

BOWEN UNIVERSITY, IWO  
DEPARTMENT OF BIOLOGICAL SCIENCES

2010/2011 SECOND SEMESTER EXAMINATION

**MCB 408: MICROBIOLOGY OF WATER, SEWAGE & AIR**

Answer one question from each section. Answer each section in a separate booklet.  
Time: 2hr 15 mins.

**SECTION A**

1. Discuss the implications of air pollutants on human health. *(25 Marks)*
2. (a) What is air pollution?  
(b) Explain the origin of **ten** non-microbial air pollutants. *(25 Marks)*

**SECTION B**

3. (a) Enumerate the stages of activity in an anaerobic sludge digester (Illustration is essential).  
(b) Tertiary method of sewage treatment is a chemical process, Explain. *(25 Marks)*
4. The objective of sewage treatment is to prevent pollution and to produce a disposable effluent that is harmless to the communities. Discuss. *(25 Marks)*

**SECTION C**

5. Discuss the technique of carrying out presumptive, confirmed and completed tests to identify coliform bacteria in a deep well. *(25 Marks)*
6. Write an essay on 'water borne diseases'. *(25 Marks)*