

**DIRECTOR OF HEALTH, MEDICAL SERVICES AND MEDICAL
EDUCATION
GUJARAT STATE**

LABORATORY AND X-RAY TECHNICIANS TRAINING COURSE EXAMINATION- 2016

MICROBIOLOGY

**DATE: 12-08-2016
TIME: 2 HOURS**

TOTAL MARKS: 50

1. Answer any **Three**.

- U-2 (a) Define sterilization and disinfection. Write in detail about hot air oven. 18
b. What is antigen antibody reaction? Write in detail about various agglutination reactions. 17
c. Collection & transport of specimens for microbiological investigation. 27
d. Enumerate Hepatitis viruses. Write in detail about Hepatitis B virus. 27

2. Short notes on any **FOUR**:

- U-2 a. Active immunity
b. Streptococcus pyogenes
c. Laboratory diagnosis of cholera
d. Write pathogenicity and laboratory diagnosis of C. diphtheriae
e. Opportunistic fungi

3. Answer any **THREE**:

- U-2 (a) What is enriched media? Give two examples 23
b. Write uses of IgM antibody
c. Name the types of diarrhoeagenic E. coli
d. What is vaccine? Give two examples of viral vaccines.

4. Answer in 1-2 sentences. Any **SIX**:

- plague, Anthrax
a. Name two bacteria causing urinary tract infection. Pseudomonas aeruginosa, Klebsiella species, Proteus species
b. Write two zoonotic bacterial diseases.
c. Define dysentery. Name one bacteria causing dysentery.
d. Write the names of causative agents of malaria. - parasites of Plasmodium genus.
e. Dermatophytes infect which parts of the body? - skin
f. What is biomedical waste? Give one example.
g. Write the pathogenicity of Hookworm.
h. Write the routes of transmission of HIV virus.

① - Infection of the intestines resulting in severe diarrhoea with the presence of blood and mucus in the faeces → Shigella bacillus, Vibrio cholerae