

virology

_ viral Morphology and classification _part one

20 Questions

TEST BANK

Rama Aloweyrat

Viral Morphology and classification

What is the primary function of viral DNA?

- A) Protein synthesis
- **B)** Replication
- C) Cell respiration
- D) Energy production
- Answer: B) Replication

Slide 13

Who first proposed the term "virus"?

- A) Louis Pasteur
- B) Walter Reed
- C) Ivanovski
- D) Loeffler
- Answer: A) Louis Pasteur

Slide 7

What is the structural protein shell that encases the viral nucleic acid called?

- A) Envelope
- B) Capsid
- C) Nucleocapsid
- D) Genome

Answer: B) Capsid

Slide 15

What does a virus primarily require to replicate?

- A) Enzymes
- B) Host cell machinery
- C) Ribosomes
- D) Mitochondria
- Answer: B) Host cell machinery

Slide 8

Which type of nucleic acid can a virus contain?

A) Only DNA

B) Only RNA

C) Both DNA and RNA

D) Either DNA or RNA, but never both

Answer: D) Either DNA or RNA, but never both

Slide 8

What was one of the earliest methods of preventing smallpox?

- A) Vaccination
- **B)** Antibiotics
- C) Variolation
- D) Quarantine

Answer: C) Variolation

Slide 4

Which discovery was made by Ivanovski and Beijerinck?

- A) Yellow fever virus
- B) Foot-and-mouth disease virus
- C) Tobacco Mosaic Virus
- D) SARS virus
- Answer: C) Tobacco Mosaic Virus

Slide 7

What term describes the complete virus particle?

A) Genome

- B) Virion
- C) Capsid
- D) Capsomere

Answer: B) Virion

Slide 11

Viruses are classified as:

- A) Cellular microorganisms
- B) Acellular organisms
- C) Prokaryotes

D) Eukaryotes

Answer: B) Acellular organisms

Slide 5

What is the typical size range of viruses?

- A) 1-10 micrometers
- B) 20-450 nanometers
- C) 1000-2000 nanometers
- D) 0.1-1 millimeters
- Answer: B) 20-450 nanometers

Slide 8

What is the main reason viral infections are harder to treat than bacterial infections?

- A) They are smaller in size
- B) They have complex structures
- C) They live inside host cells
- D) They replicate faster than bacteria

Answer: C) They live inside host cells

Slide 9

What is a "broad spectrum virus"?

A) A virus that infects a single species

- B) A virus that infects multiple species
- C) A virus that has a complex capsid
- D) A virus with multiple envelopes
- Answer: B) A virus that infects multiple species
- Slide 10

What is the term for virus-encoded glycoproteins projecting from the envelope?

- A) Capsids
- B) Peplomers
- C) Nucleocapsids
- D) Ribosomes

Answer: B) Peplomers

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What is the primary role of the viral envelope?

- A) Protect the host cell
- B) Produce viral proteins
- C) Aid in viral attachment and entry
- D) Help in the viral replication
- Answer: C) Aid in viral attachment and entry

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How do enveloped viruses typically acquire their envelope? A) Synthesizing it from nucleic acids B) Stealing it from the host cell membrane C) Creating it from viral proteins D) Forming it during replication Answer: B) Stealing it from the host cell membrane Slide 16 and 17 Which of the following viruses causes foot-and-mouth disease in cattle? A) Herpesvirus B) Influenza virus C) Enterovirus D) Tobacco Mosaic Virus Answer: C) Enterovirus (Don't worry, this is extra information) What term refers to the RNA that can function directly as mRNA in a host cell? A) Positive-sense RNA B) Negative-sense RNA C) Double-stranded RNA D) Single-stranded DNA Answer: A) Positive-sense RNA Slide 14 Which virus was discovered by Walter Reed? A) Smallpox virus B) Ebola virus C) Yellow fever virus D) HIV Answer: C) Yellow fever virus Slide 7 What component does a non-enveloped virus lack compared to an enveloped virus? A) Capsid B) Nucleic acid C) Lipid-containing membrane D) Glycoproteins Answer: C) Lipid-containing membrane Slide 16

How are viral families named?

A) Based on host range

- B) Based on replication mechanism
- C) Based on the type of disease they cause
- "D) Using the suffix "-viridae
- Answer: D) Using the suffix "-viridae

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