



**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA  
SCHOOL OF LIFE SCIENCES  
DEPARTMENT OF MICROBIOLOGY**

**SECOND SEMESTER EXAMINATION 2014/2015 SESSION**

**COURSE CODE: MCB 321**

**COURSE TITLE: GENERAL MICROBIOLOGY II (3 UNITS)**

**CLASS: 300 LEVEL**

**INSTRUCTION: Answer any four (4) questions**

**TIME: 2 Hours**

- 1(a). What roles do aluminium sulphate play in water purification?
- 1(b). Explain how hardness in water could be prevented
- 2(a). Briefly explain the mode of action of chlorine on microorganisms
- 2(b). Explain the disadvantages of using chlorine for water disinfection
- 2(c). How can this be resolved?
- 3(a). Explain the significance of microorganisms in the soil
- 3(b). How would you enhance microbial activities in the soil?
- 4(a). The following microorganisms are responsible for which type of diseases
  - (i) *Treponema palladium*
  - (ii) *Trichophyton metangrophytes*
  - (iii) *Coccidioides immitis*
  - (iv) *Candida albicans*
  - (v) *Filobasidiella neoformans*
  - (vi) *Entamoeba histolytica*
  - (vii) Negative-strand RNA *Filoviridae* virus
  - (viii) *Leishmania tropica*
  - (ix) *Trypanosoma cruzi*
  - (x) Positive-strand RNA *Retroviridae* virus
- 4(b). Mention the properties that account for intermicrobial transfer in bacteria
5. Explain with examples of its uses, the term, transfection
6. Give a complete account of the initiation of an infection against the backdrop of a compromised host and the infectious agent