

## THE COLLEGES OF MEDICINE OF SOUTH AFRICA

Incorporated Association not for gain Reg No 1955/000003/08

Examination for the Fellowship of the College of Pathologists of South Africa - Clinical

18 February 2019

Paper 1

**Chemical Pathology** 



(3 hours)

[10]

All questions are to be answered. Each question to be answered in a separate book (or books if more than one is required for the one answer)

- 1 Discuss your approach to the diagnosis of jaundice in a 12-day-old infant. [25]
- 2 Critically discuss the measurement of natriuretic peptides and their utility in patients with heart failure. [25]
- 3 Discuss the use of the delta anion gap/delta HCO3 ratio in patients with an acid base disorder. [10]
- 4 A pregnant woman has elevated transaminases. Give your differentials, laboratory investigations and expected findings. [10]
- 5 Give an outline of factors that should be considered in the implementation of a new laboratory information system. [10]
- 6 Discuss the various types of proteins found in CSF, their clinical utility and measurement.
- 7 Discus the clinical utility of cystatin C. [10]



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19 February 2019

Paper 2

Haematology



(3 hours)

All questions are to be answered. Each question to be answered in a separate book (or books if more than one is required for the one answer)

1 Discuss the haematologic manifestations of mycobacterial diseases such as tuberculosis.

		[25]
2	Discuss your approach to eosinophilia.	[25]
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- 3 Write short notes on the Direct Oral Anticoagulants (DOACS). [10]
- 4 A student technician in your laboratory has a mucosal splash from an FBC sample. Discuss your approach to managing this. [10]
- 5 The superintendent of your local district hospital approaches you, as he is concerned about the utilization of blood products in the hospital. He asks you to give an educational talk to the clinicians on the rationale use of blood products. Overview what you would include in the talk. [10]
- 6 Discuss the diagnostic classification of multiple myeloma and related disorders. [10]
- 7 Discuss your approach to a peripheral blood smear referred for a severe macrocytic anaemia. [10]



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20 February 2019



Paper 3

Medical Microbiology

(3 hours)

All questions are to be answered. Each question to be answered in a separate book (or books if more than one is required for the one answer)

- 1 Write an essay on the importance and role of biosafety, including infection control, in pathology laboratories. [20]
- 2 Discuss the etiological agents, clinical presentation and laboratory diagnosis of the infectious mononucleosis syndrome. [20]
- Briefly discuss the factors that affect antibiotic disk susceptibility testing as well as the 3 a) quality control procedures that need to be put in place. (10)
  - What are the advantages and disadvantages of implementing EUCAST for antibiotic b) susceptibility testing? (10)

[20]

Write notes on the importance of the microscopic analysis of urinary sediment. (10)4 a)

Discuss the purpose of thick and thin smears for malaria microscopy. Include in your b) answer the relevant morphological features of both red blood cells and malarial parasites. (10)(7.5)

- List the risk factors for the development of surgical site infections. C)
- [27.5]
- 5 What are the current South African recommendations for post-exposure prophylaxis for a) rabies? (8) Write short notes on (4.5)b) The prevention. i)
  - The treatment of herpesvirus infections. ii)

[12.5]