



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**14-16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS**  
**SCHOOL OF SCIENCE AND TECHNOLOGY**  
**JANUARY/FEBRUARY 2013 EXAMINATION**

**Course Code:** CIT 758 **Time:** 2½ hrs  
**Course Title:** Wireless Communication II **Course**  
**Credit Unit:** 3  
**Instruction:** Answer any five (5) questions. Each question carries 14 marks

- 1) Briefly describe any seven of the common examples of wireless equipment in use today, ) 14 marks
  
- 2a) State and describe the various classes of wireless (8 marks)  
b) Describe any three application areas of wireless technology (6 marks)
  
- 3a) In order to describe radio propagation, three basic mechanisms are generally considered. State and describe them (9 marks)  
b) Briefly describe the Free Space propagation model for mobile communication (5 marks)
  
- 4a) In the context of this course, explain what is meant by RFID? (4½ marks)  
b) Briefly describe the types of RFID readers? (5 marks)  
c) Enumerate the various types of RFID tags (4½ marks)
  
- 5a) Briefly explain Bluetooth Profile (4 marks)  
b) Write short notes on any four of the following Bluetooth versions (10 marks)
  - i) Bluetooth v4.0
  - ii) Bluetooth v1.1
  - iii) Bluetooth v1.2
  - iv) Bluetooth v3.0 + HS
  - v) Bluetooth low energy
  
- 6a) Describe the IEEE 802.11 layer (11 marks)

- b) State the three key factors that drove significant increase in RFID usage in 2010 (3 marks)
- 7a) State the function of the IEEE 802.11 Physical Layer (PHY) (3 marks)
- b) Briefly describe the three physical layers originally defined in IEEE 802.11 (9 marks)
- c) What do u understand by the term Spread Spectrum? (2 marks)