

Tanta University

Faculty of Medicine

Microbiology & Immunology Department

Master of Bacteriology (first paper)

Date 20/4/2019

Time allowed: 3 Hour

-Answer the following questions:

1- Give an account on:

- a) Bacterial capsule (5 Marks)
- b) Bacterial growth curve (10 Marks)
- c) Transposons (5 Marks)
- d) Bacterial mutation (5 Marks)
- e) Origin of antimicrobial drug resistance (5 Marks)
- f) Bacterial Transduction (10 Marks)

2- Give an account on each of the following:

- a) In situ hybridization : Definition and Application (5 marks)
- b) Nested PCR (4marks)
- c) SYBER green detection method in real time PCR (4 marks)
- d) Ligase chain reaction (4marks)

3- Discuss each of the following

- a) Sources of Nosocomial infection (6 marks)
- b) Spaulding classification of equipments (6 marks)
- c) Antimicrobial Stewardship : Definition and Objectives (6marks)
- d) Schedules of vaccines to health care workers (10 marks)
- e) Central sterilization services (10 marks)

4- Give an account of each of the following:

- a) Functions of Macrophages (10marks)
- b) Superantigen , Heterophil antigen (10marks)
- c) Differences and similarities between MHC class I and II (10 marks)
- d) Natural Killer cells (10 Marks)
- e) T-cell receptor (5 Marks)

م. د. محمد زكريا حسين

5-discuss each of the following :

- e) Bacterial pigment (10 marks)
f) Plasmid (10 marks)
g) Bacterial transformation (10 marks)
h) Complication of antimicrobial chemotherapy (10 marks)

يعقد الامتحان الشفوي يوم الاربعاء الموافق ٢٠١٩/٥/٨ بقسم الميكروبيولوجي الساعة التاسعة صباحا.

Good Luck

رئيس القسم

ا.د. محمد زكريا حسين

