



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2017/2018
FIRST SEMESTER EXAMINATION FOR THE DEGREE OF
MASTER OF SCIENCE (MICROBIOLOGY)

SMB 802: MICROBIAL PHYSIOLOGY

DATE: Monday, 5th February, 2018

TIME: 5.30 p.m. - 8.30 p.m.

INSTRUCTIONS:

*Answer any **FOUR** Questions (25 Marks each)*

1. Give a detailed account of photosynthesis of cyanobacteria.
2. Write an essay on extremophilic microorganisms and their adaptations to the environment.
3. Giving specific examples, explain the mechanisms of action of antimicrobial agents and ways in which the target microorganisms develop resistance.
4. Describe pentose phosphate pathway and its significance in bacteria.
5. Discuss metabolic diversity of microorganisms based on acquisition of carbon and energy sources.