

1<sup>st</sup> paper for 2<sup>nd</sup> part Master/Degree in: Microbiology & Immunology

Date: 12/10/2014

Time Allowed: 3 hours

Total Assessment Marks: 100

All questions to be answered



Tanta University  
Faculty of Medicine

Department of Microbiology  
and Immunology

I) Give short account on the following (5 marks each) :

- Glycocalyx
- Classification for medically important flora according to their anatomical site
- Plasmid encoded products

II) Discuss the following (5 marks each) :

- Bacterial biofilm : mechanism of antibiotic resistance and therapeutic approaches
- Principle and uses for Fluorescence –activated cell sorting
- Surface virulence factors : enumerate and discuss their role in vaccination
- Hybridization format

III) Compare between (5 marks each) :

- Allotype and isotype of immunoglobulin
- Acute and chronic desensitization
- Different invitro tests for lymphoid cell competence
- T- helper1 and T- helper2 cells

الأستاذة الدكتورة / مريم إسماعيل  
رئيس قسم الميكروبيولوجيا والطب المناعي  
Tanta University

per for 2<sup>nd</sup> part Master/Degree in: Microbiology & Immunology  
Date: 12/10/2014



Time Allowed: 3 hours

Tanta University  
Faculty of Medicine

Total Assessment Marks: 100

All questions to be answered

Department of Microbiology  
and Immunology

IV) Define the following (5 marks each) :

- Chimeric MCA
- Requirements needed for GVH reaction to occur
- Factors that affect induction and maintenance of tolerance
- Syndromes resulting from phagocyte deficiency

V) Give short account on : antifungal therapy ( 10 marks)

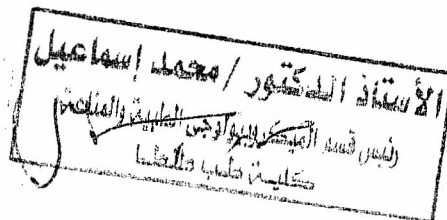
VI) Discuss the following :

- Basis for viral classification and mention the classification of RNA positive polarity viruses in a table form (9 marks)
- Vaccines prepared from viral mutants and viral reassortants

(6 marks)

Good luck

الشيخوخة مع الارتفاع في العمر  
العمر ٥٦-٦٧



paper for 2<sup>nd</sup> part Master/Degree in: Microbiology & Immunology

Date: 19/10/2014

Time Allowed: 3 hours

Total Assessment Marks: 100



Tanta University  
Faculty of Medicine

Department of Microbiology  
and Immunology

All questions to be answered

- 
- I) Discuss laboratory diagnosis and treatment for ( 5 marks each ) :
- Mycoplasma pneumonia*
  - Endemic RF*
  - Salmonella enteritidis*
  - Clostridium difficile*
- II) Compare between the causative organisms and laboratory diagnosis for: 3 different types of bacterial conjunctivitis (15 marks )
- III) Enumerate the different diseases caused by the following organisms and mention their laboratory diagnosis ( 5 marks each):
- Mobiluncus*
  - Bacteroides fragilis*
  - Streptococcus agalactiae*
- IV) As regard nosocomial infection enumerate the following ( 5 marks each) :
- Its criteria
  - Standard precautions for its prevention
  - Different typing methods used to trace source of infection

الأستاذ الدكتور / محمد عبد الله إسماعيل  
رئيس قسم الميكروبيولوجيا والاعراض المعدية  
مركز البحوث والدراسات الطبية  
جامعة طنطا

2<sup>nd</sup> paper for 2<sup>nd</sup> part Master/Degree in: Microbiology & Immunology

Date: 19/10/2014

Time Allowed: 3 hours

Total Assessment Marks: 100

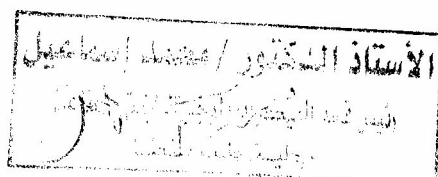
All questions to be answered



Tanta University  
Faculty of Medicine

Department of Microbiology  
and Immunology

- 
- I) **Discuss laboratory diagnosis and treatment for ( 5 marks each ) :**
- Mycoplasma pneumonia*
  - Endemic RF*
  - Salmonella enteritidis*
  - Clostridium difficile*
- II) **Compare between the causative organisms and laboratory diagnosis for: 3 different types of bacterial conjunctivitis (15 marks )**
- III) **Enumerate the different diseases caused by the following organisms and mention their laboratory diagnosis ( 5 marks each):**
- Mobiluncus*
  - Bacteroides fragilis*
  - Streptococcus agalactiae*
- IV) **As regard nosocomial infection enumerate the following ( 5 marks each ) :**
- Its criteria
  - Standard precautions for its prevention
  - Different typing methods used to trace source of infection



2nd paper for 2<sup>nd</sup> part Master/Degree in: Microbiology & Immunology

Date: 19/10/2014

Time Allowed: 3 hours

Total Assessment Marks: 100

All questions to be answered



Tanta University  
Faculty of Medicine

Department of Microbiology  
and Immunology

---

V) An infant aged 18 months suffered from abdominal pain and watery bloody diarrhea after eating refrigerated food without heating. Symptoms and signs nearly resemble appendicitis while stool examination revealed pleomorphic g-ve bacilli. Mention the following ( 2 marks each ) :

- a) The most probable causative organism
- b) The main source for infection
- c) Laboratory diagnosis
- d) Treatment
- e) Other causative organisms for differential diagnosis

VI) A 42 – year – old woman with chronic asthma for evaluation of cough. She developed a cough productive of brown mucous and blood, low grade fever and wheezing. X ray shows a lobar infiltration. CBC with elevated eosinophil count was found. ( 10 marks )

- a) What is the most likely organism
- b) What is the morphology of this organism
- c) What is the laboratory diagnosis
- d) What is the treatment

V) Discuss the following:

- a) Viral hemorrhagic fever : causes, clinical picture and laboratory diagnosis of the one causing recent outbreak in west Africa (7 marks)
- b) Neutralizing antibodies and HCV (4 marks)
- c) Prevention of CMV infection and disease (4 marks)

Good Luck