



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2013/2014

**SUPPLEMENTARY EXAMINATION FOR THE DEGREE OF BACHELOR OF
MEDICINE AND BACHELOR OF SURGERY (MBChB Level III)**

**HPA 300: PATHOLOGY II PAPER I - SHORT ANSWER QUESTIONS
AND ESSAY QUESTIONS**

DATE: MONDAY, 25TH AUGUST 2014

TIME: 2.00 P.M. – 4.00 P.M.

INSTRUCTIONS:

This paper is composed of two sections.

SECTION A: SHORT ANSWER QUESTIONS (SAQs).

- i. This section consists of sixteen (16) short answer questions each worth 5 marks.
 - ii. Answer each question on a separate booklet unless instructed otherwise.
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1. Outline 5 advantages of Fine needle aspiration cytology specimen over tissue biopsy specimen. (5 marks)
 2. List 5 histochemical stains and state the structures that each highlight. (5 marks)
 3. Classify bone tumors. (5 marks)
 4. Outline FIVE causes of oesophagitis. (5 marks)
 5. Outline FIVE cysts that can be found in the Central nervous system. (5 marks)
 6. Outline five (5) risk factors in the aetiology of malignant melanoma. (5 marks)
 7. Explain 5 biochemical laboratory abnormalities expected in a patient who has Cushing's disease. (5 marks)
 8. Explain the microscopic features of chronic inflammation. (5 marks)
 9. Giving examples, list the cells of the body by their proliferative capacity. (5 marks)
 10. State five mechanism of fatty change (steatosis). (5 marks)
 11. Outline the World Health Organization (WHO) criteria for acute myeloblastic leukaemia. (5 marks)

12. List the main constituents of the following blood components: (5 marks)
- Cryoprecipitate
 - Packed red cells
 - Fresh frozen plasma.
13. Define the term “transfusion transmissible infections” and list four infectious agents that are routinely screened for in donor blood samples. (5 marks)
14. Citing the commonest anatomical area of involvement, explain any five complications of syphilitic aneurysms. (5 marks)
15. Describe the gross macroscopic and light microscopic morphological features of transitional cell carcinoma of the urinary bladder. (5 marks)
16. Outline the germ cell tumours of the ovary. (5 marks)

SECTION B: MODIFIED LONG ESSAY QUESTIONS (20 MARKS)

- This section is composed of one (1) modified long essay question worth 20 marks subdivided into 4 subheadings each worth 5 marks.
- Answer the question in the answer booklet provided.

Discuss breast carcinoma under the following subheadings;

- Risk factors (5 marks)
- Clinical features (5 marks)
- Histological morphological classification (5 marks)
- Prognostic factors (5 marks)

SPOTS

- Spatula
 - Identify the specimen
 - State its use
- Hematoxylin stain
 - State the use of this stain
 - Name the stain used in conjunction with the above stain and what part of the cell it stains.
- Microtome
 - Identify the equipment
 - State its use

4. Gross – Breast carcinoma
 - a. State the diagnosis
 - b. Name any 2 routes of metastasis
5. Photo – Emphysema
 - a. State the diagnosis
 - b. Name 2 common risk factors
6. Photo – Lung ca.
 - a. State the diagnosis
 - b. Name 2 common risk factors
7. This is a resected liver specimen from a patient who presented with weight loss, jaundice and liver nodules.
 - a. State the MOST LIKELY diagnosis
 - b. List TWO risk factors
8. This is a photograph of a newborn child.
 - a. State the diagnosis
 - b. List ONE risk factor predisposing to Spina Bifida
9. Specimen: Photograph of goiter
Question: List two laboratory tests that would be appropriate in diagnosis of this condition
10. Specimen: Laboratory results demonstrating a monoclonal band
 - a. What is shown in this photograph?
 - b. List one diseases in which the appearance above may be seen
11. Specimen: Photograph showing a blistering skin disease
List two skin diseases that may present as above
12. Photomicrograph from a bone marrow aspirate.
 - a) Identify the neoplastic cells and give one reason (1 mark)
 - b) Name one neurological manifestation of the disease (1 mark)

13. Hemogram print out

- a) Identify the abnormal parameters in the print out and state your primary diagnosis using the full classification for the primary abnormality. (1 mark)
- b) Suggest two further appropriate laboratory tests that would provide the final diagnosis and the possible findings for each. (1 mark)

14. A set up Coomb's test with Coombs reagent

- a) Interpret the reaction of the shown laboratory test (1 mark)
- b) State the immunological basis of the interpretation you give (1 mark)

15. A set up of tube method grouping with various blood groups (4 tubes)

Indicate the suitable ABO Rh D blood group for each of the patients labeled A,B,C&D (2 marks)

16. Oophorectomy gross specimen;

- a) state the diagnosis (1 mark)
- b) State the cell of origin of this lesion (1 mark)

17. Liver gross specimen

- a) State the diagnosis (1 mark)
- b) List two cardiovascular presenting features/causes of this abnormality (1 mark)

18. Blood vessel gross specimen:

- a) state the abnormality shown (1 mark)
- b) State one clinical complication of the abnormality that you have listed above (1 mark)

19. Skin lesion photo

- a) Identify the lesion (1 mark)
- b) State the pathogenesis (1 mark)

20. Photo of foot

- a. Identify the lesion (1 mark)
- b. State the most likely cause (1 mark)

21. Photograph of parotid swelling

- a. State one common infection of this gland (1 mark)
- b. State one common benign neoplasm of this gland. (1 mark)