

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES**  
**THIRD YEAR FIRST SEMESTER EXAMINATION-JULY 2013**

**MLSMV 3101 MEDICAL MYCOLOGY & VIROLOGY**

**PAPER II**

**Date: 31.07.2013**

**Time: 2 Hours**

**ANSWER ALL EIGHT QUESTIONS**

1.

1.1. List the subcutaneous mycotic infections and the etiological agents involved **(20 marks)**

1.2. Briefly describe the laboratory tests used to identify the infections you mentioned in 1.1 **(50 marks)**

1.3. Write notes on fungal culture media **(30 marks)**

2.

2.1. Name five dermatophytes and the clinical conditions caused by them **(30 marks)**

2.2. Describe the sample collection methods and the laboratory tests used to identify the conditions mentioned in 2.1 **(40 marks)**

2.3. Write notes on antifungal agents **(30 marks)**

3. Write notes on the following

3.1. Special stains used to identify fungi **(50 marks)**

3.2. Histoplasmosis **(50 marks)**

4.

4.1. Name four filamentous fungi which cause opportunistic infections **(10 marks)**

4.2. Describe the laboratory tests used to identify each of the fungi you mentioned in 4.1 **(50 marks)**

4.3. Write note on candidiasis **(40 marks)**

5.

5.1 List five childhood viral infections **(10 marks)**

5.2 Briefly explain the pathogenesis of the infections you mentioned in 5.1 **(30 marks)**

5.3 Mention the specimens that are collected and the diagnostic tests used to confirm the infections you mentioned in 5.1 **(40 marks)**

5.4 Write how the above mentioned infections are prevented by vaccines in Sri Lanka **(20 marks)**

6.

6.1 Name four viruses which cause respiratory tract infection in human other than influenza **(20 marks)**

6.2 Describe antigenic shift and antigenic drift that occurs in influenza virus **(30 marks)**

6.3 Write how you would isolate the influenza viruses in egg culture **(50 marks)**

7. Write notes on

7.1 Diagnosis of Human immunodeficiency virus by ELISA **(30 marks)**

7.2 Viral Inclusionbodies **(30 marks)**

7.3 Immune response of interferon against viruses **(40 marks)**

8.

8.1 Name two Arboviruses which cause illnesses in Sri Lanka **(10 marks)**

8.2 Briefly explain the pathogenesis of the viral infections you mentioned in 8.1 **(40 marks)**

8.3 Briefly explain the steps involved in the isolation of Arboviruses in Arthropods **( 30 marks)**

8.4 Write the preventive measures you would take to control these infections **(20 marks)**