

※ 考生請注意：本試題不可使用計算機。 請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

1. Plot block diagram for an FM stereo receiver and explain how it demodulates the R and L voice signals. (20%)
2. Describe the main functions of LNA in a communication system. (20%)
3. Assume a wireless network operator has radio spectrum of 10-MHz bandwidth. The network uses 32QAM and 3/4 code rate. What is the theoretical maximum transmission rates of this wireless network? (20%)
4. Compare the two technologies: circuit switch and packet switch (20%).
5. What is Big Data? What are its possible applications? (20%)