

[LJ 0816]

AUGUST 2016

Sub. Code: 1041

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
(New Syllabus 2014-2015)

SECOND YEAR

PAPER I – PATHOLOGY, MICROBIOLOGY AND PHARMACOLOGY

Q.P. Code: 841041

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Define and classify the various Route of Drug Administration.
2. Explain Cellular response, adaptation, injury and cell death.
3. Explain Sterilization and Disinfection.

II. Write notes on:

(10 x 5 = 50)

1. Explain clinical pharmacokinetics.
2. Free radicals and Antioxidants.
3. Explain clinical features of leukemia.
4. Enumerate Immunoprophylaxis with examples.
5. Explain Benign tumors.
6. Autoclave.
7. Chronic inflammation.
8. Normal microbial flora of human body.
9. Immunoglobulins.
10. Laboratory diagnosis of HIV.

III. Short answers on:

(10 x 2 = 20)

1. Define passive immunity.
2. Allergy.
3. Bacterial flagella.
4. Define Neoplasia.
5. Name any two carcinogenic agents.
6. Gram staining.
7. Signs of Inflammation.
8. Define Antidote.
9. Define Apoptosis.
10. Sedatives.

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
(New Syllabus 2014-2015 & 2015-2016)

SECOND YEAR

PAPER I – PATHOLOGY, MICROBIOLOGY AND PHARMACOLOGY

Q.P. Code: 841041

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Define Pharmacokinetics. Explain in detail about the bioavailability, and various processes involved physico-chemical interactions between a drug and an organism.
2. Define Neoplasm and Biology of Tumor Growth in Benign and Malignant Neoplasms.
3. Describe in detail about the various culture method. Explain in detail anaerobic culture method with neat diagram.

II. Write notes on:

(10 x 5 = 50)

1. Define Necrosis. Explain types of necrosis in detail.
2. Describe in briefly about the moist heat sterilization.
3. Growth and multiplication of bacteria.
4. General properties of viruses.
5. Elaborate in detail about the chemical mediators of inflammation.
6. Define Gangrene. Name the types of gangrene.
7. Route of administration of drugs.
8. Autoimmune disorders.
9. Describe various staining methods in bacteriology.
10. Arrangement of bacterial flagella.

III. Short answers on:

(10 x 2 = 20)

1. Name any two carcinogenic agents.
2. Gram negative bacteria.
3. Teratogenicity.
4. Enlist any two parasitic infections.
5. Ziehl-Neelsen staining.
6. Opportunistic infections.
7. Hypertrophy.
8. Define Antidote.
9. Name Any Two Antiseptic Agents.
10. Define Acquired immunity.

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SECOND YEAR

PAPER I – PATHOLOGY, MICROBIOLOGY AND PHARMACOLOGY

Q.P. Code: 841041

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about HIV.
2. Define Inflammation and explain Acute Inflammation in detail.
3. Define and classify - adverse drug reaction.

II. Write notes on:

(10 x 5 = 50)

1. Explain bioavailability.
2. Explain Signs of Inflammation.
3. Bacterial flagella.
4. Infections and Mode of Transmission.
5. Local Anesthetics.
6. Disposal of Infectious Wastes.
7. Disorders of immune system.
8. Drug absorption.
9. Water born diseases.
10. Pathogenesis and laboratory diagnosis of HBV.

III. Short answers on:

(10 x 2 = 20)

1. Define immunity.
2. Acid Fast Staining.
3. Hyperplasia.
4. Granuloma.
5. Louis Pasteur.
6. Disinfection.
7. Define Antibody.
8. Elimination of drug.
9. Antioxidants.
10. Name any Two Anti Coagulant Drugs.

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
(New Syllabus 2014-2015 & 2015-2016)

SECOND YEAR

PAPER I – PATHOLOGY, MICROBIOLOGY AND PHARMACOLOGY

Q.P. Code: 841041

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about HIV.
2. Define pharmacokinetics. Explain in detail about the various Routes of administration.
3. Define Inflammation and explain Acute Inflammation in detail.

II. Write notes on:

(10 x 5 = 50)

1. Autoimmune disorders.
2. Explain clinical features of Leukemia.
3. Explain Teratogenicity with examples.
4. Enumerate on Immunoprophylaxis with examples.
5. Erythroblastosis foetalis.
6. Complications of Blood Transfusion.
7. Morphology of Bacteria.
8. Explain the types of drug induced hypersensitivity with examples.
9. Drug absorption.
10. Explain in detail about the pathogenesis and laboratory diagnosis of Malarial parasites.

III. Short answers on:

(10 x 2 = 20)

1. Give two examples of aldehydes used in disinfection.
2. Drugs causing hepatotoxicity.
3. Name the bacteria causing food poisoning.
4. Define antidote. Give 2 examples.
5. Acid fast staining.
6. Enlist two infections caused by the various herpes viruses.
7. Give two examples of Idiosyncratic reactions.
8. Define Necrosis and mention types of necrosis.
9. Hyperplasia.
10. Causes for cell injury.

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SECOND YEAR

PAPER I – PATHOLOGY, MICROBIOLOGY AND PHARMACOLOGY

Q.P. Code: 841041

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Define Gangrene. Name the Types of gangrene. Write in detail about Gas Gangrene.
2. Describe in detail about the Various Culture Methods. Explain in detail Anaerobic culture method with neat diagram.
3. Define and classify Adverse drug reaction.

II. Write notes on:

(10 x 5 = 50)

1. Growth and Multiplication of bacteria.
2. Define the life cycle of Wuchereria-bancrofti.
3. Role of Health workers in interrupting Transmission of Infections.
4. Disposal of infectious wastes.
5. Morphological patterns of acute inflammation.
6. Explain the role of Immune system in disease with examples.
7. Elaborate on cellular Apoptosis.
8. Name some Carcinogenic agent and explain their cellular interactions.
9. Management of Anaphylactic shock.
10. Explain Bioavailability.

III. Short answers on:

(10 x 2 = 20)

1. Define Acquired immunity.
2. Define Capsule.
3. Plasmodium species.
4. Define calcification and name the types of calcifications.
5. Name the THREE fungi causing systemic infections.
6. Grams stain procedure with diagram.
7. Granuloma.
8. Name any TWO Anticoagulant drugs.
9. Chemoprophylaxis.
10. Sedatives.

DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
(New Syllabus 2014-2015 & 2015-2016)

SECOND YEAR

PAPER I – PATHOLOGY, MICROBIOLOGY AND PHARMACOLOGY

Q.P. Code: 841041

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Define Neoplasia? Write in detail about carcinogenic agents and their cellular interaction.
2. Define culture methods? Write in detail about various culture methods.
3. Write in detail about various route of drug administration.

II. Write notes on:

(10 x 5 = 50)

1. Nosocomial infection.
2. Chronic inflammation.
3. Humeral cellular immunity.
4. Oppertunistic parasitic infection.
5. Necrosis.
6. Lab diagnosis of HIV.
7. Type III hypersensitivity reaction.
8. Phagocytosis.
9. Drug absorption.
10. Drug metabolism.

III. Short answers on:

(10 x 2 = 20)

1. IgM.
2. Bioavailability of drugs.
3. Macrophage.
4. Active immunity.
5. Infection.
6. Atropy.
7. Joseph Lister.
8. Xero order kinetics.
9. Drug potency.
10. Antiseptics.

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

[LR 1220]

**DECEMBER 2020
(AUGUST 2020 EXAM SESSION)**

Sub. Code: 1041

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
SECOND YEAR – (Regulation from 2014 -2015, 2015-2016 & 2018-2019)
PAPER I – PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY
Q.P. Code: 841041**

Time : Three Hours

Maximum : 100 Marks

Answer All Questions.

I. Elaborate on:

(3 x 10 = 30)

1. Discuss in detail the structure, clinical features, pathogenesis and transmission of HIV.
2. Classify Culture Media and add a note on various Culture Methods.
3. Define and classify Shock. Add a note on pathophysiology of Shock.

II. Write notes on:

(10 x 5 = 50)

1. Treatment of Organo phosphorous poisoning.
2. Plasma Expanders.
3. Types of Gangrene with example.
4. Laboratory diagnosis of Tuberculosis.
5. Natural Killer Cells and its function.
6. Aerobes and Anaerobes.
7. Routes of Drug Administration.
8. What are the methods followed to dispense Biomedical Wastes.
9. Autoimmune disorders.
10. Explain Teratogenicity with appropriate examples.

III. Short answers on:

(10 x 2 = 20)

1. Define Antigen and Antibody.
2. Define Dysplasia.
3. Transmission of Hepatitis B virus.
4. Prothrombin time.
5. Commensals.
6. Stem cells.
7. Draw a Microscope and mark the parts.
8. Atropine.
9. Signs of Inflammation.
10. Name Any Two Antiseptic Agents.

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

[AHS 0122]

JANUARY 2022

Sub. Code: 1041

(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
SECOND YEAR – (Regulation from 2014 -2015, 2015-2016 & 2018-2019)
PAPER I – PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY
Q.P. Code: 841041**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Explain in detail about various types of Hyper sensitivity reactions.
2. Define Neoplasia. Difference between Benign and Malignant Neoplasm.
3. Define Pharmacokinetics. Explain in detail about the various route of Administration.

II. Write notes on:

(10 x 5 = 50)

1. Define Necrosis. Explain its types of necrosis in detail.
2. Explain in detail about Blood transfusion reactions.
3. Chemical methods of Sterilization.
4. Define Active and Passive Immunity.
5. Define Calcification and its various types.
6. Define Bioavailability. Write down TWO drugs with high first pass metabolism by Oral route.
7. Management of Anaphylactic Shock.
8. Describe the life cycle of Wuchereria bancrofti.
9. Difference between Acute and Chronic Inflammation.
10. Autoclave with the diagram.

III. Short answers on:

(10 x 2 = 20)

1. Window period in HIV infection.
2. Define Metaplasia.
3. Disinfection.
4. Define Apoptosis.
5. Uses of Ziehl-Neelsen staining.
6. What is the composition of Ringer Lactate?
7. Define Antidote. Give 2 examples.
8. Name the Vitamins which acts as a natural Antioxidant.
9. Lewis Triple Response.
10. Write any three advantages of Inhalation route.

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

[AHS 0922]

SEPTEMBER 2022

Sub. Code: 1041

(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
SECOND YEAR – (Regulations from 2014 -2015, 2015-2016 & 2018-2019)**

PAPER I – PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY

Q.P. Code: 841041

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3x10 = 30)

1. Discuss in detail the structure, clinical features, pathogenesis and transmission of Hepatitis B virus.
2. Define Neoplasia. Write in detail about Carcinogenic agents and their cellular interaction.
3. Classify Penicillins. Write the mechanism of action, uses and adverse effects of Penicillin G.

II. Write notes on:

(10 x 5 =50)

1. Cell injury.
2. Endogenous Pigments.
3. Free radicals and Antioxidants.
4. Laboratory diagnosis of Malaria.
5. Autoclave.
6. Anaphylaxis.
7. Immunoglobulins.
8. Bioavailability.
9. Granuloma.
10. Define and classify – Adverse drug reactions.

III. Short answers on:

(10 x2 =20)

1. Name two Anticoagulants.
2. Define Hyperplasia.
3. Define Hypertrophy.
4. Clotting time.
5. Name any two investigations done for Leptospirosis.
6. Bacterial Flagella.
7. Define Nosocomial infection.
8. Define Spores.
9. Give two disadvantages of Oral drug administration.
10. Name any two Tumor markers.

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

[AHS 0423]

APRIL 2023

Sub. Code: 1041

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
SECOND YEAR – (Regulations 2014 -2015, 2015-2016 & 2018-2019 onwards)
PAPER I – PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY
*Q.P. Code: 841041***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Define and Classify Adverse Drug Reactions.
2. Various Morphology and Physiology of Bacteria.
3. Cellular response, adaptation, injury and Cell Death.

II. Write notes on:

(10 x 5 =50)

1. Chemical mediators of Inflammation.
2. Enumerate Immunoprophylaxis with examples.
3. Disinfection.
4. Disorders of Immune system.
5. Explain Clinical Pharmacokinetics.
6. Main Sources of Drugs.
7. Free radicals and Anti-oxidants.
8. Bacterial Growth Curve.
9. Explain Bioavailability.
10. Difference between Benign and Malignant Tumors.

III. Short answers on:

(10 x2 =20)

1. Mention any two advantages and disadvantages of Oral Route of Drug Administration.
2. Louis Pasteur.
3. Name any two RNA Viruses.
4. Name different Hyper of Bacterial Flagella with example.
5. Granuloma.
6. Define Apoptosis.
7. Define Active and Passive Immunity.
8. Neoplasia.
9. Elimination of Drugs.
10. Idiosyncrasy.

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

[AHS 1123]

NOVEMBER 2023

Sub. Code: 1041

**DIPLOMA IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
SECOND YEAR – (Regulations 2014 -2015, 2015-2016 & 2018-2019 onwards)
PAPER I – PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY
*Q.P. Code: 841041***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Enumerate the Hallmark of Inflammation and explain Chronic Inflammation. Mention the Chemical mediators of Inflammation.
2. Define Pharmacokinetics and enumerate various Pharmacokinetic processes.
3. Explain Sterilisation and Disinfection.

II. Write notes on:

(10 x 5 =50)

1. Hyperplasia and Hypertrophy.
2. Acute Inflammation.
3. Local routes of Drug administration.
4. Immunoglobulin.
5. Define Necrosis and explain different types of Necrosis.
6. Drug absorption.
7. Normal bacterial flora of Human body.
8. Laboratory diagnosis of HIV.
9. Adverse Drug Reaction.
10. Define Neoplasia and difference between Benign and Malignant tumors.

III. Short answers on:

(10 x2 =20)

1. Define Antigen and Antibody.
2. Name any two Carcinogenic agents.
3. Ziehl- Neelsen staining.
4. Name two Waterborne diseases.
5. Name any two Cellular adaptations in growth and differentiation.
6. Elimination of drugs.
7. Give two disadvantages of Oral drug administration.
8. Antioxidants.
9. Name any two General properties of Viruses.
10. Differential Media.
