

# 大同大學 九十九 學年度研究所碩士在職班入學考試試題

考試科目:科技英文

所別:通訊工程研究所

第 1/1 頁

註:本次考試 不可以參考自己的書籍及筆記; 不可以使用字典; 不可以使用計算器。

Please translate the following paragraphs into Chinese.

(每題20分)

1. Printed open loop antennas are very promising to generate circularly polarized (CP) waves. In [1], an open loop ring on a single layer substrate was excited by a coaxial line to generate CP waves. Its axial ratio bandwidth is around 15%. In [2], it was further demonstrated that axial ratio bandwidth can be increased up to 40% by loading a parasitic open ring inside an original open ring.
2. A characteristic of electrical communication systems is the presence of uncertainty. This uncertainty is due in part to the inevitable presence in any system of unwanted signal perturbations, broadly referred to as *noise*, and in part to the unpredictable nature of information itself. Systems analysis in the presence of such uncertainty requires the use of probabilistic techniques.
3. A typical FPGA logic block consists of lookup tables, multiplexers, gates and flip-flops. A lookup table is a truth table stored in an SRAM and provides the combinational circuit functions for the logic block. These functions are realized from the lookup table, in the same way that combinational circuits are implemented with ROM.
4. Security issues associated with HTTP and other web protocols have been the focus of considerable effort since the commercialization of the Internet in the early 1990s.
5. Discrete-time signal processing techniques are already promoting revolutionary advances in some fields of application. A notable example is in the area of telecommunications, where discrete-time signal processing techniques, microelectronic technology, and fiber optic transmission combine to change the nature of communication systems in truly revolutionary ways. A similar impact can be expected in many other areas of technology.