Assignment 7

Due on 2020-03-16, 23:09 IST.

1. A loudspeaker is connected to a noisy resistor. Under maximum power transfer condition find the power delivered to the loudspeaker. (10 marks)

No, the answer is incorrect. Accepted answers:

2. Find the noise figure for the cascade of two networks. First network noise figure is 2 dB, gain is 10 dB. Second network noise figure is 3 dB, Gain is 14 dB.

No, the answer is incorrect. Accepted answers:

3. For a two stage cascaded network noise figure of first and second stages is F₁ and F₂ respectively. Noise measures of first and second stages in M₁ and M₂ respectively. Which of the following is true?

No, the answer is incorrect. Accepted answers:

4. A transistor has following D-parameters at 10kHz: S₁₁=0.01+j0.007, S₁₂=0.002+j0.003, S₂₁=0.002+j0.001, S₂₂=0.002-j0.001. Find G₂₂_dB.

No, the answer is incorrect. Accepted answers:

5. For the question 8, what is G₂₂_dB?

No, the answer is incorrect. Accepted answers:

6. For a transistor, the overall transconductance G₂₁ = 16 dB and s-parameters are S₁₁ = 0.4+j0.005, S₁₂ = 0.01+j0.002, S₂₁ = 0.02+j0.002, and S₂₂ = 0.02-j0.002. Find the effective gain for the input matching network Gᵥ = 4 dB. The value of effective gain for the output matching network is

No, the answer is incorrect. Accepted answers:

7. Choose the correct option

No, the answer is incorrect. Accepted answers:

8. Choose the correct option

No, the answer is incorrect. Accepted answers:

9. Choose the correct option

No, the answer is incorrect. Accepted answers:

10. Choose the correct option

No, the answer is incorrect. Accepted answers:

11. Choose the correct option

No, the answer is incorrect. Accepted answers:

12. Choose the correct option

No, the answer is incorrect. Accepted answers:

13. Choose the correct option

No, the answer is incorrect. Accepted answers:

14. Choose the correct option

No, the answer is incorrect. Accepted answers: