

① What form of genetic material do Coronaviruses contain?

①

- dsRNA
- ssRNA
- ssDNA
- dsDNA

② Which of these illnesses does Coronaviruses cause?

①

- Ebola
- Smallpox
- SARS
- AIDS

③ What surface protein allows the virus to bind to the host cell?

①

- envelope protein
- capsid protein
- spike protein

④ Which cell transport process pulls the virus into the host cell?

①

- osmosis
- facilitated diffusion
- exocytosis
- receptor-mediated endocytosis

⑤ How does the viral genomic RNA get out of the viral capsid?

①

- proteolysis
- uncoating
- translation
- replication

⑥ Which strand of RNA do Coronaviruses contain?

①

- antisense
- sense

⑦ What will happen 1st to the genomic RNA(+) strand once it's in the cytoplasm?

①

- translation
- replication

- transcription

⑧ Which ribosomes are doing the translation of the genomic RNA(+)?

①

- viral
- host

⑨ Which reading frame of the genomic RNA(+) strand creates the polyprotein PP1a?

①

- ORF1b
- Both
- ORF1a

⑩ Which reading frame of the genomic RNA(+) strand creates the polyproteins PP1ab?

①

- ORF1b
- both
- ORF1a

⑪ How do we get two different polyproteins from the same gene in the viral genomic RNA?

1

- transcription regulatory sequences
- frameshifting during translation

⑫ What happens to the polyproteins once they are produced?

1

- translation
- proteolysis
- replication

⑬ What is formed from the breakdown of the polyproteins?

1

- structural proteins
- replicase-transcriptase complex

⑭ When the replicase-transcriptase complex replicates the genomic RNA(+) strand what is made?

1

- RNA(-) strand
- more RNA(+) strands
- subgenomic mRNA

⑮ What is formed when the RNA(-) strand is replicated?

①

- more RNA(-) strands
- more RNA(+) strands
- subgenomic mRNA

⑯ What is formed when the RNA(-) strand is transcribed?

①

- subgenomic mRNA
- more RNA(-) strands
- more RNA(+) strands

⑰ What sequences allow for the discontinuous transcription of the RNA(-) strand to form the various subgenomic mRNAs?

①

- transcription regulatory sequences
- frameshifting during translation

⑱ What do the subgenomic mRNAs form through translation?

①

- viral structural proteins
- replicase-transcriptase complex
- more RNA(+) strands

19) Where does the translation of the viral structural proteins occur?

1

- Golgi apparatus
- smooth ER
- nucleus
- rough ER

20) Where do the viral structural proteins and RNA go to be assembled and packaged into vesicles?

1

- smooth ER
- Golgi apparatus
- nucleus
- rough ER

21) What are the newly assembled progeny called?

1

- virions
- viruses

22 How will the virions get out of the host cell?

1

- facilitated diffusion
- receptor-mediated endocytosis
- osmosis
- exocytosis