

  
**DIRECTOR OF HEALTH, MEDICAL SERVICES AND  
MEDICAL EDUCATION  
GUJARAT STATE  
LABORATORY AND X-RAY TECHNICIANS TRAINING COURSE  
EXAMINATION- 2018**

**MICROBIOLOGY**

**DATE: 14-08-2018**

**TOTAL MARKS: 50**

**TIME: 10:00 AM TO 12:00 PM**

1. Answer any **Three**: 18
  - a. Moist heat sterilization
  - b. Collection & transport of specimen for microbiological investigations
  - c. Describe the pathogenicity and laboratory diagnosis of Mycobacterium tuberculosis
  - d. Define and classify hypersensitivity. Write in detail about Type I hypersensitivity.
  
2. Short notes on any **FOUR**: 20
  - a. Antibodies
  - b. Biomedical waste management
  - c. Laboratory diagnosis of enteric fever
  - d. Candida albicans
  - e. Laboratory diagnosis of HIV infection
  
3. Answer any **THREE**: 06
  - a. Write differences between active and passive immunity
  - b. Name the types of diarrheagenic E. coli
  - c. Oral polio vaccine
  - d. Selective media
  
4. Answer in 1-2 sentences. Any **SIX**: 06
  - a. Write two zoonotic bacterial infections.
  - b. What is Sabouraud's dextrose agar?
  - c. Define dysentery. Name one bacterium causing dysentery.
  - d. Name two parasites causing anaemia.
  - e. What is negative staining? Write its use.
  - f. Give two uses of blood agar.
  - g. Name the five types of Immunoglobulins.
  - h. Name two protozoa infecting humans.

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