

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

**Term-End Examination**

**December, 2016**

00233

**BAHI-006 : MICROBIOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

---

**Note : Attempt any six questions. Question no. 7 is compulsory.**

---

1. Define the term autoclaving. Enumerate the various methods of sterilization employing moist heat. Elaborate upon the principle and working of an autoclave. How do you check its efficiency ?

*2+2+5+1=10*

2. Enumerate the various mechanisms by which the pathogenic bacteria develop resistance to antibiotics. Name four methods of carrying out antibiotic susceptibility testing in the laboratory. Discuss the principle and procedure of performing any one method.

*3+2+5=10*

3. Give six characteristics of the family Enterobacteriaceae. Write about the morphology, cultural characteristics and biochemical reactions of *Salmonella typhi*. How do you diagnose enteric fever in the laboratory ?

*2+4+4=10*

4. Enumerate the organism causing pyogenic infections. Describe the morphology, cultural character and lab diagnosis of staphylococcus organisms. 10
5. Name two gram-positive cocci and mention the diseases produced by them. Describe the morphology, toxicity and cultural characteristics of any one of them. Outline the steps in the laboratory diagnosis of the diseases produced by this coccus. 2+6+2=10
6. Write briefly on any *two* of the following : 2×5=10
- (a) Quality Assurance in Clinical Microbiology Laboratory
  - (b) Bacterial Growth Curve
  - (c) Mosquito-borne Viral Diseases
7. Write short notes on any *four* of the following : 4×5=20
- (a) Dermatophytes
  - (b) Selective Media
  - (c) Clostridium Tetani
  - (d) Gonococci
  - (e) Bacteriophage