voltage is 5 V, find the collector current and the voltage drop across the base-emitter.

7. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

8. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

9. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

10. In a BJT circuit with grounded-emitter bias, if β = 100, the base current is 1 mA, and the collector-emitter voltage is 5 V, find the collector current and the voltage drop across the base-emitter.

11. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

12. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

13. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

14. In a BJT circuit with grounded-emitter bias, if β = 100, the base current is 1 mA, and the collector-emitter voltage is 5 V, find the collector current and the voltage drop across the base-emitter.

15. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

16. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

17. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

18. In a BJT circuit with grounded-emitter bias, if β = 100, the base current is 1 mA, and the collector-emitter voltage is 5 V, find the collector current and the voltage drop across the base-emitter.

19. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.

20. A transistor has a beta of 100 and a collector-emitter voltage of 5 V. If the collector current is 2 mA, find the base current, the power dissipation in the transistor, and the voltage drop across the base-emitter.