

[KV 801]

SEPTEMBER 2009

Sub. Code: 3801

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008-2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 70 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Give an account of the composition and functions of blood.
Mention the disorders of blood components.
2. Describe the structure, secretions and functions of anterior pituitary gland.
Add a note on hyperthyroidism.

II. Write notes on:

(6 x 5 = 30)

1. Spinal Cord.
2. Cardiac cycle.
3. Liver.
4. Muscle in exercise.
5. Contraceptive devices.
6. Drugs and athletics.

[KW 801]

MARCH 2010

Sub. Code: 3801

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008-2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 70 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. With a neat and labelled diagram, describe the structure and functions of heart.
Write briefly on pulmonary circulation.
2. With a neat and labelled diagram, describe the structure and functions of the kidney.
Explain how urine is formed.

II. Write notes on:

(6 x 5 = 30)

1. Cranial nerves.
2. Epithelial tissue.
3. Types of movements of joints.
4. Ovulation.
5. Regulation of respiration.
6. Digestion and absorption of proteins.

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008-2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 70 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Define a Cardiac cycle.
Describe the various events taking place in a cardiac cycle with time sequences.
2. a) List out the secretions from pituitary gland with its Physiological functions.
b) Explain the Structure and Physiological functions of Thyroid gland.
c) Add a note on the disorders of Thyroid gland.

II. Write notes on:

(6 x 5 = 30)

1. Classify Joints with the possible movements of joints from its location.
2. Enumerate the functions of blood.
3. Define the following:
 - i) Hypertension .
 - ii) Myocardial infarction.
 - iii) Hypoxia.
 - iv) Resuscitation.
4. Differentiate the terms Digestion and Absorption.
5. Describe the contraceptive devices for both Male and Female based on temporary method.
6. Write a brief note on Drug docking.

[KY 801]

MAY 2011

Sub. Code: 3801

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008-2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 70 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. a) Discuss about pancreatic islets and its hormones functions.
Explain the diabetes mellitus and its complications.
- b) Explain the structure of skin with labelled diagram.
Write about the functions of skin.
2. a) Explain the menstrual cycle. **(7)**
- b) Draw the neat diagram of heart and label it. **(2)**
Explain the structure of heart. **(6)**
Discuss about the blood flow process in the heart. **(5)**

II. Write notes on:

(6 x 5 = 30)

1. White blood cells and its function.
2. Define following terms:
 - a) Megaloblastic anaemia.
 - b) Hypertension.
 - c) Gastritis.
 - d) Osteoarthritis.
3. Salivary glands and its functions.
4. Clotting mechanism.
5. Adrenal medulla.
6. Disorders of pituitary glands.

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**FIRST YEAR****PAPER I – HUMAN ANATOMY AND PHYSIOLOGY***Q.P. Code: 383801***Time: Three Hours****Maximum: 100 marks****Answer ALL questions in the same order.****I. Elaborate on :****Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|---------|----|
| 1. Describe the anatomy of lungs and physiology of respiration with diagram. | 17 | 40 min. | 20 |
| 2. What are the endocrine glands of our body and give their functions? | 17 | 40 min. | 20 |

II. Write notes on :

- | | | | |
|--|---|---------|---|
| 1. Enumerate the functions of blood. | 4 | 10 min. | 6 |
| 2. Write the vital centres in brain. | 4 | 10 min. | 6 |
| 3. Explain in brief structure and functions of skin. | 4 | 10 min. | 6 |
| 4. Write the various types of clotting factors. | 4 | 10 min. | 6 |
| 5. Write a note on
a) Hypothalamus
b) Cranial nerves. | 4 | 10 min. | 6 |
| 6. Describe briefly about the mechanism of micturition. | 4 | 10 min. | 6 |
| 7. Write a note on electrocardiogram. | 4 | 10 min. | 6 |
| 8. Write about muscle in exercise. | 4 | 10 min. | 6 |
| 9. Discuss about any three disorders involved in gastrointestinal tract. | 4 | 10 min. | 6 |
| 10. Write three phases involved in gastric juice. | 4 | 10 min. | 6 |

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**FIRST YEAR****PAPER I – HUMAN ANATOMY AND PHYSIOLOGY***Q.P. Code: 383801***Time: Three Hours****Maximum: 100 marks****Answer ALL questions in the same order.****I. Elaborate on :****Pages Time Marks
(Max.) (Max.) (Max.)**

1. Draw a neat labeled diagram of different parts of nephron.
Explain the mechanism and hormones regulating urine formation. 17 40 min. 20
2. Discuss the anatomy of pituitary gland and name the hormones secreted by pituitary gland Describe briefly the physiological functions and abnormalities of growth hormone. 17 40 min. 20

II. Write notes on :

1. Briefly explain the Rennin Angiotensin system and its importance in blood pressure maintenance. 4 10 min. 6
2. Write the Non auditory functions of ear and name the nerves of audition. 4 10 min. 6
3. Explain the factors controlling erthropoiesis. 4 10 min. 6
4. Define the following terms: a) Atherosclerosis b) Oliguria c) Jaundice d) Apnoea e) Leucocytosis f) Ataxia. 4 10 min. 6
5. Discuss the transport of oxygen in blood.
What are the factors influencing oxygen dissociation curve? 4 10 min. 6
6. List out the cranial nerves and its functions. 4 10 min. 6
7. Name the clotting factors. Add a note on clotting and bleeding disorders. 4 10 min. 6
8. Describe the physiological changes during severe exercise. 4 10 min. 6
9. Anatomy and functions of liver. 4 10 min. 6
10. Write a note contraceptive device. 4 10 min. 6

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**FIRST YEAR****PAPER I – HUMAN ANATOMY AND PHYSIOLOGY***Q.P. Code: 383801***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. Describe the mechanism of coagulation of blood with clotting factors involved. How do intrinsic and extrinsic pathways differ? Add note on erythropoietin. | 17 | 40 min. | 20 |
| 2. Explain in detail about the mechanism and regulation of respiration. Explain the following terms:
(i) End Diastolic Volume (EDV).
(ii) Vital Capacity (VC).
(iii) Glomerular Filtration Rate. | 17 | 40 min. | 20 |

II. Write notes on :

- | | | | |
|--|---|---------|---|
| 1. Name the elementary tissues of the human body and give their silent features. | 4 | 10 min. | 6 |
| 2. Define Micturition. Explain the mechanism of Micturition. | 4 | 10 min. | 6 |
| 3. What are the various refractive errors of eye? How it can be corrected? | 4 | 10 min. | 6 |
| 4. Explain with a diagram the knee joint. | 4 | 10 min. | 6 |
| 5. Explain various phases of ECG. | 4 | 10 min. | 6 |
| 6. Name the hormones of adrenal gland. Add note on Addison's disease. | 4 | 10 min. | 6 |
| 7. Discuss the digestion and absorption of proteins. | 4 | 10 min. | 6 |
| 8. Explain Oogenesis. | 4 | 10 min. | 6 |
| 9. Write the physiological functions of sympathetic system. | 4 | 10 min. | 6 |
| 10. Draw a neat labeled diagram of human brain structure. | 4 | 10 min. | 6 |

[LC 801]

APRIL 2013

Sub. Code: 3801

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. With a labelled diagram explain the parts of nephron.
Explain the mechanism of urine formation.
2. Explain the stages of erythropoiesis.
Explain the life cycle of RBCs.

II. Write notes on:

(10 x 6 = 60)

1. Draw a labeled diagram of innominate bone and describe it.
2. Spleen and its functions.
3. Pulmonary circulation.
4. Lung volumes.
5. Structure and functions of pancreas.
6. Reflex arc.
7. Functions of glucocorticoids.
8. Genetic basis of sex determination.
9. Physiology of vision.
10. Physiology of muscle contraction.

[LD 801]

OCTOBER 2013

Sub. Code: 3801

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 70 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. With suitable diagram explain the anatomy of human brain.
Name different heart sounds and its disorders.
2. Classify hormones with examples.
Explain the physiological functions, regulations and deficiency of GH.

II. Write notes on:

(10 x 3 = 30)

1. Draw the structure white blood cells and give the functions.
2. Write the physiological changes focusing respiration, heart rate during exercise.
3. Classify tissues with suitable examples.
Draw the histological structure of squamous epithelium.
4. With the diagram explain the micturition response.
5. Explain the mechanism of vision.
6. Explain the anatomy of sympathetic system.
7. How gases are transported in the body?
8. What is ECG? With diagram explain the events of ECG.
9. Write the function and disorders of spleen.
10. Explain the properties of skeletal muscle.

[LE 801]

APRIL 2014

Sub. Code: 3801

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 70 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Define Blood pressure. Write a note on blood pressure.
How blood pressure is controlled and regulated?
2. Describe the features of thyroid gland.
Explain the biosynthesis and functions of thyroid hormones.

II. Write notes on:

(10 x 3 = 30)

1. Structure of neuron.
2. Write a note on white blood cells and their functions.
3. Describe the anatomy of lungs.
4. Cerebrospinal fluid.
5. Genetic basis of sex determination.
6. Spleen and its functions.
7. Histology of retina.
8. Structure and functions of cerebellum.
9. Structure of kidney.
10. Write a note on various salivary glands. Give the composition and functions of saliva.

[LF 801]

OCTOBER 2014

Sub. Code: 3801

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(2009-2010 Regulation)

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 70 marks

Answer All questions

I. Elaborate on:

(4 x 10 = 40)

1. Draw a neat diagram of brain and discuss about the functional areas of cerebrum.
2. Composition and functions of blood.
3. With labeled diagram describe shortly about the respiratory system and its parts.
4. Explain about the female reproductive system with diagram.

II. Write notes on:

(6 x 5 = 30)

1. Synovial joints
2. Define the following:
 - a) Acromegaly.
 - b) Grave's disease.
 - c) Addison syndrome.
 - d) Cushing syndrome.
 - e) Diabetes Insipidus.
3. Cranial nerves and its functions
4. Juxtaglomerular apparatus.
5. Menstruation cycle.
6. Physiology of hearing.

[LG 801]

APRIL 2015

Sub. Code: 3801

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(2009-2010 Regulation)

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code: 383801

Time: Three Hours

Maximum: 70 marks

Answer All questions

I. Elaborate on:

(4 x 10 = 40)

1. Draw a neat diagram of heart and discuss about circulation of blood.
2. Discuss about thyroid gland and its hormones.
3. Explain the anatomy and physiology of spinal cord.
4. Explain the secretions and functions of accessory gland of GIT.

II. Write notes on:

(6 x 5 = 30)

1. Glucocorticosteroids.
2. Mechanism of respiration.
3. Cerebrospinal fluid.
4. Oogenesis.
5. Physiological properties of skeletal muscle.
6. Micturition.

[LH 801]

OCTOBER 2015

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION

(2009-2010 Regulation)

FIRST YEAR

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time: Three Hours

Maximum: 70 marks

Answer ALL questions

I. Elaborate on :

(4 x 10 = 40)

1. Explain the anatomy of eye with a neat labeled diagram. Explain about image formation.
2. Describe the anatomy of upper respiratory track and mechanism of respiration.
3. Explain the formation of urine. Justify the role of hormones in micturition.
4. Explain the various processes in spermatogenesis; write notes on the structure of a matured sperm.

II. Write notes on :

(6 x 5 = 30)

1. Explain the structure and function of skin.
2. Write notes on synovial joint.
3. Explain the endocrine and exocrine role of pancreas.
4. Write notes on pulmonary circulation.
5. Write notes on ECG.
6. Write notes on the different salivary glands.

[LI 801]

APRIL 2016

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on :

(4 x 10 = 40)

1. Describe in detail the structure and functions of the Kidney. Add a note on mechanism of Micturition.
2. Explain the various events takes place in Cardiac cycle with time sequences.
3. List out the Hormones secreted by Pituitary glands. Discuss in detail the physiological functions and abnormalities of Growth Hormone.
4. Describe the anatomy of Female Reproductive system with neat labelled diagram.

II. Write notes on:

(6 x 5 = 30)

1. Enumerate the functions of blood.
2. Write the vital centers in brain.
3. Write a note on types of movements of joints.
4. Discuss the salivary glands and its functions.
5. Explain the various types of clotting factors.
6. Write a note on muscles in exercise.

[LJ 801]

OCTOBER 2016

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on:

(4 x 10 = 40)

1. Discuss the mechanism of coagulation of blood with clotting factors involved. Add a note on Intrinsic and Extrinsic pathways.
2. With a neat labeled sketch, explain the anatomy of human Brain. Write the functions of Cerebrospinal fluid.
3. Discuss in detail the structure and physiological functions of Thyroid gland.
4. Explain in detail the various phases involved in the regulation of Gastric secretion. Add a note on digestion and absorption of Proteins.

II. Write notes on:

(6 x 5 = 30)

1. Write a note on the conduction system of Heart.
2. Write a note on Spermatogenesis.
3. Explain the functions of Parasympathetic system.
4. Name the bones of Skull. Write the sutures of Skull.
5. Explain the physiology of hearing.
6. Write a note on drugs and athletics.

[LK 801]

MAY 2017

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on:

(4 x 10 = 40)

1. Give an account of the composition and functions of blood. Mention the disorders of blood components.
2. Explain the anatomy and physiology of spinal cord.
3. Write in detail the regulation of Respiration.
4. Explain the anatomy of eye with a neat labelled diagram. Explain the physiology of vision.

II. Write notes on:

(6 x 5 = 30)

1. Micturition.
2. Structure of kidney.
3. Explain the knee joint with a diagram.
4. Structure and functions of pancreas.
5. Write a note on various salivary glands. Give the composition and functions of saliva.
6. Classify tissues with suitable examples. Draw the histological structure of squamous epithelium.

[LL 801]

OCTOBER 2017

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on:

(4 x 10 = 40)

1. What are the Endocrine glands of our body and give their functions?
2. Describe the anatomy of Lungs and physiology of respiration with diagram.
3. Draw a neat diagram of heart and explain the physiology of the heart.
4. Explain the stages of Erythropoiesis. Explain the life cycle of RBCs.

II. Write notes on:

(6 x 5 = 30)

1. Reflex arc.
2. Synovial joint.
3. Structure and function of skin.
4. Cerebrospinal fluid.
5. Phases of gastric juice secretion.
6. Explain Oogenesis.

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

[LM 801]

MAY 2018

Sub. Code: 3801

**PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY**

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on:

(4 x 10 = 40)

1. Explain in detail the negative feedback mechanism of Renin-Angiotensin-Aldosterone system.
2. Explain the structure of Renal glands with neat labeled diagram.
3. Enumerate the clotting factors and explain the mechanism of Blood coagulation.
4. Explain in detail the structure, hormones and functions of anterior pituitary gland.

II. Write notes on:

(6 x 5 = 30)

1. Contraceptive devices.
2. Explain the simple reflex arc.
3. Write the functions of liver.
4. Write about the different types of nervous tissue.
5. Micturition.
6. Explain the genetic basis of sex determination.

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

[LN 801]

AUGUST 2018

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on:

(4 x 10 = 40)

1. Draw a neat labeled diagram of Brain and explain the functions.
2. Explain the structure of Ear with a neat labeled diagram.
3. Classify Joints and explain the different types of joints with suitable examples.
4. Explain in detail the structure, hormones and functions of Adrenal gland.

II. Write notes on:

(6 x 5 = 30)

1. Write a note on the functional areas of cerebrum.
2. Define congestive cardiac failure, asphyxia, anaemia, peptic ulcer and osteoarthritis.
3. Write the composition and functions of digestive juice.
4. Write a note on the conduction system of heart.
5. Haemopoiesis.
6. Write a note on clearance tests and its significance.

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

[LN 801]

OCTOBER 2018

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on:

(4 x 10 = 40)

1. Explain the cranial nerves and its function.
2. Explain the structure of ear with a neat labeled diagram.
3. Classify joints and explain the different types of joints with suitable examples.
4. Explain in detail the structure, hormones and functions of adrenal gland.

II. Write notes on:

(6 x 5 = 30)

1. Write a note on the functional areas of cerebrum.
2. Define congestive cardiac failure, asphyxia, and Myocardial Infarction.
3. Name the types of salivary glands, its location and functions.
4. Write a note on the conduction system of heart.
5. Haemopoiesis.
6. Write a note on sympathetic nervous system.

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

[LO 801]

MAY 2019

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on:

(4 x 10 = 40)

1. Discuss in detail the composition and functions of blood. Add a note on disorders of platelets.
2. Define cardiac cycle. Discuss the various events taking place in a cardiac cycle with time sequences.
3. With a neat labeled sketch explain the parts of Nephron. Explain the mechanism of urine formation.
4. Explain about the female reproductive system with diagram. Add a note on spermatogenesis.

II. Write notes on:

(6 x 5 = 30)

1. Write a note on electrocardiogram.
2. Write a note on mechanism of respiration.
3. Explain the anatomy and physiology of skin.
4. Discuss the digestion and absorption of proteins.
5. Explain the properties of skeletal muscle.
6. Define the following:
 - a) Resuscitation
 - b) Megaloblastic anaemia
 - c) Lung volumes
 - d) Cushing syndrome
 - e) Muscle.

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

[LP 801]

OCTOBER 2019

Sub. Code: 3801

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q.P. Code : 383801

Time : Three hours

Maximum : 70 Marks

I. Elaborate on:

(4 x 10 = 40)

1. Discuss the various phases involved in the regulation of Gastric acid secretion.
2. Describe in detail the anatomy of eye with a neat labeled diagram. Explain about image formation.
3. Explain the stages of Erythropoiesis. Add a note on life cycle of erythrocytes.
4. Explain in detail the various phases in menstrual cycle. Write about sex determination.

II. Write notes on:

(6 x 5 = 30)

1. Explain briefly the vital centres of brain.
2. Write a note on contraceptive devices.
3. Explain briefly about drugs and athletics.
4. Write the functions of white blood cells.
5. Write notes on pulmonary circulation.
6. Explain in detail about cerebrospinal fluid.
