



Sohag University
Sohag Faculty of Medicine
Department of Medical Microbiology & Immunology

الفرقة الثالثة

ميكرو

دور اول



Third year Examination

Time allowed: 2 hours

Total marks: 80

(22-5-2017)

I- Give a short account on: (Total marks: 27)

- 1- Serodiagnosis of syphilis. (4 marks)
- 2- Graft rejection (types and mechanisms). (4 marks)
- 3- Clinical forms of CMV infection. (4 marks)
- 4- Cutaneous mycosis and their methods of identification. (5 marks)
- 5- Laboratory diagnosis and treatment of HCV infection. (5 marks)
- 6- Botulinum toxin (type, mode of action & uses). (5 marks)

II- In a table form, compare between the following items: (15 marks; 3 marks each)

- 1- HA-MRSA and CA-MRSA.
- 2- Autoimmunity and immunodeficiency.
- 3- Orthomyxoviridae and paramyxoviridae.
- 4- Tuberculin skin test and Quantiferon gold test.
- 5- Septic and aseptic meningitis.

III- Mention the main functions of the following: (5 marks)

- 1- Interlukin-2. (2 marks)
- 2- Viral capsid. (2 marks)
- 3- Decay accelerating factor. (1 mark)

IV- Mention the virulence factor(s) for: (10 marks; 2 marks each)

- a- *N. meningitidis*.
- b- *Helicobacter pylori*.
- c- *Strept. pyogenes*.
- d- *Vibrio cholera*.
- e- *B. anthracis*.

V- Define: (6 marks; 2 marks each)

- 1- HAART.
- 2- Tumor marker (with TWO examples).
- 3- Cloning vector (with TWO examples).

VI- For each of the following cases, mention the causative agent and the disease produced. (10 marks; 2 marks each)

- 1- A 28-year-old man complained of frequency, urgency and burning micturition, culture of the urine revealed lactose fermenter, Gram negative bacilli and indole positive.
- 2- A 35-year-old man who is HIV antibody-positive. He developed oral ulcer in the mouth which revealed the presence of Gram-positive rounded or oval budding cells.
- 3- A neonate developed fever and neck rigidity. The isolated organism is Gram-positive cocci that is positive CAMP test.
- 4- A 48-year-old man complained of marked painful haemorrhagic enlargement of lymph glands (buboes), usually the inguinal lymph gland with sudden onset of fever. Blood film revealed bipolar staining.
- 5- A 7-year-old child presented with maculopapular skin rash and Koplik's spots.

VII- Case study (7 marks)

A married 31 years old woman presented for the evaluation of pelvic pain. The pain has progressively worsened over the last week. She has also some burning with urination and a vaginal discharge. On examination, she had no fever. Her abdomen is soft with moderate lower abdominal tenderness. On pelvic examination, she was noted to have a yellow cervical discharge and significant cervical motion tenderness. No uterine or adnexal masses were palpated but mild tenderness was also noted. A gram stain of the cervical discharge reveals only multiple polymorphs. No growth was detected on artificial culture media.

- 1- What is the possible diagnosis? (2 marks)
- 2- What is the lab diagnosis? (2 marks)
- 3- Mention the other diseases caused by this organism? (2 marks)
- 4- Mention the treatment of this disease? (1 mark)

GOOD LUCK

Oral exam will be held on Tuesday 23/5/2017 at 9:00 AM



الفريق الثالث
ميكرو
1997



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Total marks: 80

(24-8-2017)

I- Mention the causative agent, mode of infection and the laboratory methods used for diagnosis of the following cases: (Total marks: 30; 6 marks each)

- 1- A case of enteric fever after the second week.
- 2- A case of tetanus.
- 3- A primary case of cholera.
- 4- A case of hepatitis after blood transfusion.
- 5- A case of thrush.

II- Give a short account on: (Total marks: 20; 5 marks each)

- 1- Clinical stages of syphilis.
- 2- Laboratory diagnosis and treatment of HIV infection.
- 3- Autoimmune diseases.
- 4- Complications of antimicrobial chemotherapy.

III- In a table form, compare between the following items: (Total marks 12; 3 marks each)

- 1- Toxic type and infective type of food-poisoning.
- 2- Type I and type II hypersensitivity.
- 3- Moist and dry heat sterilization.
- 4- Conjugation and transformation.

IV- Define: (Total marks 8; 2 marks each)

- 1- Dimorphic fungi.
- 2- Antigenic shift of influenza virus.
- 3- Tumor markers (with TWO examples).
- 4- Zoonotic diseases (with ONE example for each of viral and bacterial diseases).

V- Case study: (10 marks)

A 50-years-old man is brought to the emergency room with a productive cough of bloody sputum. He has daily fever of 38-39 °c, night sweat& a recent weight loss. A chest x-ray shows a cavitary infiltrate of the left upper lobe.

- 1- What is the most likely etiologic agent of this illness?
- 2-How is this agent transmitted?
- 3- What is the main mechanism of host defense?
- 4- How is this disease diagnosed?
- 5-Mention the treatment& prophylaxis for this disease.

GOOD LUCK