



NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, Plot 91, Cadastral Zone, Nnamdi Azikiwe
Express Way, Jabi, Abuja

FACULTY OF SCIENCES

JULY 2017 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, what do you understand 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)