



KENYATTA UNIVERSITY

EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN INFECTIOUS DISEASES

HML 807: TUMOUR VIROLOGY

2ND SEMESTER 2021/2022

TIME: 3 HOURS

INSTRUCTIONS: ANSWER ANY THREE QUESTIONS (30 MARKS EACH)

1. Outline the key milestones in the history of tumour Virology (30 marks)
2.
 - a. List the classes of oncogenes (5 marks)
 - b. Differentiate between normal cells and transformed cells (10 marks)
 - c. Discuss the oncogenic mechanisms of Human Papilloma virus (HPV) and Epstein Barr Virus (EBV) (15 marks)
3.
 - a. Describe the tumour antigens that may be found on the surface of a tumour cell. (10 marks)
 - b. Outline the mechanisms through which tumour cells may evade the host immune protective mechanisms (20 marks)
4.
 - a. Describe the 3 stages of the cell cycle (6 marks)
 - b. Discuss the clinical significance of oncogens alterations in cell cycle regulators (10 marks)
 - c. Describe the growth factor signaling pathway of tumorigenesis (14 marks)