

Reg. No:

**Second Year B.Sc Perfusion Technology Degree Supplementary Examinations
July 2025**

**Applied Pathology & Applied Microbiology
(2016 Scheme)**

Time: 3 Hrs

Max. Marks:100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary
- Write Section A and Section B in separate answer books. Do not mix up questions from Section A and Section B

Q P Code: 211016

Section A – Applied Pathology

Marks: 50

Essays:

(2x10=20)

1. Define hypertension. Mention the types and briefly discuss the pathogenesis and complications of hypertension.
2. Discuss the causes, pathogenesis and diagnosis of chronic renal disease.

Short notes:

(4x5=20)

3. Causes and complications of valvular heart disease.
4. Pulmonary congestion and oedema.
5. Pneumoconiosis.
6. Polycythaemia.

Answer briefly:

(5x2=10)

7. Four causes of acute renal failure.
8. Four causes of pleural effusion.
9. Four common types of congenital heart disease.
10. Two causes of agranulocytosis.
11. Four complications of myocardial infarction.

Q P Code: 212016

Section B – Applied Microbiology

Marks: 50

Essays:

(2x10=20)

1. Define health care associated infections. Describe the different routes of transmission of occupationally acquired infections in healthcare professionals. Write suitable examples of organisms transmitted through each route and their prevention.
2. Describe briefly different methods of sterilization of patient care instruments and fluids with advantages and disadvantages for each method. Discuss the preparation of materials, packing, loading and unloading for autoclaving.

Short notes:

(4x5=20)

3. Describe spaulding classification of instruments and appropriate method of sterilization.
4. Ventilator associated pneumonia.
5. Methicillin resistant staphylococcus aureus infections.
6. Infection control measures in ICU's.

Answer briefly:

(5x2=10)

7. Microbiological sampling for surveillance of respiratory bacterial pathogens.
8. Define holding time and temperatures for hot air oven.
9. High level disinfectants.
10. In-use sterility testing.
11. Hypochlorites.
