

**B.Sc. IN MEDICAL LABORATORY TECHNOLOGY
(BMLT)**

Term-End Examination

December, 2014

BAHI-006 : MICRO-BIOLOGY

Time : 3 Hours

Maximum Marks : 70

Note : *Answer all questions. Answer Part A, B, C as per directions.*

PART - A

Answer **any three** questions. Each carries **10** marks.

1. (a) Define Disinfection and Sterilization. **2+3+5=10**
(b) Write principles of moist heat sterilization.
(c) Describe quality control procedures and standard operative procedures of sterilization.

2. Name the types of microscopes used in microbiology and give ONE USE of each one.

In a compound Light Microscope, what is meant by :

6+4=10

- (a) Magnification
- (b) Resolving power

3. (a) Describe the morphology (with diagram) and cultural characters of staphylococcus aureus.
- (b) Describe procedure of bound and free coagulase tests.
- (c) What is MRSA ? Give its clinical importance. **4+4+2=10**
4. (a) Name the organisms causing enteric fever.
- (b) Name TWO selective media to grow these organisms and describe their colonies on these media.
- (c) Describe the laboratory diagnosis of typhoid fever. **2+3+5=10**

PART - B

5. Write short notes on **any four** : **4x5=20**
- (a) Differential staining
- (b) Oral Polio Vaccine
- (c) Rapid tests for syphilis diagnosis
- (d) Pneumococci
- (e) Antibiotic susceptibility testing by Disc Diffusion method
6. Write briefly on **any two** of the following : **2x5=10**
- (a) Candidiasis
- (b) BCG vaccine
- (c) Clostridium tetani

PART - C

7. Choose the **single correct** answer. 5x1=5
- (a) *Treponema pallidum* causes :
 - (i) Gastro enteritis
 - (ii) Gonorrhoea
 - (iii) Syphilis
 - (b) Lactophenol cotton blue stain is used to study :
 - (i) Fungi
 - (ii) Parasites
 - (iii) Viruses
 - (c) Acute sore throat is caused by :
 - (i) *Brucella*
 - (ii) *Streptococcus pyogenes*
 - (iii) *Pseudomonas* spp.
 - (d) Blood agar is an :
 - (i) Enriched medium
 - (ii) Enrichment medium
 - (iii) Anaerobic medium
 - (e) Which of the following antibiotics acts on the bacterial cell wall ?
 - (i) Gentamicin
 - (ii) Penicillin
 - (iii) Ciprofloxacin

8. Fill in the blanks. 5x1=5
- (a) *Clostridium perfringens* causes _____.
 - (b) Viruses are cultivated in _____ medium.
 - (c) _____ is non motile mucoid organism.
 - (d) Bacillary dysentery is caused by _____.
 - (e) DPT stands for _____.
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