

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025  
(Fifth Semester)

Branch – MICROBIOLOGY

MEDICAL MICROBIOLOGY

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 *Staphylococcus aureus* is a
  - (i) Ferments sucrose
  - (ii) Coagulase negative
  - (iii) produces phosphatase
  - (iv) Urease negative
- 2 Cholera red reaction is identified by
  - (i) Sulphuric acid
  - (ii) Nitric acid
  - (iii) Acetic acid
  - (iv) Hydrochloric acid
- 3 Influenza viruses of human are spread by
  - (i) Saliva
  - (ii) Sneezing
  - (iii) Fecal water
  - (iv) Sexual transmission
- 4 Amoebiasis is caused by
  - (i) *Plasmodium vivax*
  - (ii) *Wuchereria bancrofti*
  - (iii) *Ascaris lumbricoides*
  - (iv) *Entamoeba histolytica*
- 5 Which of the following is not a common site for collecting a throat swab specimen?
  - (i) Abdominal cavity
  - (ii) Posterior pharyngeal
  - (iii) Nasopharynx wall
  - (iv) Tonsils

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Summarize the pathogenicity of *Escherichia coli*  
OR  
b Analyse the laboratory diagnosis and treatment of *Proteus* sp.
- 7 a Outline the procedure for hair perforation technique  
OR  
b State the pathogenesis of Cryptococcosis
- 8 a Bringout the laboratory diagnosis and prophylaxis of Rabies virus  
OR  
b Explain the symptoms and pathogenesis of Measles
- 9 a Summarize the pathogenesis of *Plasmodium vivax*  
OR  
b Narrate the life cycle and laboratory diagnosis of *Wuchereria bancrofti*
- 10 a How to collect the faeces sample? Explain in detail  
OR  
b Organize the collection method of sputum sample

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Discuss the morphology, clinical features, pathogenesis and prophylaxis of *Salmonella* sp.

OR

- b Examine the clinical features, life cycle and prophylaxis of *Mycobacterium tuberculosis*

- 12 a Highlight the pathogenesis, laboratory diagnosis and treatment of *Tinea nigra*

OR

- b Distinguish the life cycle and prophylaxis of Aspergillosis

- 13 a Elucidate account on pathogenesis and treatment of Hepatitis B virus

OR

- b Analyze the symptoms, laboratory diagnosis and prophylaxis of Corona virus

- 14 a Summarize the life cycle, laboratory diagnosis and prophylaxis of *Entamoeba histolytica*

OR

- b Assume the pathogenesis, laboratory diagnosis and treatment of *Ancylostoma duodenale*

- 15 a Infer the collection method of cerebrospinal fluid sample

OR

- b Categorize the various methods of wound sample collection

Z-Z-Z

END