

[KX 807]

SEPTEMBER 2010

Sub. Code: 3807

**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**

**(Regulations 2008-2009 )**

**(Candidates admitted from 2008-2009 onwards)**

**SECOND YEAR**

**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code: 383807*

**Time: Three Hours**

**Maximum: 70 marks**

**Answer ALL questions**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Define Cell Injury. Explain its Etiology and Pathogenesis.
2. Discuss the pathophysiology of i) Atherosclerosis ii) Renal failure.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Give the mechanism of wound healing.
2. What is metastasis? List out the differences of benign and malignant tumours.
3. Give the Etiology of diabetes. Discuss the diabetic related complications.
4. Write a brief note on alcoholic liver disease.
5. Explain the Pathophysiology of Stroke.
6. Give the etiology and causes of Edema.

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**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION****SECOND YEAR****PAPER I – PATHOPHYSIOLOGY***Q.P. Code: 383807***Time: Three Hours****Maximum: 100 marks****Answer ALL questions in the same order.****I. Elaborate on :****Pages Time Marks  
(Max.) (Max.) (Max.)**

- |  |    |         |    |
|--|----|---------|----|
| 1. Define Cell injury. Explain the pathogenesis of cell injury.<br>Add a note on various cellular adaptations.       | 17 | 40 min. | 20 |
| 2. Explain the etiology and pathogenesis of Cancer.<br>List out the differences between benign and malignant cancer. | 17 | 40 min. | 20 |

**II. Write notes on :**

- |   |   |         |   |
|---|---|---------|---|
| 1. Explain the factors that influence the healing of wounds.          | 4 | 10 min. | 6 |
| 2. Explain briefly the pathogenesis and mode of transmission of AIDS. | 4 | 10 min. | 6 |
| 3. Discuss the pathogenesis of Parkinsonism.                          | 4 | 10 min. | 6 |
| 4. Write a brief note on Protein Calorie Malnutrition.                | 4 | 10 min. | 6 |
| 5. Complications of Diabetes Mellitus.                                | 4 | 10 min. | 6 |
| 6. Discuss the cause, mode of spread and pathogenesis of Leprosy.     | 4 | 10 min. | 6 |
| 7. Discuss the biological effects of radiation.                       | 4 | 10 min. | 6 |
| 8. Write a brief note on Pneumonia.                                   | 4 | 10 min. | 6 |
| 9. Discuss the pathogenesis of Acute Renal Failure.                   | 4 | 10 min. | 6 |
| 10. Explain the mechanism of autoimmunity.                            | 4 | 10 min. | 6 |

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**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION****SECOND YEAR****PAPER I – PATHOPHYSIOLOGY***Q.P. Code: 383807***Time: Three Hours****Maximum: 100 marks****Answer ALL questions in the same order.****I. Elaborate on :**

Pages Max.)	Time (Max.)	Marks (Max.)
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- |  |    |         |    |
|--|----|---------|----|
| 1. Explain the process of repair of wounds in the skin.<br>Mention the factors that influence the healing of wounds. | 17 | 40 min. | 20 |
| 2. Define hypersensitivity. List out the types of hypersensitivity.<br>Discuss any two types in detail.              | 17 | 40 min. | 20 |

**II. Write notes on :**

- |  |   |         |   |
|--|---|---------|---|
| 1. Classify autoimmune diseases and discuss the criteria for autoimmunity. | 4 | 10 min. | 6 |
| 2. Discuss the pathogenesis of Schizophrenia.                              | 4 | 10 min. | 6 |
| 3. Explain the process of Apoptosis.                                       | 4 | 10 min. | 6 |
| 4. Discuss the classification of Tumors.                                   | 4 | 10 min. | 6 |
| 5. Explain the pathogenesis of Hypertension.                               | 4 | 10 min. | 6 |
| 6. Write a brief note on Malaria.  | 4 | 10 min. | 6 |
| 7. Discuss the pathogenesis of type 2 Diabetes Mellitus.                   | 4 | 10 min. | 6 |
| 8. Discuss the various stages of Shock.                                    | 4 | 10 min. | 6 |
| 9. Discuss the pathogenesis of Obesity.                                    | 4 | 10 min. | 6 |
| 10. Write a note on food allergy.  | 4 | 10 min. | 6 |

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**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION****SECOND YEAR****PAPER I – PATHOPHYSIOLOGY***Q.P. Code: 383807***Time: Three Hours****Maximum: 100 marks****Answer ALL questions in the same order.****I. Elaborate on :****Pages Time Marks  
(Max.) (Max.) (Max.)**

1. Define acute inflammation.

Explain the pathogenesis of acute inflammation.

17 40 min. 20

Add a note on the chemical mediators of inflammation.

2. Discuss the pathogenesis, symptoms and associated complications of Diabetes.

17 40 min. 20

**II. Write notes on :**

1. Define Cell injury. Discuss the causes of cell injury.

4 10 min. 6

2. Discuss the pathophysiology of atherosclerosis.

4 10 min. 6

3. Write a note on T and B lymphocytes.

4 10 min. 6

4. Give the etiology of Peptic Ulcer.

Discuss the pathogenesis of Peptic Ulcer.

4 10 min. 6

5. Write a brief note on Alcoholic Liver Disease.

4 10 min. 6

6. Discuss the etiology of Cancer.

4 10 min. 6

7. Write a brief note on Urinary Tract Infections.

4 10 min. 6

8. Pathogenesis of HIV infection.

4 10 min. 6

9. Discuss the pathogenesis of Asthma.

4 10 min. 6

10. Discuss the pathogenesis of Ischemic Stroke.

4 10 min. 6

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**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**

**SECOND YEAR**

**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code: 383807*

**Time: Three Hours**

**Maximum: 100 marks**

**Answer All questions**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Discuss the pathophysiology of
  - a) Hypertension.
  - b) Atherosclerosis.
2. Write a note on the following:
  - a) Protein Calorie Malnutrition.
  - b) Pathophysiology of Diabetes Mellitus.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Write a note on Acquired Immune Deficiency Syndrome (AIDS).
2. Explain the Etiology and Pathogenesis of cancer.
3. Explain the factors that influence the healing of wounds.
4. Discuss the pathophysiology of stroke.
5. What is the metastasis? List out the differences of benign and malignant tumors.
6. Discuss the biological effects of radiation.
7. Write a brief note on vitamins.
8. Write a brief note on alcoholic liver disease.
9. Discuss the pathophysiology of Asthma and Chronic obstructive airway diseases.
10. Discuss the cause, mode of spread and pathogenesis of Tuberculosis.

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[LD 807]

OCTOBER 2013

Sub. Code: 3807

**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**

**SECOND YEAR**

**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code: 383807*

**Time: Three Hours**

**Maximum: 70 marks**

**Answer All questions**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Define Malaria. Explain in detail the life cycle of malaria.  
b) Causes, clinical manifestation and pathogenesis of typhoid.
2. a) What is Hepatitis? Discuss in detail the types of hepatitis.  
b) Pathogenesis of ulcerative colitis.

**II. Write notes on:**

**(10 x 3 = 30)**

1. Pathogenesis of peptic ulcer.
2. Mechanism of parkinsonism.
3. Types of stroke and its pathophysiology.
4. Define congestive cardiac failure and add a note on its pathophysiology.
5. Mechanism and stages of shock.
6. Differentiate benign and malignant tumor.
7. Pathophysiology of chronic renal failure.
8. Pathogenesis of Chronic obstructive airway disease.
9. Pathophysiology of Asthma.
10. Biological effects of radiations.

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[LE 807]

APRIL 2014

Sub. Code: 3807

**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**

**SECOND YEAR**

**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code: 383807*

**Time: Three Hours**

**Maximum: 70 marks**

**Answer All questions**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Write brief notes of pathogenesis of cancer and elucidate the difference between benign and malignant tumor.  
b) Explain about spread of malignant tumor and factors influencing cancer.
2. Define the term auto immunity and explain the mechanism of Autoimmunity.  
Classify autoimmune disease and explain in detail about pathophysiology of any three auto immune disease.

**II. Write notes on:**

**(10 x 3 = 30)**

1. Define hypersensitivity. List out the types of hypersensitivity.  
Discuss any two types in detail.
2. Mechanism of auto immunity and organ rejection.
3. Write a brief note on Urinary Tract Infections.
4. Explain about the process involved chronic inflammation.
5. Peptic ulcer disease.
6. Write short notes on causes and pathogenesis of cell injury.
7. Pathophysiology of Parkinson's disease.
8. Discuss brief notes on pathophysiology of tuberculosis.
9. Classify tumor and write brief notes on each.
10. Pathophysiology of amyloid deposition with disease model.

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[LF 807]

OCTOBER 2014

Sub. Code: 3807

**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**

**(2009-2010 Regulation)**

**SECOND YEAR**

**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code: 383807*

**Time: Three Hours**

**Maximum: 70 marks**

**Answer All questions**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Define and discuss about pathogenesis of cell injury.
2. Enumerate on various types of hypersensitivity reactions.
3. Detail about pathophysiology of Atherosclerosis.
4. Give note on repair of wound with factors influencing wound healing.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Mention about classification of tumors.
2. Note on pathogenesis of Starvation.
3. Write about etiology of Cirrhosis.
4. Explain about Schizophrenia.
5. Write brief note on Syphilis.
6. Pathophysiology of Hypertension.

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[LG 807]

APRIL 2015

Sub. Code: 3807

**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**

**(2009-2010 Regulation)**

**SECOND YEAR**

**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code: 383807*

**Time: Three Hours**

**Maximum: 70 marks**

**Answer All questions**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Discuss on chemical mediators of inflammation.
2. Detail about criteria and classification of autoimmune disease in man.
3. Explain the etiology and pathogenesis of cancer.
4. Write a note on pathophysiology of Acute Renal Failure.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Explain biological effects of Radiation.
2. Pathogenesis of Tuberculosis.
3. Write about etiology of Asthma.
4. Pathophysiology of Ischemic Stroke.
5. Discuss about nutritional diseases.
6. Differentiate between duodenal ulcer and gastric ulcer.

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[LH 807]

OCTOBER 2015

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION**

**(2009-2010 Regulation)**

**SECOND YEAR**

**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time: Three Hours**

**Maximum: 70 marks**

**Answer ALL questions**

**I. Elaborate on :**

**(4 x 10 = 40)**

1. Explain briefly about etiology and Pathogenesis of chronic renal failure.
2. Pathophysiology of peptic ulcer.
3. What is Hepatitis? Discuss in detail the types of hepatitis.
4. Enumerate on types of shock with their stages and mechanism.

**II. Write notes on :**

**(6 x 5 = 30)**

1. Explain briefly the pathogenesis and mode of transmission of AIDS.
2. Protein calorie malnutrition.
3. Patterns of spread of tumors.
4. Note on Amyloidosis.
5. Pathogenesis of leprosy.
6. Define congestive cardiac failure and its types.

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[LI 807]

APRIL 2016

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION**  
**(2009-2010 Regulation)**  
**SECOND YEAR**  
**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on :**

**(4 x 10 = 40)**

1. Pathophysiology of Angina pectoris.
2. Etiology, Pathogenesis and Hazards of Obesity.
3. Difference between Benign and Malignant Tumors.
4. Define Diabetes Mellitus. Discuss about its complications.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Inflammatory Bowl Diseases.
2. Urinary Tract Infections.
3. T and B cells.
4. Glycogen storage diseases.
5. Write a brief note on Typhoid.
6. Fat soluble vitamins.

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[LJ 807]

OCTOBER 2016

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION**  
**(2009-2010 Regulation)**  
**SECOND YEAR**  
**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Discuss in detail on etiology and mechanisms of Cell injury.
2. Describe about various Vitamin Deficiency diseases.
3. Explain the etiology and pathophysiology of Myocardial Infarction.
4. Enumerate on etiology and pathogenesis of Urinary Tract infection.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Write a note on Vascular and Cellular responses of inflammation.
2. Brief about the allergy due to various factors with example.
3. List the various types of Pneumonia with its etiology.
4. Write the pathophysiology of Parkinsonism.
5. Classify tumors and write general biology of Tumors.
6. Define Anaphylaxis and write the management of Anaphylaxis.

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[LK 807]

MAY 2017

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION  
(2009-2010 Regulation)  
SECOND YEAR  
PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Pathogenesis of Acute Inflammation.
2. Explain the etiology and pathophysiology of Diabetes Mellitus.
3. Chronic Obstructive Airway Diseases.
4. Discuss about Air Pollution.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Alcoholic liver diseases.
2. Pathogenesis of depression.
3. Food allergy.
4. Hypersensitivity Type II reaction.
5. Morphology of cell injury.
6. Write a note on Gonorrhoea.

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[LL 807]

OCTOBER 2017

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION**  
**(2009-2010 Regulation)**  
**SECOND YEAR**  
**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Define autoimmunity and add a detailed note on immunological tolerance.
2. Write in detail on the mediators of inflammation.
3. Write briefly on the etiopathogenesis of Asthma.
4. Explain on the pathogenesis and morphology of cell injury.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Microbial carcinogenesis.
2. 'T' cell mediated hypersensitivity.
3. Effects of ionizing radiation.
4. Pathogenesis of Schizophrenia.
5. Explain the pathophysiology of angina.
6. Life cycle of malaria.

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

[LM 807]

MAY 2018

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION  
(2009-2010 Regulation)  
SECOND YEAR  
PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Explain the etiology and pathogenesis of Cancer.
2. Discuss the causes and pathophysiology of Congestive Cardiac failure.
3. Write a note on Acquired Immuno Deficiency Syndrome (AIDS).
4. Elaborate on the biological effects of Radiation.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Write about chemical cell injury.
2. Discuss the pathophysiology of Hypertension.
3. Give note on Protein Calorie Malnutrition.
4. Write a note on T and B Lymphocytes.
5. Describe the pathogenesis of Parkinsonism.
6. Write about Urinary Tract Infections.

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

[LN 807]

OCTOBER 2018

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION**  
**(2009-2010 Regulation)**  
**SECOND YEAR**  
**PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Write a note on etiology and pathophysiology of Acute Renal Failure.
2. Discuss about types of hypersensitivity in detail.
3. Explain the risk factors involved and the pathophysiology of atherosclerosis.
4. Elaborate on types of shock with their stages and mechanism.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Give note on pathogenesis of Starvation.
2. Write briefly about repair of wounds in the skin.
3. Define and explain the mechanism of auto immunity.
4. Classify tumors with their general biology.
5. What is Hepatitis? Discuss in detail the different types of hepatitis.
6. Discuss the cause, mode of spread and pathogenesis of Tuberculosis.

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

[LO 807]

MAY 2019

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION  
(2009-2010 Regulation)  
SECOND YEAR  
PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Discuss the types, causes and pathogenesis of hypertension.
2. Write a detailed account on the patterns and mechanism of spread of tumours.
3. Discuss in detail the healing of wounds on the skin.
4. Give a detailed account of Malaria.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Give the etiology of cell injury.
2. Write about the types and characteristic features of chronic inflammation.
3. Give the mechanism of rejection of allograft.
4. Write a note on Typhoid.
5. Give the causes and types of Asthma.
6. What is Angina Pectoris? Explain the different types of angina pectoris.

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

[LP 807]

OCTOBER 2019

Sub. Code: 3807

**PHARM. D DEGREE EXAMINATION  
(2009-2010 Regulation)  
SECOND YEAR  
PAPER I – PATHOPHYSIOLOGY**

*Q.P. Code : 383807*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Write a note on cellular adaptations and Glycogen storage diseases.
2. Discuss the causative organism, mode of transmission and pathophysiology of Tuberculosis.
3. Discuss the etiology, types, pathogenesis and complications of peptic ulcer.
4. Write a note on general biology of tumours.

**II. Write notes on:**

**(6 x 5 = 30)**

1. What are MHC proteins? Give their significance.
2. Give the factors influencing wound healing.
3. Write a note on Schizophrenia.
4. Give an account of the patterns of spread of tumours.
5. Write a note on Air pollution.
6. Give the pathogenesis of starvation.

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

**[PHARMD 0321]**

**MARCH 2021**

**Sub. Code: 3807**

**(OCTOBER 2020 EXAM SESSION)  
PHARM. 'D' DEGREE EXAMINATION  
SECOND YEAR (2009-2010 Regulation)  
PAPER I – PATHOPHYSIOLOGY  
Q.P. Code : 383807**

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Write in detail about types, risk factors and pathogenesis of Stroke.
2. Elaborate on the effects of protein calorie malnutrition and starvation.
3. Explain in detail about etiology and pathogenesis of Cancer.
4. Discuss in detail about effects of free radicals and loss of calcium homeostasis in cell injury.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Enumerate the classes of Auto immune diseases in man.
2. Write about the types and process of Wound healing.
3. Classify Hypersensitivity with suitable examples.
4. Write a note on etiology and pathogenesis of Dysentery.
5. Enumerate on protective measure to prevent biological effects of radiation.
6. Write the etiology and pathophysiology of Chronic Obstructive Airway Diseases.

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

**[PHARMD 0122]**

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

**Sub. Code: 3807**

**PHARM. 'D' DEGREE EXAMINATION  
SECOND YEAR (2009-2010 Regulation)  
PAPER I – PATHOPHYSIOLOGY  
*Q.P. Code : 383807***

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Explain about etiology, pathogenesis and complications of type II Diabetes Mellitus.
2. Elaborate on causes, types and complications of Urinary Tract Infection.
3. Discuss the etiology and pathogenesis of Cancer.
4. Classify various inflammatory mediators with their functions.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Enumerate on causes and stages of Chronic Renal Failure.
2. Write about cellular adaptive changes during cell injury.
3. Classify the types of Shock.
4. Write in brief about allergy due to food and drugs.
5. Write a note on etiology and complications of Obesity.
6. Enumerate the pathogenesis and risk factors associated with Atherosclerosis.

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

**[PHARMD 0522]**

**MAY 2022  
(APRIL 2022 EXAM SESSION)**

**Sub. Code: 3807**

**PHARM. 'D' DEGREE EXAMINATION  
SECOND YEAR (2009-2010 Regulation)  
PAPER I – PATHOPHYSIOLOGY  
*Q.P. Code : 383807***

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Discuss in detail on Inflammatory responses and signs of Inflammation.
2. Elaborate on etiology and pathogenesis of HIV infection.
3. Discuss the etiology, types, pathogenesis and complications of Myocardial Infarction.
4. Classify Shock and write about its mechanisms and management.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Enumerate on stages and pathogenesis of alcoholic Liver diseases.
2. Classify Pneumonia and write its etiology.
3. Write a note on sources of radiation that affects human.
4. Classify Tumors with suitable examples.
5. Briefly discuss on the effects of sulfur dioxide and carbon monoxide exposure.
6. Enumerate the functions of T and B cells.

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