UNIVERSITY OF JAFFNA, SRI LANKA

BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES

SECOND YEAR FIRST SEMESTER EXAMINATION-JULY 2013

MLSMM2103 MEDICAL MICROBIOLOGY

PAPER II

Date: 22.08.2013   Time: Two hours

Answer all questions

1.
    a) Name three staining methods used in the diagnosis of bacteria   (15marks)
    b) Give **two** examples of bacteria stained by each staining method you mentioned in (a)**and** their appearance   (30marks)
    c) Briefly mention the steps of **one of** the staining method you mentioned in (a)   (55marks)

2. Write short notes on
    a) C3 containment   (40marks)
    b) Sterilization methods used in clinical Microbiology laboratories   (60marks)

3.
    a) Name three parv⌐ ɔacteria**other than**_Haemophilus_(15marks)
    b) Name three genera of _Haemophilus_(15marks)
    c) Describe briefly how you would identify _Haemophilus_to species level in the laboratory   (70marks)

4. Describe briefly how to differentiate the following bacteria in a laboratory
    a) _Staphylococcus aureus_ from _Staphylococcus epidermidis_(30marks)
    b) _Streptococcus pneumoniae_ from _Streptococcus viridians_(35marks)
    c) _E coli_ from _Klebsiella_ (35marks)

5. Write short notes on
    a) Analytical profile index(API)   (40marks)
    b) Antibiotic sensitivity test (ABST)   (60marks)

6.

    a) Name five bacteria that produce the enzyme urease   (25marks)

    b) Name five biochemical tests **other than** urease test carried out in
       the Microbiology laboratory to identify bacteria   (25marks)

    c) Describe briefly how to perform urease test   (50marks)

7.

    a) Name 3 specimens that are used to isolate *Salmonella typhi*
       on culture media   (15marks)

    b) Describe the colonies of *Salmonella typhi* onXLD agar **and** on
       MacConkey agar   (30marks)

    c) Describe how you would identify *Vibrio cholerae* in the laboratory (55marks)

8.

    a) Name twomicroaerophilic bacteria   (10marks)

    b) Name five anaerobic bacteria other than*Clostridia*(15marks)

    c) Describe briefly how you would culture and identify
       Clostridium perfringens   (75marks)

....