PAPER CODE: AHS12010 A&B

KALOJI NARAYANA RAO UNIVERSITY OF HEALTH SCIENCES
WARANGAL, TELANGANA– 506 002
B.Sc. (ALLIED HEALTH SCIENCES) SECOND YEAR DEGREE EXAMINATIONS: FEBRUARY 2026

OPERATION THEATRE TECHNOLOGY

PAPER-I

APPLIED PATHOLOGY (PART-A) & APPLIED MICROBIOLOGY (PART-B)

Time: 3 Hours **Max Marks: 80**

Note: Draw diagrams whenever necessary.
Answer **Part-A & part-B** Questions in two **respective answer booklets**. Questions in **Part "A"** should not be answered in **Part "B"** and **vice versa**. Otherwise, they will not be evaluated.

APPLIED PATHOLOGY

PART-A (40 Marks)

Write an essay on any ONE of the following: **1 X 10 = 10**

1. Describe the pathogenesis, risk factor, morphology, clinical significance, and prevention of Atherosclerosis.
2. Explain the pathophysiology of heart failure. Discuss the causes, progression, and the effects on the cardiovascular system.

Write a short note on any THREE of the following: **3 X 5 = 15**

3. Define hypertension. Explain the different types of hypertension and their pathogenesis.
4. What are aneurysms? Classify them and briefly describe their pathology and complications.
5. Discuss the causes and pathophysiology of cardiac hypertrophy. How does it progress to heart failure.
6. Explain the Ischemic heart disease (IHD) in brief. Write the pathophysiology, and complications of IHD?
7. What is pericardial effusion? Describe its causes, effects and how it is diagnosed?

Write briefly on any FIVE of the following: **5 X 3 = 15**

8. What is the basic defect in congenital heart disease and what are its effects?
9. List the morphological types of anemia and explain how it is diagnosed.
10. What is leukocytosis, and what are the causes and clinical significance?
11. Define chronic obstructive pulmonary disease (COPD). Briefly explain its types, causes, pathology, and complications.
12. What is pneumoconiosis? Describe its types and the pathology involved.
13. What is the difference between obstructive and restrictive pulmonary diseases?
14. Define end-stage renal disease (ESRD). Discuss its causes, effects, and role of dialysis and renal transplantation in its management.

APPLIED MICROBIOLOGY

PART-B (40 Marks)

Write an essay on any ONE of the following: **1 X 10 = 10**

15. What is the impact of Hospital Associated Infections (HAIs) on healthcare systems?

16. Describe preventive measures for infections in healthcare workers.

Write a short note on any THREE of the following: **3 X 5 = 15**

17. What are Methicillin Resistant Staphylococcus aureus (MKRSA) infections?

18. How is antimicrobial resistance monitored in hospitals?

19. Explain rinse technique in microbiological sampling.

20. What are Vancomycin Resistant Enterococci (VRE)?

21. How is infection control managed is Intensive Care Units (ICUs)?

Write briefly on any FIVE of the following: **5 X 3 = 15**

22. Define catheter-related bloodstream infections.

23. How can Ventilator Associated Pneumonia (VAP) be prevented?

24. Name two infections caused by Clostridium difficile.

25. Why is microbiological surveillance important?

26. Name two diseases transmissible to healthcare workers via respiratory route.

27. How does the One Atmosphere Uniform Glow Discharge Plasma (OAUGDP) methods work.

28. List two advantages of gaseous sterilization.

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