

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

POSTGRADUATE DIPLOMA IN VENEREOLOGY EXAMINATION
NOVEMBER 2021

PAPER I

(ESSAY TYPE QUESTIONS)

Date: 08th November 2021

Time: 1.00 p.m. – 4.00 p.m.

Answer all five (05) questions

Each question to be answered in a separate book.

1. A female sex worker was diagnosed as having secondary syphilis and treated with a single dose of benzathine penicillin 2.4 MU intramuscularly 16 months ago.

Below table gives her VDRL titres according to her medical record.

Time in relation to syphilis treatment	VDRL titre
Pre-treatment	Non-reactive
Pre-treatment – repeated on the same day	R ₍₅₁₂₎
2 months after treatment	R ₍₁₂₈₎
4 months after treatment	R ₍₆₄₎
6 months after treatment	R ₍₃₂₎
9 months after treatment	R ₍₆₄₎
12 months after treatment	R ₍₁₆₎
15 months after treatment	R ₍₃₂₎
16 months after treatment	R ₍₁₂₈₎
16 months after treatment- repeat	R ₍₁₂₈₎

- 1.1 Discuss the possible reasons for the VDRL titres observed in this patient. (40 marks)
- 1.2 Discuss the use of VDRL test and its limitations in syphilis. (60 marks)

2. Surveillance of Sexually Transmitted Infections (STI) is described as the systematic collection, analysis, interpretation and dissemination of STI related data for decision making.

2.1 Describe the current STI surveillance system in Sri Lanka. (40 marks)

2.2 There are several criteria for selecting a STI for including in the surveillance. Describe these criteria taking gonorrhoea as an example. (30 marks)

2.3 Write the global definition of congenital syphilis. (30 marks)

3. Data reported from a district STD clinic regarding outreach testing programmes conducted for men having sex with men (MSM) during 2019 are given below.

A. Number of MSM registered in the HIV clinic who were detected through outreach testing programme during the year - 36

B. Out of them, the number started on ART - 30

C. Out of them, the number retained on ART after one year - 20

3.1 Describe four (4) reasons for the gap observed between A and B. (20 marks)

3.2 Describe four (4) reasons for the gap observed between B and C. (20 marks)

3.3 Describe steps to improve this situation as the medical officer in-charge of this clinic. (60 marks)

4. A 25-year-old drug user presented to the HIV clinic, Colombo with dyspnea on exertion, dry cough and fever for 2 weeks duration. He was diagnosed with HIV two years ago but defaulted before commencing ART.

On examination, he was not pale, not cyanosed, temperature - 38.8°C and respiratory rate - 32/min.

Auscultation revealed equal air entry, vesicular breathing and bilateral scattered crepitations.

Oxygen saturation at rest was 92%.

- 4.1 List three (3) differential diagnoses. (15 marks)
- 4.2 List five (5) investigations to support the above diagnoses giving reasons. (25 marks)
- 4.3 Outline the initial management of this patient. (30 marks)
- 4.4 Describe the long-term management plan of this patient. (30 marks)
5. A cross-sectional study was conducted to assess whether adherence to antiretroviral therapy (ART) is associated with treatment success of HIV.
- 5.1 Describe one (01) limitation in selecting a cross-sectional design to determine the above association. (15 marks)
- 5.2 Define the study population using eligibility criteria, giving reasons. (20 marks)
- 5.3 Discuss the precautions taken to minimise measurement errors when assessing adherence to ART and treatment success of HIV. (30 marks)
- 5.4 The proportion with treatment success was significantly lower in patients with suboptimal adherence (10 out of 65 patients) compared to patients with optimal adherence (38 out of 45) ($p < 0.01$).
Verify whether this statement is statistically valid. (35 marks)