



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN BIOMEDICAL SCIENCE &
TECHNOLOGY WITH INFORMATION TECHNOLOGY
(MAIN CAMPUS)**

PMT 224: HAEMATOLOGY

Date: 8th April, 2014

Time: 8.30 - 1045am

INSTRUCTIONS:

- This paper consists of two sections, A and B.
- Answer ALL questions in SECTION A and TWO questions from SECTION B.



SECTION A: Short answer questions (SAQ's).

Fill in the blanks in **ALL** the 10 questions in this section [30 marks] on the question paper.

1. In a patient with pernicious anaemia:
 - a. Major complaints (symptoms) are _____ and _____
 - b. Main clinical feature (sign) on physical examination is _____
 - c. Major laboratory feature of red blood cells on a peripheral blood slide is _____
 - d. Drug treatment should consist mainly of _____ and _____
2. Any three blood parasites, two of which are zoonotic may include:
a. _____, b. _____, c. _____
3. The mean corpuscular volume (MCV) is important for _____
4. Stages in the development of the lymphocyte:
 - a. Starts from or in the _____
 - b. Then proceeds to _____
 - c. Thereafter to _____
5. Any three of the plasma cell dyscrasias are:
a. _____ b. _____ c. _____
6. Two leukæmias of lymphoid origin are:
a. _____
b. _____
7. Three hereditary red blood cell abnormalities are as follows:
 - a. One which is most common in Kenya is _____
 - b. One which is most common in the Mediterranean region is _____
 - c. One which is most common in South East Asia is _____
8. A myeloproliferative disorder which can turn into an acute leukæmia is _____
9. In the discovery of the Rhesus blood group system, _____ and _____
Were involved, with the use of _____
10. Three main routes in the coagulation pathways are:
 - a. _____
 - b. _____ and
 - c. _____

SECTION B: ANSWER QUESTION ELEVEN (11) AND ANY OTHER THREE (3) FROM 5-7:

11. Discuss the main cause and significance of acute hæmorrhage in Kenya and how it can be controlled.
12. Elaborate on the neonatal blood manufacture.
13. Discuss a blood parasite of your choice which you have not mentioned under question two (2) in Section A.
14. How would you demonstrate evidence of presence of hyperbilirubinæmia by:
 - a. Carefully looking at a patient from whom you are just about to draw blood
 - b. Observing the blood drawn from the patient in a sterile dry tube and left to stand for some time
 - c. Reading the results from biochemistry of the patient's blood sample?
15. Elaborate on performance and significance of the erythrocyte sedimentation rate (ESR).