



W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2021/2022
EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE MEDICAL
MICROBIOLOGY**

TMM 3100: PATHOGENIC MICROBIOLOGY

DATE: JULY, 2022

TIME: 3 HOURS

INSTRUCTIONS: Answer Any FOUR Questions (25 Marks each)

Question One

Biofilms are a predominated^{nt} danger in infectious disease treatment. Discuss possible drugs characteristics that would prevent bacteria from forming biofilms. [25 marks]

Question Two

Discuss the etiology, pathogenesis, clinical manifestations, diagnosis, treatment, control and prevention of typhoid fever. [25 marks]

Question Three

H. pylori colonize the stomach and can induce chronic gastritis, peptic ulceration and more rarely endo carcinoma. Discuss how type IV secretion system in H.pylori contribute to disease progression. [25 marks]

Question Four

Discuss pathotypes of E.coli and describe the virulence factor for each E.coli pathotype. [25 marks]

Question Five

Using specific examples, discuss bacteria toxigenicity and invasiveness. [25 marks]

Question Six

Discuss in details on sample collection, laboratory diagnosis and identification of salmonella species. [25 marks]