

VEER NARMAD SOUTH GUJARAT UNIVERSITY
EXAMINATION AUGUST 2026
BACHELOR OF HOMOEOPATHIC MEDICINE & SURGERY (CBDC) (2ND YEAR)
SUBJECT CODE: 2507000302040802
PATHOLOGY AND MICROBIOLOGY (PAPER - II)

[Time: 3 Hrs]

[Max. Marks: 100]

Instructions:

1. Fill up strictly the following details on your answer book:

- a. Name of the Examination: **BACHELOR OF HOMOEOPATHIC MEDICINE & SURGERY (CBDC) (SECOND YEAR)**
- b. Name of the Subject: **PATHOLOGY AND MICROBIOLOGY (PAPER - II)**
- c. Subject Code No: **HOM UG-PATH M**

2. Sketch neat and labelled diagram wherever necessary.

Figures to the right indicate full marks of the question. All questions are compulsory.

Question 1: Multiple Choice Questions.

10 × 1 = 10

1. Pasteurization is used for

- A. Water
- B. Milk
- C. Alcohol
- D. Sugar

2. Normal flora of the intestine mainly consists of:

- A. E. coli
- B. Staphylococcus aureus
- C. Mycobacterium tuberculosis
- D. Salmonella typhi

3. Infection means:

- A. Entry and multiplication of Organisms in the body
- B. Only entry of organisms
- C. Presence of toxins
- D. Disease production

4. Gram-positive bacteria typically appear after Gram staining.

- A. Pink
- B. Purple/Violet
- C. Colourless
- D. Yellow

5. Which of the following is not a characteristic feature of protozoans?

- A. Binary fission
- B. Contractile vacuole
- C. Cell membrane as an outer body covering
- D. Pseudopodia

6. Replication of viruses includes all the following steps except:

- A. Attachment
- B. Haemolysis
- C. Uncoating
- D. Replication

7. AFB staining is most used for the diagnosis of:

- A. Pneumonia
- B. Streptococcal infection
- C. Tuberculosis
- D. Diphtheria

8. Which of the following is an RNA virus?

- | | |
|-------------------------|----------------|
| A. Hepatitis C | C. Hepatitis B |
| B. Herpes Simplex Virus | D. Poxvirus |

9. Which culture medium is used for fungi?

- | | |
|-------------------|------------------|
| A. MacConkey Agar | C. Dextrose Agar |
| B. Blood Agar | D. Nutrient Agar |

10. Sycosis is caused by suppression of

- | | |
|---------------|-----------------|
| A. Gonorrhoea | C. Itch |
| B. Syphilis | D. Tuberculosis |

Question 2: Short Answer Questions.

08 × 05 = 40

1. Discuss culture media.
2. Explain various methods of sterilization.
3. Describe the morphology and pathogenicity of *Clostridium tetani*.
4. Explain replication of viruses.
5. Explain the pathogenesis and laboratory investigation of *Escherichia coli*.
6. Discuss pathology and laboratory diagnosis of *Mycobacterium tuberculosis*.
7. Explain pathogenesis and clinical features of Herpes Simplex virus.
8. Write a note on candidiasis.

Question 3: Long Answer Questions.

05 × 10 = 50

1. Explain the morphology, culture characteristics, and pathogenesis of *Streptococcus*.
2. Describe the life cycle, clinical features, laboratory diagnosis, and complications of *Plasmodium*.
3. Discuss the morphology, pathogenesis, and laboratory diagnosis of *Salmonella typhi*.
4. Explain the morphology, pathogenesis, and laboratory diagnosis of Hepatitis B virus infection.
5. Discuss the life cycle, pathogenesis and laboratory diagnosis of *Ancylostoma duodenale*.