## Virology for second year MD students – School of Medicine – the University of Jordan

Malik Sallam, MD, PhD

## **Activity for the second lecture (online)**

## Please read each statement carefully and indicate whether it is True or False:

- 1. Every virulent virus is pathogenic, but not every pathogenic virus is virulent. **TRUE**
- 2. Latent persistence with periodic reactivation implies the presence of inactive viral genomes within host cells. **TRUE**
- 3. If two viruses belong to the same genus, they share more phenotypic similarities than two viruses belonging only to the same family. **TRUE**
- 4. A virus in the *Orthopoxvirus* genus can differ from another *Orthopoxvirus* member in replication strategy but not in genome type. **FALSE**
- 5. Chronic infection can result from incomplete virus clearance after an acute phase. **TRUE**
- 6. Virus transmission through contaminated surgical instruments constitutes indirect transmission via fomites. **TRUE**
- 7. If uncoating is blocked, viral genome synthesis can still proceed via host RNA polymerase. **FALSE**
- 8. Infection via fomites is an example of direct viral entry into the body. FALSE
- 9. Groups VI and VII in the Baltimore system differ only in the polarity of their RNA strands. **FALSE**
- 10. The immune response to viruses is always protective and never contributes to disease pathology. **FALSE**
- 11. Reverse transcription can occur in viruses that start with either RNA or DNA genomes. **TRUE**

- 12. The hierarchical increase in similarity from family to sub-family to genus implies that evolutionary divergence decreases correspondingly. **TRUE**
- 13. Group IV and Group VI viruses both contain positive-sense RNA genomes, yet only one group requires a DNA intermediate in replication. **TRUE**
- 14. The suffix *-viridae* is specific to virus sub-families, distinguishing them from genera. **FALSE**
- 15. The distinction between early and late transcription is functionally related to whether the viral replication or capsid proteins are being produced.

  TRUE
- 16. An asymptomatic infection implies absence of both viral replication and host immune response. **FALSE**
- 17. Viral transformation of cells represents a possible outcome distinct from cytolytic destruction. **TRUE**
- 18. Early viral proteins are primarily structural, while late proteins regulate genome replication. **FALSE**
- 19. Because SARS-CoV-2 is in the *Orthocoronavirinae* sub-family, it must share more genomic and structural features with MERS-CoV than with an unrelated RNA virus in another sub-family. **TRUE**
- 20. The presence of a virus in the body means symptomatic disease if attachment and entry occur successfully. **FALSE**

## **Good luck!**