



KENYATTA UNIVERSITY

EXAMINATION FOR THE DEGREE OF MEDICINE AND BACHELOR OF SURGERY (MBChB LEVEL II)

HPA 1: PATHOLOGY 1 PAPER 1 SHORT ANSWER QUESTIONS AND ESSAY

2ND SEMESTER 2020/2021

TIME: 2 HOURS

INSTRUCTIONS:

Attempt all questions

All questions must be answered on the answer booklet given.

SECTION A: SHORT ANSWER QUESTIONS (80 MARKS)

1. State four genes targeted by carcinogenic agents and name one bacterium implicated in gastric cancer. (5 marks)
2. State five mechanisms of fatty change (5 marks)
3. Classify oedema on the basis of pathogenesis (5 marks)
4. List five types of immunotherapy and give an example in each case (5 marks)
5. State any five integral proteins traversing the plasma membrane which are associated with cellular functions in human cells. (5 marks)
6. State any one host immune evasion mechanism for each of the following pathogens:
 - (a) *Entamoeba histolytica* (1 mark)
 - (b) *Histoplasma capsulatum* (1 mark)
 - (c) *Influenza virus* (1 mark)
 - (d) *Neisseria gonorrhoeae* (1 mark)
 - (e) *Schistosoma haematobium* (1 mark)
7. Outline the process of activation of a naive T lymphocyte (5 marks)
8. Outline the pathogenesis of Marfan syndrome (5 marks)
9. State the mode of action of each of the five toxins produced by *Streptococcus pyogenes* (5 marks)
10. Explain the pathogenesis of *Mycobacterium tuberculosis* infection (5 marks)
11. State five features that distinguish measles (Rubeola) from German measles (Rubella) infection (5 marks)

INVOLVEMENT IN ANY EXAMINATION IRREGULARITY SHALL LEAD TO DISCONTINUATION

12. Summarize the laboratory diagnosis of coccidioidomycosis (5 marks)
13. State five ways by which cestodes are adapted to parasitic life in a human host(5 marks)
14. Complete the table below (5 marks)

Condition	Parasite involved	Disease
Winterbottom's sign		
Kerandel's sign		
Epistasis		
Romana's sign		
Cachexia		

15. Explain the adverse effects caused by *Ascaris lumbricoides* on the host (5 marks)
16. State the modes of transmission of African trypanosomiasis (5 marks)

SECTION B: LONG ANSWER QUESTION (20 MARKS)

17. Describe the etiology, pathogenesis, laboratory diagnosis and treatment of *Helicobacter pylori* (20 marks)