



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF MEDICAL SCIENCES
UNIVERSITY EXAMINATION FOR:
BMLS
AML4304 : IMMUNOPATHOLOGY
SPECIAL/ SUPPLIMENTARY EXAMINATIONS
SERIES: SEPTEMBER 2018

TIME: 2 HOURS

DATE: Pick Date Sep 2018

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **TWO** Section(s). Attempt All questions in section A and B and any two questions in section C.

Circle the correct answer in section A. paper 2

Section A

1. The leukocytes bellow do not have surface markers.
 - a) NK cells.
 - b) Macrophages
 - c) RBC
 - d) B-cells.
 - e) Langahans cells
2. Congenital conditions do not include .
 - a) Malaria
 - b) Syphilis
 - c) Asthma.
 - d) Pregnancy
 - e) Typhoide
3. Activation of the Complement system requires which of the following antibodies:
 - a) IgG
 - b) IgD
 - c) IgY
 - d) Immune complexes.

e) IgM

4. Phagocytosis is basically:

- a) A none specific immune mechanism.
- b) Is acquired immune response
- c) It specifically targets parasites invading the circulatory system
- d) None functional
- e) Prepares antigens for CD4 and CD8

5. Macrophages produce what kind of cytokines

- a) Antibodies
- b) IF γ
- c) IL-4.
- d) platelets
- e) interleukin 1 (IL- 1)

6. Vaccination are activators of:

- a) Natural immunity
- b) Acquired immunity
- c) Active immunity
- d) Artificial acquired immunity
- e) accidental Immunity

7. The antibody produced with the lowest contraction in the body is.

- a) IgG
- b) IgE
- c) IgM.
- d) IgA
- e) IgH

8. Tissue culture assists in.

- a) Tissue and organ transplant.
- b) Diagnosis of diseases
- c) Production of antibodies.
- d) Transfer of information
- e) Tissue cross-match for organ transplant

9. The central factor of the complement system is :

- a) MAC.
- b) C1
- c) C9
- d) C3.
- e) C4

10. The antibody that does not cross the placenta is

- a) IgA
- b) IgM
- c) IgD
- d) IgG.
- e) IgH

11. Allograft rejection is caused by mismatch of;

- a) Donor and recipients allo-antigens.
- b) Blood groups
- c) Donor antibodies
- d) Recipients' antibodies
- e) MHC antigen mismatch

12. The introduction of plasma to a patient is a form of protection called:

- a) Artificial immunity
- b) Natural immunity
- c) Natural passive immunity
- d) Artificial passive immunity.
- e) Genetically acquired immunity

13. The natural infections with high concentrations of IgM antibodies shows that the infection is:

- a) Current.
- b) chronic.
- c) parasitic
- d) viral
- e) Bacterial

14. The diagnosis using ELISA technique relies on the production of:

- a) Antibody antigen reaction
- b) Secondary conjugated antibody.
- c) Detecting machine
- d) Colour change
- e) screening test

15. The antibody with J chain is:

- a) IgD
- b) IgE
- c) IgM
- d) IgG.
- e) IgA

16. Red blood cells are produced by:

- a) Redbone marrow of small bones.
- b) Thymus
- c) Bursa of fabric us
- d) Pancreas
- e) Dermis

17. Antigens are defined as:

- a) Proteins produced after antigenic stimulation.
- b) Protein substances produced by cells which react against causative agent.
- c) Are protein substances
- d) Remnants of proteins
- e) Interleukins

18. The pentameric immunoglobulin is one of the following antibodies:

- a) IgD
- b) IgA.
- c) IgM
- d) IgE
- e) IgG

19. The characteristics of allergy include:

- a) Delayed response
- b) Active immune response
- c) Immediate.
- d) Destruction of host tissue.
- e) Initiates specific immunity

20. Interleukins are protein substances produced by leukocytes called:

- a) macrophages.
- b) WBCs
- c) Monocytes
- d) Plasma cells.
- e) Langerhans cells

21. The presentation peptides to T-lymphocytes is a function of:

- a) Monocytes
- b) Macrophages.
- c) White cells
- d) Dendritic cells.
- e) APCs

22. Malaria is one of the major causes of anemia due to:

- a) formation of surface receptors on infected RBC
- b) Hepatitis
- c) Rabbits
- d) Epstein-Barr.
- e) RBC destruction

23. Steroides may be associated with inducing immuno-suppression in the treatment of:

- a) Antihistamines.
- b) Analgesics
- c) Allergy
- d) Organ transplant.
- e) Malaria

24. allergies are defense reactions called :

- a) Dying organism
- b) Changed reaction.
- c) Initial response to antigenic stimulation
- d) Negative reaction
- e) positive reaction of immune response

25. Heterophile can be defined as

- a) Antigens that are found in unrelated organisms.
- b) Blood group antigens
- c) Cell-wall antigen
- d) White blood cell antigens
- e) All pathogens

26. The following interleukins are synthesized by T-cells

- a) IL-4
- b) IL-7
- c) IL-5.
- d) IL-16
- e) IL-1

27. The antigen fixing agents include:

- a) Antibody.
- b) Lymphocytes
- c) Monocytes
- d) NK cells
- e) Basophills

28. The following dimeric antibodies are found joined together by J-chain

- a) IgD
- b) IgG
- c) IgM.
- d) IgC.
- e) IgA

29. Eger gel methods for diagnosis of typhoid is

- a) Auchtalony.
- b) Radial Immunodiffussion
- c) ELISA
- d) Mancini.
- e) IPR

30. The largestt Immunoglobulin found in serum is

- a) IgM.
- b) IgG
- c) IgD
- d) IgE
- e) IgH

Section B

Q31. Discuss in detail the importance of C3 in the activation cascade and the formation of Lytic factor.

-----20 marks

Q32a . State with relevant examples of immunopathologies encountered in medicine—
10marks

Q32b Describe T-cell activation by macrophages -----10 marks

