



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATION FOR:

BACHELOR OF SCIENCE MEDICAL LABORATORY SCIENCES

AML 4301: MEDICAL VIROLOGY II

SPECIAL/ SUPPLIMENTARY EXAMINATIONS

SERIES: SEPTEMBER 2018

TIME: 2HOURS

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.

Circle the correct answer in section A.

Section A

1. Which of the following is a naked double stranded DNA virus
 - a) Parvo virus
 - b) Adeno virus
 - c) Reo virus
 - d) Retro virus
 - e) None of the above
2. Which of the following viruses replicates in host nucleus but it does not integrate as a provirus
 - a) Filo virus
 - b) Papillomavirus
 - c) Flavi virus
 - d) Toga virus
 - e) All of the above
3. Which of the following viruses Infects epithelial cells lining respiratory tract, GI tract, and conjunctiva
 - a) Hepatitis E
 - b) Pox virus

- c) Reo virus
 - d) Toga virus
 - e) Adenovirus
4. Which of the following virus causes rhinitis in immune-suppressed people
- a) Cytomegalovirus
 - b) Neonatal herpes infection
 - c) Small pox
 - d) Influenza
 - e) Parainfluenza
5. Hepatosplenomegaly, retinitis, rash, and central nervous system involvement; these are symptoms for which of the following virus?
- a) Varicella-zosta
 - b) Herpes simplex
 - c) Human herpes 5
 - d) Cytomegalo virus
 - e) Human herpes 7
6. The following are group 2 viruses EXCEPT?
- a) Paramyxoviruses
 - b) Picornaviruses
 - c) Adenoviruses
 - d) Unconventional slow viruses
 - e) Rabies
7. Which of the following belong to the group 4 viruses
- a) Filoviruses
 - b) HIV
 - c) Orthomyxo viruses
 - d) Togaviruses
 - e) None of the above
8. Birds are the primary hosts for which of the following emerging virus
- a) Chikungunya
 - b) West Nile
 - c) Dengue
 - d) Onyongnyong
 - e) Yellow fever
9. The following are symptoms of prion infection EXCEPT?
- a) Lack of coordination
 - b) Staggering
 - c) Slurred speech
 - d) Dramatic mood swings
 - e) None of the above
10. Which of the following is not true about Bunya virus
- a) Its enveloped

- b) It is segmented
 - c) It is naked
 - d) It is RNA virus
 - e) It is single stranded
11. Which of the following viruses is single stranded and encodes reverse transcriptase
- a) Reo virus
 - b) Retrovirus
 - c) Parvo virus
 - d) Arenavirus
 - e) Papovavirus
12. The following are enteric viruses EXCEPT?
- a) Polio virus
 - b) Echovirus
 - c) Rhino virus
 - d) Coxsackie virus
 - e) Herpangina
13. Hydrophobia is a symptom of which of the following virus?
- a) Dengue
 - b) Measles
 - c) Herpes
 - d) Rabies
 - e) Hepatitis A
14. Which of the following viruses hooks to Acetylcholine receptors at neuromuscular junction
- a) Rabies
 - b) Junin
 - c) Marburg
 - d) Rhinovirus
 - e) All of the above
15. Which of the following oncovirus particles are non infectious
- a) A-Type
 - b) B-Type
 - c) C-Type
 - d) D-Type
 - e) None of the above
16. Which of the following viruses can be detected through hemadsorption
- a) Influenza A
 - b) Influenza B
 - c) Influenza C
 - d) Paramyxo virus
 - e) All of the above
17. Koplik spots are common in which of the following?
- a) Measles
 - b) Croup

- c) Mumps
 - d) Influenza
 - e) Parainfluenza
18. The following belong to the Flavivirus family Except?
- a) Zika
 - b) Yellow fever
 - c) Dengue
 - d) German measles
 - e) Hepatitis C
19. Transformation of cancerous cells involves the following EXCEPT
- a) Loss of growth control
 - b) Anchorage-independent growth
 - c) Ability to invade extracellular matrix
 - d) Differentiation
 - e) Immortalization
20. Papilloma viruses are associated with the following EXCEPT?
- a) Anal carcinomas
 - b) Squamous cell carcinomas of larynx
 - c) Squamous cell carcinomas of esophagus
 - d) Breast Cancer
 - e) Squamous cell carcinomas of lung
21. Which of the following is a human Polyoma virus
- a) SV40
 - b) Bk and JC
 - c) Junnin
 - d) West Nile
 - e) Rabis
22. Which of the following viruses is associated with Burkitts lymphoma?
- a) Epstein Barr virus
 - b) Human herpes 8 virus
 - c) Adeno virus
 - d) Polyoma Virus
 - e) Herpes simplex virus
23. Cytomegalovirus is associated with the following EXCEPT?
- a) Prostate
 - b) Breast
 - c) Kaposi's sarcoma
 - d) Hodgkin's lymphoma
 - e) Castle's disease
24. Which of the following oncoviruses often form syncytia of giant multinucleate cells?
- a) Lentiviruses
 - b) Oncovirinae
 - c) Spumavirinae

- d) All of the above
 - e) None of the above
25. Which of the following viruses cause keratinization of the skin
- a) BK
 - b) JC
 - c) SV40
 - d) Papilloma
 - e) Adenovirus
26. Which of the following viruses is the most common cause of blindness in immunosuppressed patients
- a) Human herpes 8
 - b) Human herpes 7
 - c) Cytomegalovirus
 - d) Varicella-zoster
 - e) All of the above
27. Which of the following viruses has both DNA and RNA in its genome
- a) Rhabdovirus
 - b) Filovirus
 - c) Hepadnavirus
 - d) Herpesvirus
 - e) Arenavirus
28. Which of the following filovirus is known to cause a major epidemic in Africa
- a) Marburg
 - b) Ebola
 - c) Dengue
 - d) Zika
 - e) Chikungunya
29. Which of the following viruses has a Dane particle
- a) Hepatitis A
 - b) Hepatitis B
 - c) Hepatitis C
 - d) Hepatitis E
 - e) All of the above
30. Which of the following virus is common in causing upper respiratory infections in infants
- a) Influenza virus
 - b) Parainfluenza virus
 - c) Respiratory syncytial virus
 - d) Mumps virus
 - e) Rhinovirus

Section B

31. Describe hurdles of interspecies transfer that has contributed to emerging and re-emerging of viral infection (10Mks)

b. Describe Polyoma virus (10 Mks)

2. Describe the following viruses' families outlining two of the diseases caused by these families (10mks)

i. Orthomyxo Virus

ii. Paramyxo virus

b. Describe hepadnaviridae (10mks)