

[LB 0212]

AUGUST 2012

Sub. Code: 1411

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR**

**PAPER – I PHARMACOLOGY, PATHOLOGY &
CLINICAL MICROBIOLOGY**

Q.P. Code : 801411

Time: Three hours

Maximum: 100 marks

(180 Mins) Answer ALL questions in the same order.

I. Elaborate on:

**Pages Time Marks
(Max.)(Max.)(Max.)**

- | | | | |
|---|---|----|----|
| 1. Name the diuretics with a note on their mode of action & side effects. | 7 | 20 | 10 |
| 2. Name 5 disinfectants with their mode of action advantages & disadvantages. | 7 | 20 | 10 |
| 3. Describe nephrotic syndrome & its pathophysiology. | 7 | 20 | 10 |

II. Write Notes on:

- | | | | |
|--|---|----|---|
| 1. Chronic obstructive pulmonary disease. | 4 | 10 | 5 |
| 2. Patent ductus arteriosus. | 4 | 10 | 5 |
| 3. Exercise induced asthma. | 4 | 10 | 5 |
| 4. Coronary artery disease. | 4 | 10 | 5 |
| 5. Classes of antibodies with 2 properties each. | 4 | 10 | 5 |
| 6. Morphology of bacterial cell. | 4 | 10 | 5 |
| 7. Hot air oven. | 4 | 10 | 5 |
| 8. Cold sterilization. | 4 | 10 | 5 |

III. Short Answers on:

- | | | | |
|--|---|---|---|
| 1. Name the drugs used in asthma with their mode of action & side effects. | 2 | 4 | 3 |
| 2. Write a note on drug inter actions of warfarin. | 2 | 4 | 3 |
| 3. Write a note on ionotropes. | 2 | 4 | 3 |
| 4. Classify insulin, based on their mode of action. | 2 | 4 | 3 |
| 5. Enterococcal infections. | 2 | 4 | 3 |
| 6. Drug resistance in Gram negative organisms. | 2 | 4 | 3 |
| 7. Hot air oven. | 2 | 4 | 3 |
| 8. Chronic renal failure & its causes. | 2 | 4 | 3 |
| 9. Acute tubular neorosis. | 2 | 4 | 3 |
| 10. Bacterial endocarditis. | 2 | 4 | 3 |

[LD 0212]

AUGUST 2013

Sub. Code:1411

B.Sc., CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

PAPER I – PHARMACOLOGY, PATHOLOGY AND
CLINICAL MICROBIOLOGY

Q.P. Code: 801411

Time : Three hours

Maximum : 100 Marks

Answer all questions

I. Elaborate on

3 x 10 = 30

1. Classify drugs used in angina. Write on the mechanism of action, bio availability, side effects of Nitrates.
2. Define sterilization. Classify the various methods of sterilization. Describe in detail about the chemical method of sterilization.
3. Define pneumonia. Classify pneumonia. Discuss in detail the pathology and complications of pneumonia.

II. Write notes on

8 x 5 = 40

1. Nephrotic syndrome.
2. Pathology of Myocardial infarction.
3. Rheumatic heart disease.
4. Wound infection.
5. Staphylococci.
6. Low molecular weight heparin.
7. Write briefly on bronchodilators.
8. Alpha-blockers.

III. Short answers on

10 X 3 = 30

1. Drugs causing electrolyte disturbances.
2. Write shortly on Diltiazem.
3. Mechanism of positive inotropic action of cardiac glycosides.
4. List any 3 catheter related infections.
5. Ziehl – Neelsen status.
6. List the diseases which are transmitted by blood transfusion.
7. Write shortly on Beta-blockers.
8. Complications of atheroma.
9. Tetralogy of Fallot
10. Causes of acute renal failure.

[LF 0212]

AUGUST 2014

Sub. Code:1411

B.Sc., CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

PAPER I – PHARMACOLOGY, PATHOLOGY AND
CLINICAL MICROBIOLOGY

Q.P. Code: 801411

Time : Three hours

Maximum : 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Discuss etiology, pathogenesis and clinical feature of Infective endocarditis.
2. Discuss the status of oral hypoglycemic drugs in diabetes mellitus.
3. Write in detail about cell wall of bacteria and classify bacteria based on arrangement of flagella.

II. Write notes on:

(8 x 5 = 40)

1. Dark field Microscope.
2. Sterilization by filtration.
3. Heparin and its pharmacokinetics.
4. Hyperkalemia.
5. Radioactive iodine and its therapeutic uses.
6. Drug induced lung diseases.
7. Serous pericarditis.
8. Nephritic syndrome.

III. Short answers on:

(10 X 3 = 30)

1. Atopic asthma.
2. Renal calculi.
3. Pyelonephritis.
4. Opioids.
5. Antihistamine drugs.
6. Diabetic ketoacidosis.
7. List out the bacterial agents, which cause Lower Respiratory tract infection.
8. Decontamination.
9. Precipitation reaction.
10. Opsonin.

[LG 0215]

FEBRUARY 2015

Sub. Code:1411

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

**PAPER I – PHARMACOLOGY, PATHOLOGY AND
CLINICAL MICROBIOLOGY**

Q.P. Code: 801411

Time : Three Hours

Maximum : 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Classify beta blockers. Write the pharmacological actions, therapeutic uses, adverse effects, contraindications and drug interactions of beta blockers.
2. Enumerate the methods of sterilization by dry heat. Discuss the functioning of a hot air oven.
3. Discuss pathogenesis and morphology of rheumatic heart disease.

II. Write notes on:

(8 x 5 = 40)

1. Four features and complications of tetralogy of Fallot.
2. Emphysema- Definition, types and etiology.
3. Types of Urinary tract infection and predisposing factors.
4. Clinical features of HIV infection.
5. Parenteral Iron therapy.
6. Mechanism of action of oral hypoglycemic drugs.
7. Classify drugs used in bronchial asthma.
8. Describe the measures to control infections in health care settings.

III. Short answers on:

(10 x 3 = 30)

1. List the causes of acute renal failure.
2. Name renal function test.
3. Iodine is contraindicated in children.
4. Osmotic diuretics.
5. Therapeutic uses of alpha blockers.
6. Phagocytosis.
7. Agglutination.
8. Transferable drug resistance.
9. Coagulase test.
10. What is negative staining? Give examples for negative stains.

[LH 0815]

AUGUST 2015

Sub. Code:1411

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

**PAPER I – PHARMACOLOGY, PATHOLOGY AND
CLINICAL MICROBIOLOGY**

Q.P. Code: 801411

Time : Three Hours

Maximum : 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Define and classify sterilization, describe the various methods of sterilization.
2. Define and classify pneumonia, enumerate in detail the pathophysiology, complications of pneumonia.
3. Define diabetes mellitus, explain the types, etiology and management of DM with mode of action, advantages and disadvantages.

II. Write notes on:

(8 x 5 = 40)

1. List the virus that will be transmitted by blood transfusion.
2. Gastro intestinal tract infections.
3. Explain about stains.
4. Acute renal failure.
5. Rheumatic heart diseases.
6. Pathology of myocardial infarction.
7. Beta blockers and its mode of action, uses and side effects.
8. Define and classify diuretics with mode of action, uses.

III. Short answers on:

(10 x 3 = 30)

1. Nosocomial infections.
2. Autoimmune diseases.
3. Precipitation reaction.
4. Pulmonary hypertension.
5. Pyelonephritis.
6. Bacterial endocarditis.
7. Name the drugs used in thyroid disorders.
8. Acidosis.
9. Sodium channel blocker.
10. Antihistamine drugs.

[LI 0216]

FEBRUARY 2016

Sub. Code:1411

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR**

**PAPER I – PHARMACOLOGY, PATHOLOGY AND
CLINICAL MICROBIOLOGY**

Q.P. Code: 801411

Time : Three Hours

Maximum : 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Define the morphology of bacterial cell with a neat and labeled diagram.
2. Describe renal failure and its pathology.
3. Name the NSAID's with a note on their mode of action, uses and side effects.

II. Write notes on:

(8 x 5 = 40)

1. Hepatitis.
2. Cold sterilization.
3. Biomedical waste management.
4. Non inflammatory diseases.
5. Rheumatoid arthritis.
6. List 5 opportunistic infection typically associated with HIV.
7. Antiasthmatic drug.
8. Anticoagulants.

III. Short answers on:

(10 x 3 = 30)

1. What is pasteurization?
2. Gram negative organism.
3. Organisms causing UTI.
4. Acute tubular necrosis.
5. Tetralogy of fallot.
6. Pleuritis.
7. Coronary artery diseases.
8. Calcium channel blockers.
9. Alpha blockers.
10. Hypokalemia.

[LJ 0816]

AUGUST 2016

Sub. Code:1411

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR**

**PAPER I – PHARMACOLOGY, PATHOLOGY AND
CLINICAL MICROBIOLOGY**

Q.P. Code: 801411

Time : Three Hours

Maximum : 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Discuss etiology, pathogenesis and clinical feature of Acute Renal failure.
2. Define sterilization. Classify the various methods of sterilization.
Describe in detail about the Gaseous method of sterilization.
3. Classify beta blockers. Write the pharmacological actions, therapeutic uses, adverse effects, contraindications and drug interactions of beta blockers.

II. Write notes on:

(8 x 5 = 40)

1. Drug induced lung diseases.
2. Patent ductus arteriosus.
3. Bacterial Endocarditis.
4. Mannitol.
5. Thyroxine.
6. HBV.
7. Blood stream infections.
8. Hot air oven.

III. Short answers on:

(10 x 3 = 30)

1. Sterilization.
2. GIT infections.
3. Causes of ARF.
4. Interstitial lung disease.
5. Name 3 Non inflammatory heart disease.
6. Pulmonary Embolism.
7. List any 3 Catheter related infections.
8. Antihistamine drugs.
9. Alpha blockers.
10. Acidosis.

[LK 0217]

FEBRUARY 2017

Sub. Code:1411

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR**

**PAPER I – PHARMACOLOGY, PATHOLOGY AND
CLINICAL MICROBIOLOGY**

Q.P. Code: 801411

Time : Three Hours

Maximum : 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Classify Insulin preparations with examples and write a short essay on composition and pharmacokinetics of Rapid acting Insulin.
2. Classify Antiarrhythmic drugs with examples and a short essay on Mechanism of action, therapeutic uses and adverse effects of Lidocaine.
3. Discuss Congenital Heart diseases: the developmental factors and pathogenesis of Congenital Heart Diseases.

II. Write notes on:

(8 x 5 = 40)

1. Complications of atheroma.
2. Classes of antibodies with 2 properties each.
3. Atherosclerosis.
4. Frusemide.
5. Inflammatory Lung diseases.
6. UTI.
7. Morphology of bacterial cell.
8. Viral Hepatitis.

III. Short answers on:

(10 x 3 = 30)

1. RTI.
2. Staphylococcus.
3. Name 3 causes of Chronic Renal Failure.
4. Name 3 congenital lung disorders.
5. Pulmonary hypertension.
6. Myocardial Infarction.
7. Drug resistance in Gram negative organisms.
8. Diabetic ketoacidosis.
9. Beta blockers.
10. Alkalosis.

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR
PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL
MICROBIOLOGY**

Q.P. Code: 801411

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Define and classify pneumonia. Write in detail about pathogenesis and complication of pneumonia.
2. Classify Beta blockers. Write in detail about the pharmacokinetics, therapeutics uses, side effects, contraindications and drug interactions of beta blockers.
3. Classify disinfectants and write their mode of action, advantages and disadvantages.

II. Write notes on: **(8 x 5 = 40)**

1. Acute renal failure.
2. Morphology of bacteria.
3. Biomedical waste management.
4. Drugs in Asthma.
5. Rheumatic heart disease.
6. Hyperkalemia.
7. Catheter related infection.
8. Thyroxine.

III. Short answers on: **(10 x 3 = 30)**

1. Negative staining with example.
2. Nephritic syndrome.
3. Lung function test.
4. Opioids.
5. Drug resistance in gram negative organisms.
6. Name the diseases transmitted by blood transfusion.
7. Agglutination.
8. Drugs causing electrolyte disturbances.
9. Mode of action and side effects of metformin.
10. Patent ductus arteriosus.

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

**PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL
MICROBIOLOGY**

Q.P. Code: 801411

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Write in detail about etiology, pathogenesis, lab diagnosis and complications of infective endocarditis.
2. Classify diuretics and write a short essay about thiazide diuretics with emphasis on its pharmacokinetics, action, uses and contraindications.
3. Write in detail about Nosocomial infection and its prevention.

II. Write notes on: **(8 x 5 = 40)**

1. Tetralogy of fallot.
2. Chronic obstructive pulmonary disease.
3. Pathology of myocardial infarction.
4. Hot air oven.
5. Wound infection.
6. Alpha blockers.
7. Acidosis.
8. Anticoagulants.

III. Short answers on: **(10 x 3 = 30)**

1. Vitamin K.
2. Staphylococcus.
3. Ziehl Neilson stain.
4. Mode of action of nitrates in angina.
5. Filtration technique.
6. Acute renal failure.
7. Drugs in Asthma.
8. Thyroxine.
9. Atheroma.
10. Drug induced lung disease.

[LN 0818]

AUGUST 2018

Sub. Code: 1411

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

**PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL
MICROBIOLOGY**

Q.P. Code: 801411

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about nephrotic syndrome with emphasis on its pathogenesis and complications.
2. Write about the importance of arterial blood gas analysis with a note on its disturbances and corrections.
3. Define and classify sterilization and write in detail about chemical sterilization.

II. Write notes on:

(8 x 5 = 40)

1. Emphysema.
2. Insulin.
3. Decontamination.
4. Respiratory tract infections.
5. Low molecular weight heparin.
6. Atherosclerosis.
7. Potassium sparing diuretics.
8. Patent ductus arteriosus.

III. Short answers on:

(10 x 3 = 30)

1. Antihistaminics.
2. Pericarditis.
3. Precipitation reaction.
4. Phagocytosis.
5. Calcium channel blocker.
6. Mechanism of drug resistance.
7. Bacterial endocarditis.
8. Opsonin.
9. HBV.
10. Cold sterilization.

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

**PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL
MICROBIOLOGY**

Q.P. Code: 801411

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Classify beta blockers. Write the pharmacological actions, therapeutic uses, adverse effects, contraindications of beta blockers.
2. Explain the types, etiology and management of Diabetes Mellitus.
3. Describe the etiology, pathogenesis, clinical symptoms, diagnosis and control of HIV.

II. Write notes on:

(8 x 5 = 40)

1. Insulin.
2. Alpha blockers.
3. Frusemide.
4. Inflammatory Lung diseases.
5. Acute renal failure.
6. Respiratory tract infections.
7. Staphylococcus.
8. Hand washing principles.

III. Short answers on:

(10 x 3 = 30)

1. Rheumatic tumours of heart.
2. Name the drugs used in thyroid disorders.
3. Antihistamine drugs.
4. Tetralogy of fallot.
5. Coronary artery diseases.
6. Hypokalemia.
7. Pulmonary Embolism.
8. Drug resistance in gram negative organisms.
9. Distinguish dry heat and moist heat sterilization.
10. Any three catheter related infections.

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

**PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL
MICROBIOLOGY**

Q.P. Code: 801411

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Hospital acquired infections and its prevention.
2. Define and classify Pneumonia. Describe in detail the pathology and its complications.
3. Name the NSAID's. Add a note on their mode of action, side effects and uses.

II. Write notes on:

(8 x 5 = 40)

1. Blood stream infections.
2. Drugs in Asthma.
3. Mannitol.
4. Pathology of Myocardial infarction.
5. Rheumatoid arthritis.
6. Bacterial flagella.
7. Biomedical waste management.
8. List the viruses transmitted by blood transfusion.

III. Short answers on:

(10 x 3 = 30)

1. Calcium channel blocker.
2. Drugs causing electrolyte disturbances.
3. Transferable drug resistance.
4. Pleuritis.
5. Inflammatory Lung diseases.
6. Bacterial endocarditis.
7. Atheroma.
8. Hepatitis.
9. Ziehl Neilson stain.
10. Gas sterilization methods.

[LQ 0220]

FEBRUARY 2020

Sub. Code: 1411

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR

**PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL
MICROBIOLOGY**

Q.P. Code: 801411

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Explain oral hypoglycemic drugs in diabetes mellitus.
2. Describe renal failure and its pathology.
3. Elaborate on the physical methods of sterilization.

II. Write notes on:

(8 x 5 = 40)

1. Bronchodilators.
2. Frusemide.
3. Calcium channel blockers.
4. Atherosclerosis.
5. Nephrotic syndrome.
6. Pathology of myocardial infarction.
7. General principles of disinfection.
8. Gastrointestinal tract infections.

III. Short answers on:

(10 x 3 = 30)

1. Antihistamine drugs.
2. NSAIDs.
3. Opioids.
4. Renal calculi.
5. Diabetic ketoacidosis.
6. Celecoxib.
7. Antibodies and their types.
8. Plasmids.
9. Distinguish sterilization and disinfection.
10. Alkalosis.

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

[AHS 0321]

MARCH 2021

Sub. Code: 1411

(AUGUST 2020 EXAM SESSION)

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR (Regulations 2010-2011 & 2014-2015)

PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL MICROBIOLOGY

Q.P. Code : 801411

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Pathophysiology of Heart Failure.
2. Biomedical waste Disposal.
3. Write in detail about drugs used in Hypertension.

II. Write notes on:

(8 x 5 = 40)

1. Flagella.
2. Dark field microscopy.
3. Renal stones.
4. Bronchodilators.
5. Radioactive Iodine.
6. Pleuritis.
7. Diabetic ketoacidosis.
8. Agglutination.

III. Short answers on:

(10 x 3 = 30)

1. Gram staining.
2. Thyroxine.
3. Interstitial lung disease.
4. Lowenstein Jenson medium.
5. Alkalosis.
6. Fibrinolytic drugs.
7. Drugs causing Torsades de pointes.
8. Transposition of great arteries.
9. Celecoxib.
10. Pulmonary Embolism.

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

[AHS 0222]

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

Sub. Code: 1411

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR (Regulations 2010-2011 & 2014-2015)
PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL MICROBIOLOGY
Q.P. Code : 801411**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on: (3 x 10 = 30)

1. Write in detail about the oral hypoglycemic drugs and their mechanism of actions.
2. Write in detail about nosocomial infections, its prevention and management.
3. Define nephrotic syndrome. Discuss in detail about the causes and pathogenesis of nephrotic syndrome.

II. Write notes on: (8 x 5 = 40)

1. Morphology of bacterial cell.
2. Rheumatic heart disease.
3. Wound infection.
4. Beta-blockers.
5. Hot air oven.
6. NSAIDs.
7. Bronchodilators.
8. Chronic obstructive pulmonary disease.

III. Short answers on: (10 x 3 = 30)

1. Drug interactions of warfarin.
2. Inotropes.
3. Enterococcal infections.
4. TSH.
5. Ziehl – Neelsen stain.
6. Negative staining.
7. List the opportunistic infections in HIV.
8. Decontamination.
9. Pyelonephritis.
10. Phagocytosis.

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

[AHS 0922]

SEPTEMBER 2022

Sub. Code: 1411

(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR (Regulations from 2010-2011 & 2014-2015)
PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL MICROBIOLOGY
Q.P. Code : 801411**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Pathogenesis and complications Rheumatic heart disease.
2. Write in detail about Diuretic drugs.
3. Write in detail about Hospital acquired infections and the role of health care worker in prevention of it.

II. Write notes on:

(8 x 5 = 40)

1. Exercise induced asthma.
2. Opioids.
3. Moist Heat Sterilization.
4. Antibodies.
5. Treatment of hypocalcemia.
6. Morphology of Gram Negative bacilli.
7. Pyelonephritis.
8. Angiotensin converting enzyme inhibitors.

III. Short answers on:

(10 x 3 = 30)

1. Ziehl Neelsen staining.
2. Diseases transmitted by Blood Transfusion.
3. Complications of aspirin.
4. Diltiazem.
5. Apoptosis.
6. Pulmonary hypertension.
7. Fibrinolytics.
8. Pneumothorax.
9. Protamine Sulphate.
10. Drug interactions of warfarin.

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

[AHS 0423]

APRIL 2023

Sub. Code: 1411

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR (Regulations 2010-2011, 2014-2015 & 2018-2019 onwards)
PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL MICROBIOLOGY
Q.P. Code: 801411**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on: (3 x 10 = 30)

1. Write in detail about Cardiac Glycosides.
2. Viruses causing Hepatitis.
3. Write in detail about pathophysiology of Inflammation.

II. Write notes on: (8 x 5 = 40)

1. Parenteral Iron preparations.
2. Methods of transmission of Infections.
3. Universal precaution.
4. Osmotic diuretics.
5. Candidiasis.
6. Aspirin.
7. Sodium Channel Blockers.
8. Autoclave.

III. Short answers on: (10 x 3 = 30)

1. Congenital Lung Disorder.
2. Pasteurization.
3. Anaerobic organisms.
4. Thrombolytics.
5. Bronchiectasis.
6. Vasodilators.
7. Cardiomyopathy.
8. Hypocalcemia.
9. Mention the causes of cell injury.
10. Acidosis.

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

[AHS 1123]

NOVEMBER 2023

Sub. Code: 1411

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

SECOND YEAR (Regulations 2010-2011, 2014-2015 & 2018-2019 onwards)

PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL MICROBIOLOGY

Q.P. Code: 801411

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Classify Anticoagulants. Explain the mechanism of action, uses and adverse effects of warfarin.
2. Enlist the viruses causing Respiratory Tract Infections. Describe the pathogenesis and laboratory diagnosis of Influenza.
3. Discuss etiology, pathogenesis and pathology of Congenital Heart diseases.

II. Write notes on:

(8 x 5 = 40)

1. Indications and application of Sodium bicarbonate.
2. Mechanism of action of Delayed hypersensitivity reactions.
3. Pathogenesis, laboratory diagnosis, and treatment of HCV.
4. List out the infection caused by Staphylococcus aureus and write a note on its Lab diagnosis.
5. Oral Hypoglycemic drugs.
6. Etiopathogenesis of Ischemic heart disease.
7. Etiopathogenesis of Cystic diseases of kidney
8. Pharmacologic actions of Aspirin.

III. Short answers on:

(10 x 3 = 30)

1. Any three examples of Platelet aggregation inhibitors.
2. Define Nephrolithiasis.
3. Define Emphysema.
4. Application of Flash sterilization.
5. Define Bioavailability.
6. Types of Biological safety cabinets.
7. Uses of McIntosh Filde's Jar.
8. Types of Cardiomyopathy.
9. Principle of Western Blot test.
10. Any three examples of Anti-arrhythmic drugs.

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

[AHS 0424]

APRIL 2024

Sub. Code: 1411

**B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR (Regulations 2010-2011, 2014-2015 & 2018-2019 onwards)
PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL MICROBIOLOGY
Q.P. Code: 801411**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Discuss the methods of Sterilization by moist heat. Explain in detail about functioning of an Autoclave.
2. Classify Congenital Heart diseases. Discuss in detail about Tetralogy of Fallot.
3. Classify Anticoagulants. Discuss in detail about the various types, mechanism of action, indications and contraindications and dosage of Heparin.

II. Write notes on:

(8 x 5 = 40)

1. Hepatitis B Virus Infection.
2. Infective endocarditis.
3. Predisposing factors of urinary tract infections and types of UTI.
4. Emphysema – definition, types and etiology.
5. Types of pneumonia and their morphology.
6. Alpha-blockers.
7. Parenteral iron therapy.
8. Nephritic syndrome.

III. Short answers on:

(10 x 3 = 30)

1. Myocardial infarction-pathology.
2. Gram's stain.
3. Multidrug resistant Bacteria with example.
4. Chemical methods of sterilization.
5. Causes of acute renal failure.
6. Bronchodilators.
7. Drugs used in thyroid disorders.
8. Serous pericarditis.
9. Sodium channel blockers.
10. Diagnosis of HIV.

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

[AHS 1125]

NOVEMBER 2025

Sub. Code: 1411

B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY
SECOND YEAR (Regulations 2010-2011, 2014-2015 & 2018-2019 onwards)
PAPER I – PHARMACOLOGY, PATHOLOGY AND CLINICAL MICROBIOLOGY
Q.P. Code: 801411

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Discuss the etiology, pathogenesis and clinical features of Infective endocarditis.
2. Define and classify Sterilization and discuss in detail about Gaseous method of Sterilization.
3. Classify Diuretics. Discuss in detail about Loop Diuretics.

II. Write notes on:

(8 x 5 = 40)

1. Cardiac Tamponade.
2. Chronic Renal Failure - Pathophysiology.
3. Heparin and pharmacokinetics.
4. Hyperkalemia.
5. Personal Protective Equipment.
6. Dark Field Microscope.
7. Prevention of Nosocomial infections.
8. Exercise Induced Asthma.

III. Short answers on:

(10 x 3 = 30)

1. Renal Function Tests.
2. Interpretation of Arterial Blood Gas (ABG).
3. Name three drugs given for Urinary Tract Infection (UTI).
4. Gram staining.
5. Antihistamines.
6. Types of Emphysema.
7. Components of Nephrotic Syndrome.
8. Types of Renal Stones.
9. Name three Antiarrhythmic drugs.
10. Name three infections transmitted by blood and body fluids.
