Ministry of Higher Education Subject: virology & Scientific Research Stage: fourth Al-Muthanna University **College of Science** 11 Date: Time: 13. 06. 2017 ((Assessment of the final exam for the second semester)) 45 Academic year 2016 -2017 (Eight marks for each question) Q1/A- Define the prion and what does it cause? B- What is the difference between capsid and capsomeres? C- Why is killed influenza A and B vaccine given to elderly and immunocompromised patients, while attenuated influenzaA vaccine is available for healthy adults and children? D-Why does HDV replicate only in cell infected with HBV? Q2/A- Give the viral attachment molecule and target cell type for the following? 1-Retroviridae 2- Rhabdoviridae 3- Orthomyxoviridae 4- Herpesviridae B- Why are the anti-viral drugs used very few and what are the properties of the antiviral drugs? Q3/ A-Define the cytopathic effect and give the common types? B- Which virus does contain diploid genome? Clssify it & give the most important properties. Q4/A- Describe the pathogenesis of the following viruses? (Two only) 1- Influenza virus 2-HHV-6 & HHV-7 3-EBV B- How can you diagnosis Hepatitis-B virus in the laboratory? Q5/A- Give the general properties of herpes viruses family and what are the diseases caused by Herpes simplex virus type-1? 3 B-Explain the role of antibody (Ab) in defends of the body against the viral infection? 11.55