

Examination for Master Degree in: Biochemistry
Course title: Medical Microbiology & Immunology
Date: 23/3 / 2021
Term: February 2021
Time allowed: 3 hours
Total assessment marks: 90marks



Tanta University
Faculty of Medicine
Microbiology Department

Answer the following questions:

1-Mention the virulence factors of the following organisms: (10 marks)

- a- *Staphylococcus aureus*. (5 marks)
- b- *Helicobacter pylori* (5 marks)

2-Comment on each of the following statements: (10 marks)

- a. Not all types of *E.coli* can induce gastroenteritis. (3marks)
- b. Only certain types of staphylococci can produce food poisoning (3marks)
- c. *Cl. tetani* cannot be isolated from the patient blood.(2 marks)
- d. Only lysogenized strains of *C.diphtheriae* are pathogenic.(2 marks)

3-What is the causative agents and mode of infection of the following diseases (10 marks, 2.5 marks each) :

- a. Traveler's diarrhea
- b. Malignant pustule
- c. Weil's disease
- d. Scarlet fever

4-Mention the disease caused by the following organisms and its laboratory diagnosis . (10 marks)

- a-*Niesseria meningitidis* (5 marks)
- b-*Shigella* (5 marks)

5-Compare between: (10 marks)

- a-Primary tuberculosis and post primary tuberculosis (5 marks).
- b- Primary stage and secondary stage of syphilis (5 marks)

6-Discuss the prophylaxis for the following diseases: (10 marks)

- a- Whooping cough (5 marks)
- b- Cholera (5 marks)

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7-Both rubella virus and cytomegalovirus (CMV) are implicated as causes of congenital malformations.(10 marks)

- a-Which of these two viral infections possess a more serious problem? Explain why?(3marks)
b-What laboratory tests indicate that the newborn is congenitally infected?(3marks)
c-What are the other modes of transmission for CMV? (4marks)

8-Name the target cell for each of the following viruses:(5 marks)

- a- Poliovirus b- Measles virus
c - EBV d- HIV e- Mumps virus

9-Explain how can you deal with the following case to reach proper diagnosis and mention recommend treatment (10 marks)

-A suspected case of Vaginal candidiasis

10-Discuss Standard precautions applied in healthcare facility for nosocomial infection control (5 marks)

Good luck

Chairman of Department
Prof. Mohamed Zakaria Hussen

Oral exam: /3 /2021

Practical exams: starts /3 /2021 to / 3/2021

At 10 am in Microbiology & Immunology Department

GOOD LUCK

