Device 2 Projects

Projects

1. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=10 to feed R_{load}=10 kΩ.
2. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=13 to feed R_{load}=5 kΩ.
3. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=8 to feed R_{load}=7 kΩ.
4. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=14 to feed R_{load}=20 kΩ.
5. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=6 to feed R_{load}=10 kΩ.
6. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=12 to feed R_{load}=8 kΩ.
7. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=16 to feed R_{load}=15 kΩ.
8. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=7 to feed R_{load}=11 kΩ.
9. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=11 to feed R_{load}=5 kΩ.
10. Design an amplifier with phase shift 180^o between input and output and voltage gain Av=7 to feed R_{load}=10 kΩ.
11. Deign a unity voltage gain amplifier (Source follower) with g_m=21 mA/v to feed R_{load}=10 kΩ.
12. Deign a unity voltage gain amplifier (Source follower) with g_m=22 mA/v to feed R_{load}=15 kΩ.
13. Deign a unity voltage gain amplifier (Source follower) with g_m=23 mA/v to feed R_{load}=12 kΩ.
14. Design a unity voltage gain amplifier (Source follower) with g_m=20 mA/v to feed R_{load}=13 kΩ.
15. Design a unity voltage gain amplifier (Source follower) with g_m=22mA/v to feed R_{load}=15 kΩ.
16. Design a unity voltage gain amplifier (Source follower) with g_m=21 mA/v to feed R_{load}=10 kΩ.

17. Design a unity voltage gain amplifier (Source follower) with g_m=25 mA/v kΩ to feed R_{load}=8 kΩ.
18. Design a unity voltage gain amplifier (Source follower) with g_m=24 mA/v and to feed R_{load}=12 kΩ.
19. Design a unity voltage gain amplifier (Source follower) with g_m=21 mA/v and to feed R_{load}=15 kΩ.
20. Design a unity voltage gain amplifier (Source follower) with g_m=20 mA/v and to feed R_{load}=15 kΩ
21. Design a unity current gain amplifier with gain Av=10 and g_m=20 mA/v to feed R_{load}=10 kΩ.
22. Design a unity current gain amplifier with gain Av=12 and g_m=20 mA/v to feed R_{load}=8 kΩ.
23. Design a unity current gain amplifier with gain Av=14 and g_m=20 mA/v to feed R_{load}=10 kΩ.
24. Design a unity current gain amplifier with gain Av=15 and g_m=20 mA/v to feed R_{load}=7 kΩ.
25. Design a unity current gain amplifier with gain Av=16 and g_m=20 mA/v to feed R_{load}=10 kΩ.
26. Design a unity current gain amplifier with gain Av=8 and g_m=20 mA/v to feed R_{load}=15 kΩ.
27. Design a unity current gain amplifier with gain Av=7 and g_m=22 mA/v to feed R_{load}=12 kΩ.
28. Design a unity current gain amplifier with gain Av=11 and g_m=20mA/v to feed R_{load}=15 kΩ.
29. Design a unity current gain amplifier with gain Av=9 and g_m=20 mA/v to feed R_{load}=15 kΩ.
30. Design a unity current gain amplifier with gain Av=5 and g_m=20 mA/v to feed R_{load}=14 kΩ.

Students are required to accomplish the following:

- A maximum of 2 students are allowed per project.
- Reports containing detailed design steps and ORCAD simulations are required.