

[LN 1018]

OCTOBER 2018

Sub. Code: 1703

**M.Sc. CRITICAL CARE TECHNOLOGY EXAMS
FIRST YEAR
PAPER III – APPLIED PATHOLOGY AND MICROBIOLOGY RELATED
TO CRITICAL CARE**

Q.P. Code: 281703

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. Define biomedical waste; what are the categories of biomedical waste? How will you segregate biomedical waste at source? Add a note on the importance of biomedical waste management.
2. What are the common types of poisoning? Discuss the care of these patients in an ICU setting. Add a note on the general methods of treatment in a case of poisoning.

II. Write notes on: **(10 x 6 = 60)**

1. Explain in detail about Universal precautions.
2. Define carrier state. Discuss its clinical significance.
3. Name the causative agent of Tuberculosis. Discuss why it is endemic in our country and list the preventive measures undertaken.
4. List the causative agents of Malaria. Add notes on its clinical features and laboratory diagnosis.
5. What is differential staining? Mention any two of differential staining methods used for methods for the demonstration of bacteria.
6. Define Anemia. What are the causes, clinical features and complications of anemia in ICU patients?
7. Define Pneumonia? Mention the types of Pneumonia and explain its pathogenesis.
8. What is Hepatic Coma? Explain the precipitating factors and its pathogenesis.
9. What is stress response? Explain the Hypothalamic Pituitary – Adrenal (HPA) system and Sympathomedullary Pathway (SAM).
10. Name the parasites which will cause amoebiasis? Explain about intestinal amoebiasis.

[LP 1019]

OCTOBER 2019

Sub. Code:1703

**M.Sc. CRITICAL CARE TECHNOLOGY EXAMS
FIRST YEAR
PAPER III – APPLIED PATHOLOGY AND MICROBIOLOGY RELATED
TO CRITICAL CARE**

Q.P. Code: 281703

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. Define sterilization and disinfection; classify various agents used for sterilization; explain about moist heat sterilization. Add a note on fumigation of ICU.
2. What is Pneumonia? Mention about types of Pneumonia and pathogenesis. Explain about hospital acquired Pneumonia in terms of its predisposing factors and clinical features. Add a note on the prevention of hospital acquired Pneumonia.

II. Write notes on: **(10 x 6 = 60)**

1. Describe about Koch's postulates.
2. What are different types of culture media? Write a note on transport media.
3. What is HIV? Mention the modes of transmission of HIV infection. Add a note on Universal precautions.
4. List the causative of fever with headache. Add note on clinical features and Laboratory diagnosis of Dengue.
5. Mention the different staining techniques used in Bacteriology. Explain about differential staining technique.
6. Define acute renal failure. What are the causes, clinical features and complications of Acute Renal Failure in ICU patients?
7. Define Neutropenia. What are the causes, clinical features and complications of Neutropenia?
8. Name the common poisoning in India. Add note on clinical features and complications of OPC Poisoning.
9. List the different methods of biomedical waste treatment. Describe in detail about any two methods of biomedical waste treatment.
10. Name the parasites which will cause Diarrhea? Explain about amoebiasis.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0321]

MARCH 2021

Sub. Code: 1703

(OCTOBER 2020 EXAM SESSION)

M.Sc. CRITICAL CARE TECHNOLOGY

FIRST YEAR (From 2017-2018 onwards)

**PAPER III – APPLIED PATHOLOGY AND MICROBIOLOGY RELATED TO
CRITICAL CARE**

Q.P. Code : 281703

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Define COPD. List out the diseases included in it? Write briefly about Bronchial Asthma.
2. Define sterilization and disinfections. Add a note on Different types of sterilization.

II. Write Short Notes on:

(10x6 = 60)

1. Write in detail about pathogenesis of myocardial infarction.
2. Mention causative organism for tuberculosis, risk factors and pathogenesis of primary tuberculosis.
3. Role of Health Care workers in preventing Health Care-Associated Infections.
4. What is Hepatic Coma? Discuss in detail about its causes and management in ICU.
5. Mention common types of poisoning? Discuss in detail about Management of Organo phosphorus poisoning.
6. Factors affecting the Wound healing and its Complications
7. Define Neutropenia? What are all the causes of Neutropenia?
8. Expand CSSD? Importance of hand washing in preventing infections and steps involved In hand washing technique?
9. Mention precautions for prevention of needle stick injury and the protocol to be followed after needle stick injury?
10. What is the causative agent for Malaria? Mention its types and laboratory diagnosis of Malaria.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 1703

**M.Sc. CRITICAL CARE TECHNOLOGY
FIRST YEAR**

(Candidates admitted from 2017-2018 onwards - Paper III)

(Candidates admitted from 2020-2021 onwards - Paper IV)

**PAPER III & IV – APPLIED PATHOLOGY AND MICROBIOLOGY RELATED
TO CRITICAL CARE
Q.P. Code : 281703**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What is Nosocomial Infections? List out the sources and spread of infections? Discuss in detail about methods of prevention of these infections?
2. Define Shock. Discuss in detail about its types and pathogenesis of septic shock.

II. Write Short Notes on:

(10x6 = 60)

1. What are the types of Hypersensitivity reactions and give two examples in each type.
2. Discuss in detail about Immunization schedule for Children.
3. What is Ghon's focus? Mention various complication of Tuberculosis?
4. What is Pneumonia? Mention about types of Pneumonia and pathogenesis?
5. Universal precautions.
6. Define Acute Renal Failure. Add a note on it's the causes, clinical features and complications in detail.
7. What is septicemia? How will you manage in ICU?
8. Define anaemia. Write about the four common causes, clinical features and its complication in detail.
9. What are Zoonotic diseases? Mention two parasitic and two bacterial causes of zoonotic diseases.
10. Define Sterilization and list the methods of sterilizations.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1022]

OCTOBER 2022

Sub. Code: 1703

M.Sc. CRITICAL CARE TECHNOLOGY

FIRST YEAR

(Candidates admitted from 2017-2018 onwards - Paper - III)

(Candidates admitted from 2020-2021 onwards - Paper - IV)

**PAPER III & IV – APPLIED PATHOLOGY AND MICROBIOLOGY RELATED
TO CRITICAL CARE**

Q.P. Code : 281703

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Define Bio Medical Waste. What are the Categories? How will you segregate at the source? Note on importance of Bio Medical Waste Disposal.
2. Define Cerebro Vascular Accident. Discuss in detail about its etiology, risk factors and management in ICU.

II. Write Short Notes on:

(10x6 = 60)

1. Define Emphysema. Mention the types of emphysema and its clinical features.
2. What are the causes for Upper Gastrointestinal bleeding? Mention its clinical features and management.
3. What is PPE? List PPE used in ICU. How will you discard the used PPE?
4. What are the causes for Portal Hypertension? Discuss in detail about its clinical presentation and its Managements in ICU.
5. What is the causative agent, source of infection and mode of transmission of intestinal amoebiasis?
6. What do you mean by Opportunistic infections? Mention four common infections and two malignancies that occurring in HIV patients.
7. Write about etiology and preventive measures of CLABSI (Catheter Related Blood Stream Infections).
8. Barrier nursing methods used in the ICU. What is isolation?
9. What is Bronchio-Alveolar Lavage? Mention briefly about its clinical implication.
10. What are the causes for Viral Hepatitis? Discuss in detail about complications HBV infections?
