

OLABISI ONABANJO UNIVERSITY

DEPARTMENT OF MICROBIOLOGY

2016/2017 SESSION HARMATTAN EXAMINATION

ICB 403: PHARMACEUTICAL MICROBIOLOGY AND QUALITY CONTROL



INSTRUCTION: Answer any THREE questions

TIME: 1 hr. 30mins

1. a. What are antibiotics?

b. Briefly explain three factors that may influence the therapeutic outcome of an antibiotic.

c. Explain quality control as it relates to pharmaceutical products.

c(ii). List five features of a counterfeit pharmaceutical product.

a. Describe a named antibiotic class with specific detail on:

i. Chemistry of the core compound

ii. Structure of a named example cited in (i) above

iii. Spectrum of activities

iv. Organism responsible for its natural synthesis

v. At least two examples of antibiotics in the class

b. Highlight four general characteristics of a successful chemotherapeutic agent.

3. Discuss the influence of environmental factors on microbial growth.

4. Explain the following as assay methods for antimicrobial compounds:

(i) Agar well diffusion

(ii) Agar plug diffusion

(iii) Cross streak method

(iv) Poison food method