

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

Term-End Examination

June, 2015

BAHI-006 : MICRO-BIOLOGY

Time : 3 hours

Maximum Marks : 70

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

PART - A

Answer any three questions. Each carries 10 marks.

1. (a) Classify Bacteriological culture media, and give examples. 4+4+2
(b) Write briefly about Blood agar and its preparation.
(c) How is Quality Control of Blood agar checked ?
2. (a) Name any two methods of carrying out Antibiotic Susceptibility Testing. 1+3+6
(b) What is the principle of the Kirby-Bauer disc diffusion method ?
(c) Give details of how this test is carried out.
3. (a) Classify Streptococci. 1+4+4+1
(b) Describe the morphology (with diagram) and cultural characters of streptococcus pneumoniae.
(c) Explain two confirmatory tests for this organism.
(d) Name two diseases produced by this pathogen.

4. (a) Enumerate features of cholera stool. **1+4+5**
(b) Describe and distinguish characters and biochemical features of classical and ELTOR vibrios.
(c) Write laboratory diagnosis of ELTOR Vibrio.

PART - B

5. Write short notes on **any four** : **5x4=20**
(a) Selective media
(b) Deep Mycosis
(c) Gonococci
(d) Bacterial capsule
(e) Clostridium tetani
6. Write briefly on **any two** : **5x2=10**
(a) Autoclaving
(b) Cultivation of fungi in the lab
(c) Anaerobiosis

PART - C

7. Choose the single **correct** answer : **1x5=5**
(a) Pyocyanin is a pigment produced by :
(i) Staphylococcus aureus.
(ii) pseudomonas aeruginosa.
(iii) Proteus mirabilis.
(b) Beta haemolysis on Blood agar is produced by :
(i) S. epidermidis
(ii) Streptococcus pyogenes
(iii) Streptococcus pneumoniae
(c) Peritrichous flagellation is seen in :
(i) Salmonella typhi
(ii) Vibrio cholerae
(iii) Pseudomonas aeruginosa

- (d) Viruses can be cultivated in :
 - (i) Selective media
 - (ii) Anaerobic media
 - (iii) Tissue culture media
- (e) Which of the following is a dermatophyte ?
 - (i) *Candida tropicalis*
 - (ii) *Cryptococcus neoformans*
 - (iii) *Microsporum gypseum*

8. Fill in the blanks : 1x5=5

- (a) Typhoid fever is caused by _____.
 - (b) _____ is gram positive, aerobic and spore forming.
 - (c) Target haemolysis on Blood agar is produced by _____.
 - (d) Golden yellow pigment is produced by _____.
 - (e) Antibiotic solutions are sterilised by _____.
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