



# KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

FIRST SEMESTER EXAMINATION FOR THE DEGREE MASTER OF SCIENCE IN  
MEDICAL BIOCHEMISTRY

SBC 877: BIOCHEMICAL PATHOLOGY I

DATE: Friday, 24<sup>th</sup> November 2017

TIME: 2.00 p.m. - 5.00 p.m.

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**INSTRUCTIONS:**

**SECTION A: Answer All Questions (5 marks each)**

1. Chemical messengers can operate as long distance or as local intercellular signalling molecules in the body. Discuss
2. Outline the pathogenesis of hyperthyroidism
3. Compare and contrast hyperchlorhydria and achlorhydria
4. Adipose tissue is more than a fuel store. Discuss
5. Iron deficiency rarely occurs in males as compared to females and infants. Explain
6. Distinguish between direct and indirect bilirubin
7. Highlight the cardinal features associated with sprue
8. Explain the mechanism of the contraceptive pills

**SECTION B: Answer Three questions (20 marks each)**

1. The kidney plays a key role in defense of blood pressure and blood gases. Discuss
2. Outline the pathogenesis of pancreatitis under the following headings
  - a) Acute pancreatitis (7 Marks)
  - b) Chronic pancreatitis (8 Marks)
  - c) Principle of laboratory diagnosis (5 Marks)
3. Calcium is one of the most regulated Cation in the body. Highlight the role of the hormones in this process and the effect of its abnormal homeostasis
4. Elaborate on the role of adrenal, pancreatic, and placental derived endocrine hormones in the bodies of both the foetus and mother during the gestation period