

بسم الله الرحمن الرحيم

King Fahd University of Petroleum and Minerals
Department of Electrical Engineering

Semester I 2006/2007 Analog Integrated Circuit Design EE542 Final Test

ATTEMP ALL QUESTIONS
TIME ALLOWED THREE HOURS

- Q1. Obtain the transfer function of the multi-input single-output structure shown in Fig. 1. Discuss the merits and demerits of this structure.
- Q2. Obtain the transfer function of the circuit shown in Fig. 2. Discuss the merits and demerits of this circuit.
- Q3. Obtain the transfer function of the single-input multiple-output structure shown in Fig. 3. Discuss the advantages and disadvantages of this oscillator circuit.
- Q4. Consider the circuit shown in Fig. 4. Show that it simulates a floating inductor. Discuss the advantages and disadvantages of this inductor.
- Q5. Write a short account on the following:
a. GaAs FETs. b. SiGe transistors. c. Flicker noise.

