



Technical University of Mombasa

Faculty of Applied and Health Sciences

DEPARTMENT OF PURE AND APPLIED SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN COMMUNITY HEALTH
BSCH 13S

AML 4207 : IMMUNOLOGY

SEMESTER : EXAMINATION

APRIL 2014 SERIES

2 HOURS

Instructions to candidates:

This paper consists of **TWO Sections**

Answer **ALL** question

SECTION A

1. First line defence mechanism include the following cells
 - a) T cells
 - b) B cells
 - c) Macrophages
 - d) T helper cells
2. Specific immunity is associated with
 - a) Memory
 - b) Recognition
 - c) Diversity
 - d) All of the above
3. Macrophages are involved in
 - a) Antigen presentation of processing
 - b) Type 1 hypersensitivity
 - c) Activating cytotoxic T lymphocytes

- d) Vival immunity
4. Physical barriers that contribute to natural immunity include
- Normal microbial flora
 - Neutrophils
 - Skin
 - Lysozymes
5. Primary immune response is mediated by
- IgM
 - IgG
 - IgA
 - IgD
6. First immunoglobulin produced by B lymphocytes is
- IgM
 - IgG
 - IgA
 - IgE
7. Pentameric immunoglobulin include
- IgG
 - IgA
 - IgM
 - IgD
8. Type of graft include
- Allugraft
 - Autograft
 - Domnograft
 - All of the above
9. IgA is a
- Mucosal antibody
 - Memory antibody
 - Primary antibody
 - Secondary Antibody
10. Hypersentivity is due to
- Allergens
 - Antigen
 - Epitomes
 - None of the above
11. Complement is
- Antibody
 - Opsonin

- c) Protein
- d) Carbohydrate

12. Which class of antibody cross placenta

- a) IgG
- b) IgM
- c) IgA
- d) IgE

13. Most abundant immunoglobulin in serum pool is?

- a) IgM
- b) IgG
- c) IgA
- d) IgE

14. Effect functions of immunoglobulin include all

- a) Phagocytosis
- b) Complement fixation
- c) Neutralization
- d) All of the above

15. Human blood groups include all the following except

- a) Blood group A
- b) Blood group AB
- c) Blood group A
- d) Blood group D

16. Vaccines can be prepared through

- a) Chemical exposure
- b) Heat inactivation
- c) Cultivation
- d) All of the above

17. Live attenuated vaccines include

- a) BCG vaccine
- b) Polio vaccine
- c) Cholera vaccine
- d) Diphtheria vaccine

18. Toxoid vaccine include

- a) Diphtheria vaccine
- b) TB vaccine
- c) Polio vaccine
- d) None of the above

19. Hyper acute rejection occur

- a) In minutes
- b) After weeks

- c) In months
 - d) After years
20. Graft rejection is a
- a) Hypersensitivity reaction
 - b) Immune response to alloantigens
 - c) Autoimmune reaction
 - d) All of the above
21. Graft rejection can be prevented by
- a) Immune suppression
 - b) Use of mono-clonal antibodies
 - c) Compatibility test
 - d) All of the above
22. Autoimmune disease are caused by
- a) Autoantibodies
 - b) Macrophages
 - c) Neutrophils
 - d) NK cells
23. Acquired immunodeficiency is due
- a) Chemotherapy
 - b) Immunosuppression
 - c) Malnutrition
 - d) All the above
24. Cell mediated hypersensitivity reaction include
- a) Arthus reaction
 - b) Tuberculin reaction
 - c) Anaphylaxis reaction
 - d) Asthma
25. Primary lymphoid organs include
- a) Bone marrow
 - b) Spleen
 - c) Liver
 - d) Lymph nodes
26. The primary site for lymph filtration is
- a) Lymph nodes
 - b) Spleen
 - c) Liver
 - d) Bone marrow
27. Worn out red blood cells are destroyed in the
- a) Thymus
 - b) Bone marrow

- c) Peyer's patches
- d) Spleen

28. Thelper cell has ____ marker

- a) CD₄
- b) CD₁
- c) CD₈
- d) CD₂₃

29. MHC class 1 is associated with

- a) T cytotoxic cell
- b) T suppression cells
- c) T regulatory cells
- d) All of the above

30. Humoral immunity is effective against

- a) Viral infection
- b) Bacterial infection
- c) Fungal infection
- d) Protozoa infection

SECTION B

1. Discuss acquired immunity

(20marks)

2. Describe type one hypersensitivity

(20marks)