



Cert ID(SA) - Micro

THE COLLEGES OF MEDICINE OF SOUTH AFRICA

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

Examination for the Subspeciality Certificate in Infectious Diseases of the  
College of Pathologists of South Africa

19 March 2009

I Paper Only

(3 hours)

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

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- 1 Discuss the following in relation to influenza virus infection
  - a) Write brief notes on the molecular characteristics of influenza virus in humans including the molecular epidemiology of influenza type A virus currently causing annual influenza epidemics.
  - b) Discuss the pathogenesis of the interaction between influenza virus predisposing to bacterial co-infection and the clinical evidence thereof.
  - c) Write brief notes on influenza virus subtype H5N1 and its relevance to a future influenza pandemic.
  - d) Discuss the role of neuraminidase inhibitors in the treatment and prevention of influenza virus infections.

[20]
- 2 Discuss the management of patients with suspected cholera.

[15]
- 3 Write short notes on all of the following
  - a) Epidemiology, clinical features, differential diagnosis and treatment of gnathostomiasis.
  - b) Your management of an 18-year-old traveller presenting with haemospermia, 8 months after returning from a diving holiday in Lake Malawi.
  - c) Describe the PAIR procedure for a solitary hydatid cyst of the liver.

[15]
- 4 Discuss novel approaches for the laboratory diagnosis of tuberculosis highlighting the clinical and epidemiological importance of, as well as the challenges in, the rapid deployment of these diagnostic techniques in sub-Saharan Africa.

[15]

5 Write short notes on the following

- a) Discuss the indications for and efficacy of isoniazid preventive therapy in HIV-infected adults.
- b) Discuss discontinuing fluconazole for patients on antiretroviral therapy following cryptococcal meningitis.

[15]

- 6
- a) Discuss the benefit of the outer membrane to gram-negative organisms in the context of  $\beta$ -lactam antibiotic resistance.
  - b) Discuss the clinical manifestation/s, diagnosis and management of ParvoB19 infection in AIDS. What is the mechanism of action of the treatment of choice?
  - c) Discuss the various tests that can be used to diagnose syphilis. Explain the principles of the laboratory tests. Include the value or lack thereof of the test at the various stages of the disease including central nervous system infection.
  - d) In a region of low disease prevalence, tests with high sensitivity and specificity are more likely to give false positive results. Explain why. Use an illustrative example.

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