

DIRECTOR OF HEALTH, MEDICAL SERVICES AND  
MEDICAL EDUCATION

GUJARAT STATE

LABORATORY AND X-RAY TECHNICIANS TRAINING COURSE  
EXAMINATION- 2014

25/7/14

MICROBIOLOGY

DATE: 16-08-2014  
TIME: 02 HOURS

TOTAL MARKS: 50

1. Answer any Three:

- (a) Define sterilization and disinfection. Write in detail about Autoclave. 17, 18
- (b) Collection & transport of specimen for microbiological investigation. 27
- c. Write method of smear preparation & staining for malarial parasite.
- d. Write in detail about HIV virus. 180

2. Short notes on any FOUR:

- a. Hypersensitivity 26
- b. Laboratory diagnosis of syphilis (133) 130-PT-pallidum
- c. E. coli 162
- (d) ELISA
- e. Hospital waste management 243

3. Answer any THREE:

- a. By which serological methods do we diagnose Hepatitis B in laboratory? 06 (75, EITW, RJA, PCR)
- (b) Selective media 24
- c. Write names of bacterial & viral vaccines
- d. Which infection can be transmitted in during laboratory work.

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

- a. What is negative stain. Give it's use.
- b. Name two bacteria causing urinary tract infections - E. coli, proteus spp. 06 enterobacter
- c. Give two uses of blood agar.
- d. Name two vaccines for Polio - OPV, IPV
- e. What is the use of KOH & Sabouraud's agar in Mycology?
- f. Draw a labeled diagram of bacterial cell
- g. Name the five types of Immunoglobulin
- h. What is Hypersensitivity?

E. faecalis, S. aureus, E. coli, proteus, enterobacter, E. coli, proteus, E. coli, proteus, E. coli, proteus

→ specimen placed in a drop in 10% KOH on slide & coverslip

→ yeasts cell & hyphae may be observed & use other cells