LINEAR INTEGRATED CIRCUITS QUESTION BANK

UNIT-2

1) Write reasons for stability requirements in a feedback system.
2) What is Barkhausen's criteria?
3) What do you mean by internally compensated op amp?
4) For better stability what should be the phase margin value?
5) At pole frequency, gain increases by 20db/decade, True or False?
6) At frequency where two poles exist, gain falls by 60db/decade, True or False?
7) At zero frequency, phase leads by 90 degrees, True of False?
8) Overshoots can be reduced by decreasing phase margin, True or False?
9) Compensation circuits are usually realized by RL networks, True or False?
10) How many poles are there in this transfer function?

$$A\beta = \frac{\dfrac{aZ_G}{Z_F + Z_G + Z_O}}{\dfrac{(Z_F + Z_G)Z_O C_L s}{Z_F + Z_G + Z_O} + 1}$$

11) With the help of bode diagram, explain gain compensation technique
12) With the help of bode diagram, explain lead compensation technique.