



SOUTH EASTERN KENYA UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

BCH 308: BIOCHEMISTRY OF TUMOURS

8TH DECEMBER, 2016

TIME: 4.00-6.00 P.M

INSTRUCTIONS TO CANDIDATES

- (a) Answer ALL the Questions in Section A**
- (b) Answer ANY TWO Questions in Section B**
- (c) Illustrate your answers with well labeled diagrams where appropriate**

Section A (30 Marks)

1. Describe the classifications of cancer. **(4 Marks)**
2. Briefly discuss how cancer develops. **(6 Marks)**
3. Describe the effects of nicotine metabolism in cancer formation. **(5 Marks)**
4. Describe the cancer stage grouping. **(4 Marks)**
5. Discuss briefly the fine needle aspiration method in cancer diagnosis. **(6 Marks)**
6. Describe the gene silencing technique used in oncology. **(5 Marks)**

Section B (40 Marks)

7. Discuss in detail the genetics of cancer. **(20 Marks)**

8. Describe in detail benign tumours and malignant tumours. **(20 Marks)**
9. Discuss in detail the epidemiology of cancer. **(20 Marks)**
10. a) Discuss how the natural killer cells are involved in cancer immunology. **(10 Marks)**
- b) Describe the gene enzyme prodrug therapy in cancer management. **(10 Marks)**