February 2011

[KY 759] **Sub. Code: 4253**

FIRST B.PHARM. DEGREE EXAMINATION

(Regulations 2009)

Candidates Admitted from 2009-10 onwards

Paper III – ANATOMY PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time : Three hours **Maximum : 80 marks**

I. Essay Questions : Answer any **TWO** questions. **(2 x 20 = 40)**

1. Explain the following with neat diagram a) Neuron b) Nephron.
2. Anatomy and Physiology of Heart.
3. Explain the functions of blood and lymphatic system.

II. Write Short Notes : Answer any **SIX** questions. **(6 x 5 = 30)**

1. Types of synovial joint.
2. Hepatic circulation.
3. Lung volumes.
4. Composition of pancreatic juice and its functions.
5. Scapula.
6. Uterus and its functions.
7. Posterior pituitary gland.
8. Causative agent, Mode of transmission and treatment of tuberculosis.

III. Short Answers: Answer any **FIVE** questions. **(5 x 2 = 10)**

1. Pulmonary circulation.
2. Reflex arc.
3. Any two contraceptive methods for Male.
4. Phaeochromocytoma.
5. Myxoedema.
6. Caisson’s disease.
7. Composition of urine.

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August 2011

[KZ 4253] **Sub. Code: 4253**

FIRST B.PHARM. EXAMINATION

Paper III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

I. LONG ESSAYS **(2 x 20 = 40)**

1. With a neat diagram explain the Anatomy of the Heart. Explain the cardiac cycle.
2. Explain the structure of the kidney with a neat labeled diagram. Discuss the functions of kidney.

II. SHORT NOTES **(8 x 5 = 40)**

1. Explain the anatomy of respiratory tract.
2. Discuss the various stages of menstrual cycle.
3. Write note on blood grouping and its significance.
4. Discuss the various methods of family planning.
5. Describe the physiology of audition.
6. Discuss the physiology and functions of thyroid gland.
7. Explain the preventive measures and treatment of vitamin deficiency disorders.
8. Write a note on cranial nerves and their functions.

III. SHORT ANSWERS **(10 x 2 = 20)**

1. Types of cells
2. Define spermatogenesis and oogenesis.
3. Functions of skeleton
4. What is cyanosis?
5. Causative agents and modes of transmission of chicken pox and measles.
6. What is blood pressure?
7. Composition of lymph.
8. What is reflex arc?
9. What are the various heart sounds?
10. What is a balanced diet?

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February 2012

(LA 4253) **Sub. Code: 4253**

FIRST B.PHARM. EXAMINATION

Paper III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three Hours Maximum: 100 marks

Answer ALL questions

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

1. Give the physiological functions of female sex hormones. Explain the physiology of menstruation
2. With neat labelled diagram, explain the anatomy of respiratory system. Give the functions of respiratory organs. Add a note on regulation of respiration.

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

1. Give the composition and functions of cerebrospinal fluid.
2. Write a note on the bones of the skull
3. Draw the structure of a human skin and give its functions.
4. Explain the regulations of erythropoiesis
5. Briefly write about blood pressure
6. Write a note on liver
7. Enumerate the functions of epithelial tissue
8. Name various types of muscle. Explain the properties of skeletal muscle

III. Short Answers: **(10 x 2 = 20)**

1. Name the disorders of Vitamin K and Iron
2. What is vasectomy?
3. Name the causative organism of Tuberculosis, chicken pox, Diphtheria, Filariasis.
4. What is balanced diet?
5. What is resuscitation?
6. What are rods and cones?
7. Define coagulation, erythropoiesis.
8. Name two important functions of Kidney
9. Diagrammatically represent the action potential of muscle
10. Give the composition of bile.

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(LB 4253) **AUGUST 2012** **Sub. Code: 4253**

FIRST YEAR B.PHARM. EXAM

Paper III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three Hours **Maximum: 100 marks**

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

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. With a neat diagram explain the Anatomy of Brain. Add a note on its functions.	19	33	20
2. Draw a neat diagram of eye. Discuss the physiology of vision.	19	33	20
II. Write notes on:			
1. Explain the cardiac cycle.	3	8	5
2. Discuss the physiology of cell membrane.	3	8	5
3. Write note on disease causing agents and their prevention.	3	8	5
4. Describe the different phases of menstrual cycle.	3	8	5
5. Write notes on Oral contraceptives.	3	8	5
6. Discuss the mechanism of coagulation.	3	8	5
7. Explain the anatomy of the pituitary gland.	3	8	5
8. Discus the causative agent, modes of transmission and prevention of AIDS.	3	8	5
III. Short Answers:			
1. Define Vital capacity.	1	5	2
2. Composition of lymph.	1	5	2
3. Functions of neuron.	1	5	2
4. What is mountain sickness?	1	5	2
5. Characteristic features of muscular tissues.	1	5	2
6. Resuscitation methods.	1	5	2
7. Functions of reticulo-endothelial system.	1	5	2
8. Deficiency of fat soluble vitamins.	1	5	2
9. What is ECG?	1	5	2
10. Types of joints.	1	5	2

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(LC 4253) **FEBRUARY 2013** **Sub. Code: 4253**

FIRST YEAR B.PHARM. EXAM

Paper III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three Hours **Maximum: 100 marks**

(180 Min)

I. Elaborate on: **(2 x 2 0 = 40 marks)**

1. a) Draw a neat sectional diagram of heart and label the inner parts ?
   b) Mention about vital centers of brain?
   c) Cerebrospinal Fluid?

2. a) Structure and function of male and female reproductive system ?
   b) Spermatogenesis and oogenesis?

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

1. What is causative agent? Mode of transmission and preventive measures of Tuberculosis?
2. Balanced diet?
3. Cardiac cycle?
4. Rh factors?
5. Define B.P? write about the various factors that regulate B.P
6. Explain the mechanism of Respiration?
7. Types of Synovial joint?
8. Composition of urine, Disease of the urinary system?

III. Short Answers: **(10 x 2 = 20 marks)**

1. Aqueous humor.
2. Kawashiorkar.
3. Functions of cell.
4. Classification of bones.
5. Functions of WBC.
6. Functions of Spleen.
7. Rods and cones.
8. Types of valves in the heart.
9. Cerebellum.
10. Functions of Uterus.

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(LD 4253) **AUGUST 2013** **Sub Code: 4253**

FIRST B.PHARM. EXAM

Paper III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time : Three hours **Maximum : 100 marks**

I. Elaborate on: **(2X20=40)**

1. a) Draw a neat diagram and describe the organs of digestive system.
   b) Explain their role in digestion of food.
2. a). Write the composition and functions of Blood.
   b) Discuss about the mechanism of Blood coagulation.

II. Write Short Notes: **(8 x 5 = 40)**

1. Discuss about the structure of skin and its function.
2. Classify Bones with example.
3. Write briefly about the mechanism of Respiration.
4. Write a note on Hormones of pituitary gland.
5. Write briefly on Erythropoiesis.
6. Define Reflex action and describe the formation of Reflux action.
7. Describe different family planning methods.
8. Describe the endocrine functions of Pancreas.

III. Short Answers: **(10 x 2 = 20)**

1. Functions of Hypothalamus.
2. Fat soluble Vitamins and its function.
3. Functions of the Liver.
4. Functions of Bones.
5. Permanent sterilisation methods of family planning.
6. Sexually transmitted diseases and its causes.
7. Adrenal cortical Hormones and its functions.
8. Disorders of Thyroid gland and its functions.
9. Carbohydrate metabolism.
10. Diseases of the eye.

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(LE 4253) **FEBRUARY 2014** **Sub Code: 4253**

FIRST B.PHARM. EXAM

Paper III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time : Three hours **Maximum : 100 marks**

Answer All Questions

I. Elaborate on: **(2X20=40)**

1. a) Explain anatomy of Heart with neat labeled diagram.
   b) Write a note on cardiac cycle.
2. a) Draw a labeled diagram to show the histology of the thyroid gland. Write the steps involved in thyroxine.
   b) Write the principal actions and disorders of thyroxine.

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

1. Functions of Reticulo- endothelial system
2. Physiology of audition
3. Malnutrition
4. Reflex arc
5. Mechanism of urine formation
6. Composition and functions of pancreatic juice
7. Systemic circulation
8. Discuss the causative agent, mode of transmission, prevention and control of various communicable disease.

III. Short Answers: **(10 x 2 =20)**

1. Type of joints.
2. Blood groups & its significance.
3. Mountain sickness
4. Composition of bile
5. Types of cartilage
6. Define Gestation
7. Pelvic Girdle
8. Christmas factor
9. Heamostatis
10. Composition of lymph

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(LF 4253) **AUGUST 2014** **Sub Code: 4253**

FIRST B.PHARM. EXAM
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 marks**

Answer All Questions

I. Essay: **(2X20=40)**

1. Discuss the anatomy of respiratory organs with neat labeled diagram and explain the mechanism of respiration.
2. Draw a neat sketch of cross section of eye and label the parts. Explain the physiology of vision.

II. Short Notes: **(8x5=40)**

1. Cerebro spinal fluid and its function.
2. Enumerate the communicable diseases and discuss the prevention of TB and Malaria.
3. Write the composition of functions of blood.
4. Give the classification of connective tissue. What are its functions?
5. Classify joints. Add a note on ball and socket joint
6. Explain the physiology of heart.
7. Write notes on spermatogenesis.
8. State the functions of hypothalamus.

III. Short Answers: **(10x2=20)**

1. Cardiac cycle.
2. Tidal volume
3. Functions of ANS
4. Anaemia
5. Functions of WBC
6. Blood pressure
7. Functions of skin
8. AIDS
9. Nephrons
10. Balanced diet

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(LG 4253) **FEBRUARY 2015** **Sub Code: 4253**

B.PHARM. EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 marks**

I. Essays: **(2 x 20 = 40)**

1. a) With neat labeled diagram, explain the anatomy of kidney and Nephron and its functions.
   b) Explain physiology of urine formation.
2. Describe various layers and glands of skin with labeled diagram. Write the functions of skin.

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

1. Describe the structure and functions of epithelial tissue
2. Define and classify bones with suitable example
3. Write notes on physiology of hearing
4. Explain the different family planning methods
5. Action potential
6. Functions of cerebrum and cerebellum
7. Discuss the mechanism of respiration
8. Anatomy of pituitary gland with diagrammatic representation

III. Short answers: **(10 x 2 = 20)**

1. Define cardiac output
2. What is cyanosis?
3. Define vital capacity
4. Myxoedema
5. Anaemia
6. What is balanced diet?
7. Define erythropoiesis
8. What is reflex arc?
9. Droplet infection
10. Heart sounds

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[LH 4253] **AUGUST 2015** **Sub. Code: 4253**

B.PHARM. DEGREE EXAMINATION

FIRST YEAR

PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code: 564253

Time : Three Hours **Maximum : 100 marks**

Answer All Questions

I. Essay: **(2 x 20 = 40)**

1. a) Name the water soluble and fat-soluble vitamins with their physiological role.
   b) Write their deficiency disorders and how to prevent them.
   c) State the necessity for balanced diet and its composition.

2. a) Draw the structure of ear and label.
   b) How the impulses are formed and conducted for hearing sensation?
   c) Mechanism of equilibrium.

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

1. First aid for burns.
2. Name of microbial agent, mode of transmission and prevention of tuberculosis.
3. Permanent method of contraception.
4. Mechanism of skeletal muscle contraction.
5. Blood coagulation by intrinsic pathway.
6. Fetal circulation.
7. Lung volumes and capacities.
8. Hormones acting on kidney.

III. Short answers: **(10 x 2 = 20)**

1. Function of ribosomes.
2. Spermatogenesis.
3. Spinal reflex.
4. Graves disease.
5. Kwashiorkar.
6. Blood groups and their importance.
7. Nutritive value of Egg.
8. Central nervous system.
9. Posterior pituitary hormones and their functions.
10. Erythrocytic stage of malarial parasite.

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(LI 4253) FEBRUARY 2016 **Sub Code: 4253**

B.PHARM. EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

I. Essays: **(2 x 20 = 40)**

1. a) Give description of Epithelial tissue.
   b) Discuss the various types of Epithelial tissue, their location and functions.

2. a) Enumerate the cellular components of Blood and their functions.
   b) Explain the role of Erythropoietin.
   c) Define Megaloblastic Anaemia and Iron deficiency Anaemia.

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

1. First aid for snakebite.
2. Vaccine Vs Antiserum.
3. Oral contraceptive pills.
4. Circle of Willis.
5. Neuromuscular junction.
6. Hormones of anterior Pituitary and their function.
7. Communicable disease.
8. Joints and their movements.

III. Short answers: **(10 x 2 = 20)**

1. Bones of Thoracic cavity.
2. Structure of Lymph Node and its function.
3. Heart sounds.
4. Formation and functions of CSF.
5. Muscles of Respiration.
6. Retina.
7. Auditory Ossicles.
8. Composition of Bile and its function.
9. Micturition reflex.
10. Balanced diet.

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(LJ 4253) AUGUST 2016 **Sub Code: 4253**

B.PHARM. EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

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

1. a) With a neat outline diagram describe the structure of Digestive System.
   b) Discuss the Digestion of Carbohydrate, Protein and Fat.

2. a) Draw the structure of Adrenal gland.
   b) Discuss the hormones secreted by Adrenal glands and their functions.

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

1. First aid for Shock.
2. Name of organism, mode of transmission and prevention of Rabies.
3. Intrauterine devices used for family planning.
4. Clotting factors in blood.
5. Renal regulation of blood pressure.
6. Portal circulation.
7. Synthesis of Thyroxine.
8. Structure of Synovial joint.

III. Short answers on : **(10 x 2 = 20)**

1. Function of Mitochondria.
2. Cervical segment of vertebral column.
3. Ovulation.
4. Conduction tissues of Heart.
5. Atherosclerosis.
6. Functions of Neuroglia.
7. Process of Deglutition.
8. Functions of insulin.
9. Composition of saliva and its function.
10. Any two properties of muscle tissue.

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(LK 4253) FEBRUARY 2017 **Sub Code: 4253**

B.PHARM. EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

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

1. a) Explain the role of platelets on Hemostasis.
   b) Explain the mechanism of coagulation.

2. a) Explain Ovulation.
   b) Outline the various events of menstrual cycle.

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

1. Describe various types of muscular tissues.
2. Write a note on reticuloendothelial system and its functions.
3. Describe briefly the chambers of heart.
4. Write a note on lung volumes.
5. Describe the structure and functions of stomach.
6. Formation, circulation and composition of lymph.
7. Describe the physiology of vision.
8. Write a note on poisoning and first aid given for poisoning.

III. Short answers on: **(10 x 2 = 20)**

1. Define blood pressure and write its normal value.
2. Glomerular filtration.
3. Mention any four communicable diseases with their causative agents.
4. Permanent family planning methods.
5. Bones of skull.
6. Action potential.
7. Electrocardiogram.
8. Cough reflex.
9. Mention the functions of liver.
10. Fate of RBC.

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(LL 4253) AUGUST 2017 **Sub Code: 4253**

B.PHARM. DEGREE EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

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

1. Classify the hormones of pituitary gland. Give the physiological functions and disorders of growth hormone.

2. a) Draw the cross structure of human brain and label its parts.
   b) Give the functions of different parts of the cerebellum with a neat diagram.

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

1. Explain the action potential of a skeletal muscle.
2. Classify tissues with example.
3. Write a note on hip joint.
4. Name the clotting factors.
5. What are lymph nodes? Where they are present? Give it physiological function.
6. Give the functions and composition of saliva.
7. What is spermatogenesis? Give its regulation.
8. Explain pulmonary circulation.

III. Short answers on: **(10 x 2 = 20)**

1. What is peristaltic movement?
2. What are cyanosis and mountain sickness?
3. What are the hormones released by kidney?
4. What is GFR? Give its normal value.
5. Name the preganglionic and postganglionic neurotransmitters of parasympathetic system.
6. Name the auditory and vision receptors.
7. Name the causative organism and mode of transmission of chicken pox.
8. What are water bone diseases? Give example.
9. How pH affects oxygen transport?
10. What is intrinsic respiration?

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

(LM 4253) FEBRUARY 2018 **Sub Code: 4253**

B.PHARM. DEGREE EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

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

1. Explain the structure of the kidneys with a neat labeled diagram. Discuss the functions of kidney.

2. Describe the anatomy of brain with a neat diagram. Write the important functions of brain.

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

1. Composition and functions of blood.
2. List the hormones secreted by pituitary gland and discuss any two anterior pituitary hormones with their functions.
3. What are rods and cones? Give its importance.
4. Draw the structure of respiratory tract. Mention the functions of each part.
5. Define and classify vitamins. Mention the deficiency disorders of vitamins.
6. Composition of pancreatic juice and its functions.
7. Stages of cardiac cycle.
8. Write notes on spermatogenesis.

III. Short answers on: **(10 x 2 = 20)**

1. Functions of lymph.
2. Haemolytic disease of new born.
3. Parathyroid gland.
4. Heart sounds.
5. Cranial nerve functions.
6. What is reflex arc?
7. Types of cell and its functions.
8. Haemoglobin.
9. What is a balanced diet?
10. Sexually transmitted diseases.

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

(LN 4253) AUGUST 2018 **Sub Code: 4253**

B.PHARM. DEGREE EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

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

1. Describe the various stages of development of RBC and explain the factors controlling erythropoiesis.

2. Explain the structure and functions of Heart with a neat labeled diagram.

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

1. Blood grouping and its significance.
2. Explain the lung volumes and lung capacities.
3. Mode of transmission and preventive measures taken in treatment of tuberculosis.
4. Mechanism of urine formation.
5. Temporary and permanent methods of contraception.
6. Write notes on simple epithelial tissues.
7. Draw the structure of a human skin and mention its functions.
8. Composition and functions of gastric juice.

III. Short answers on: **(10 x 2 = 20)**

1. What is a balanced diet?
2. Types of anaemia.
3. Any two disorders of joints.
4. Emergency treatment of shock.
5. Divisions of ANS.
6. Functions of skeletal system.
7. Growth hormone disorders.
8. Functions of cerebrospinal fluid.
9. Mountain sickness.
10. Structure of neuron.

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

(LO 4253) FEBRUARY 2019 **Sub Code: 4253**

B.PHARM. DEGREE EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

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

1. Draw a neat diagram and describe the organs of digestive system. Explain their role in digestion of food.
2. Draw a neat sketch of cross section of eye and label the parts. Explain the physiology of vision.

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

1. Classify Bones with example.
2. Give the functions and composition of Lymph.
3. Write a note on lung volumes.
4. Write a note on poisoning and first aid given for poisoning.
5. Intrauterine contraceptive devices used for family planning.
6. Write a note on Micturition process.
7. Write a note on ECG.
8. Describe the structure and functions of epithelial tissue.

III. Short answers on: **(10 x 2 = 20)**

1. Define cardiac output.
2. What is cyanosis?
3. Spermatogenesis.
4. Grave's disease.
5. Blood groups and their importance.
6. Kwashiorkor.
7. What is GFR? Give its normal value.
8. Functions of Neuroglia.
9. Formation and functions of CSF.
10. Fat soluble Vitamins.

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

(LP 4253) AUGUST 2019 **Sub Code: 4253**

B.PHARM. DEGREE EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

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

1. a) Draw the internal structure of a human Heart and label it.
   b) What is Hypertension? How it has been regulated?

2. Explain Urine formation and factors regulating it with a diagram.

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

1. Explain different lung volumes.
2. Differentiate sympathetic and parasympathetic systems.
3. Write the functions of hypothalamus.
4. What are rods and cones? Give its importance.
5. Write the factors affecting erythropoiesis.
6. Write the disorders of Thyroid hormone.
7. What are oral contraceptives? Give its mechanism of action.
8. Give the composition and functions of pancreatic juice.

III. Short answers on: **(10 x 2 = 20)**

1. Give the histological structure of a cardiac muscle.
2. Give four functions of epithelial tissue.
3. What are the movements of shoulder joint?
4. What is hemophilia and purpura?
5. How carbon dioxide is transported?
6. Name the male and female sex hormones.
7. What is dwarfism and cushing syndrome?
8. Give the mode of transport and causative organism of TB.
9. Name two viral diseases and its causative organisms.
10. Name the bone of upper limb.

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

(LQ 4253) FEBRUARY 2020 **Sub Code: 4253**

B.PHARM. DEGREE EXAMINATION
FIRST YEAR
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code : 564253

Time: Three hours **Maximum: 100 Marks**

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

1. a) Describe the mechanism of coagulation of blood. How do extrinsic and intrinsic pathways differ? What are the factors involved in it?
   b) Define Anemia. Classify Anemia and explain each type of Anemia.

2. Give the physiological functions of female sex hormones. Explain the physiology of menstruation.

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

1. Parasympathetic innervation and its function.
2. Reflex arc.
3. Describe various types of muscular tissues.
4. Structure and functions of skin.
5. Explain the factors involved in the regulation of blood pressure.
6. Composition & function of plasma protein.
7. Cardiac cycle.
8. Name the fat soluble Vitamins and their deficiency diseases.

III. Short answers on: **(10 x 2 = 20)**

1. Mountain sickness.
2. Acromegaly.
3. Neuromuscular junction.
4. Pulmonary circulation.
5. Causative agents and modes of transmission of chickenpox and measles.
6. Name the disorders of Vitamin K and Iron.
7. What is Tubectomy and Vasectomy?
8. What is resuscitation?
9. Give the composition of bile.
10. Define Vital capacity.

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

[LR 1220] DECEMBER 2020 Sub. Code: 4253

(AUGUST 2020 EXAM SESSION)

B. PHARMACY DEGREE EXAMINATION

FIRST YEAR – (Regulation from 2009-2010)

PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code: 564253

Time: Three hours **Answer ALL questions** **Maximum: 100 Marks**

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

1. a) Elaborate the Hematopoiesis and write the composition and functions of Blood.
   b) List of coagulation factors and discuss about the mechanism of Blood coagulation.
2. Draw a neat diagram of Heart. Discuss the conduction system of Heart.

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

1. Define tissues and classify the tissues.
2. Types of synovial joint.
3. Composition of Pancreatic juice and its functions.
4. Draw the neat diagram of Kidney and its functions.
5. Give short notes on various methods of Family planning.
6. Briefly write about Blood Pressure and their regulation.
7. Discuss the causative agent, modes of transmission and prevention of AIDS.
8. Write a note on Hormones of Pituitary gland.

III. Short answers on: **(10 x 2 = 20)**

1. Functions of skeleton.
2. How to prevent Malaria?
3. Composition of saliva and its functions.
4. Short answer on balanced diet.
5. Give two names of Male and Female sex hormones.
6. Lung volumes.
7. Micturition.
8. Cerebellum.
9. Diseases associated with respiratory system.
10. Fat soluble Vitamins and its function.

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

[BPHARM 0921] SEPTEMBER 2021 Sub. Code: 4253
(FEBRUARY 2021 EXAM SESSION)

B. PHARMACY DEGREE EXAMINATION
FIRST YEAR – (NON-SEMESTER)
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION
Q.P. Code: 564253

Time: Three hours **Answer ALL questions** **Maximum: 100 Marks**

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

1. What is Erythropoiesis? With the diagram explain the different stages of Erythropoiesis? Name the factors affecting Erythropoiesis? Add a note on Anemia.
2. a) Draw the cross structure of a human heart. Explain the anatomical features of the same.
   b) Explain Cardiac cycle with diagram.

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

1. Draw a Nerve cell and name its parts.
2. Bones of Upper limb.
3. Explain Knee joint formation.
4. Digestion of carbohydrate.
5. Mechanism of Respiration.
6. Explain the factors affecting Glomerular Filtration Rate.
7. Functions of brain.
8. State the difference between Sympathetic & Parasympathetic system.

III. Short answers on: **(10 x 2 = 20)**

1. What is mean by Depolarization?
2. Write the movements of shoulder joint.
3. What is meant by Pacemaker?
4. Write two functions of Insulin.
5. Define Cyanosis & Hypoxia.
6. Name the hormones of Anterior pituitary.
7. Write the functions of FSH.
8. Water soluble Vitamins.
9. Name two contagious diseases?
10. How to prevent Malaria?

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

[BPHARM 0122] JANUARY 2022 Sub. Code: 4253
(AUGUST 2021 EXAM SESSION)

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
FIRST YEAR (Regulation 2009-2010)
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION
Q.P. Code: 564253

Time: Three hours **Answer ALL questions** **Maximum: 100 Marks**

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

1. Anatomy and Physiology of Heart. Discuss the circulation system of Heart.
2. a) Write the composition and functions of Blood.
   b) Discuss about the mechanism of Blood coagulation.

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

1. Give notes on types of Joints.
2. Define Tissues and classify the Tissues.
3. Composition of Gastric juice and its functions.
4. Draw the neat diagram of Kidney and its functions.
5. Give short notes on various methods of Family planning.
6. Briefly write about blood pressure and their regulation.
7. Discuss the causative agent, modes of transmission and prevention of AIDS.
8. Write a note on Hormones of Adrenal gland.

III. Short answers on: **(10 x 2 = 20)**

1. Functions of skeleton.
2. What are the various heart sounds?
3. Composition of saliva and its functions.
4. Short answer on balanced diet.
5. Give two names of male and female sex hormones.
6. Lung volumes.
7. Water Soluble Vitamins.
8. Cerebellum.
9. Diseases associated with respiratory system.
10. What are rods and cones?

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

[BPHARM 0522] MAY 2022 Sub. Code: 4253
(FEBRUARY 2022 EXAM SESSION)

B. PHARMACY DEGREE EXAMINATION
FIRST YEAR – (NON-SEMESTER)
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION
Q.P. Code: 564253

Time: Three hours **Answer ALL questions** **Maximum: 100 Marks**

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

1. Write the composition of Blood. Give the structure and functions of different formed elements. State the normal values of the formed elements.
2. a).Draw the structure of a Human Kidney and explain its internal structure
   b) Explain the formation of Urine.

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

1. Give notes on types of Joints.
2. Define Tissues and classify the Tissues.
3. Composition of Gastric juice and its functions.
4. Lung Volumes.
5. Give short notes on various methods of Family planning.
6. Briefly write about blood pressure and their regulation.
7. Functions of Skin.
8. Water soluble Vitamins.

III. Short answers on: **(10 x 2 = 20)**

1. Functions of skeleton.
2. What are the various heart sounds?
3. Functions of saliva.
4. Short answer on balanced diet.
5. Give two names of male and female sex hormones.
6. Functions of Cerebellum.
7. Compositions of CSF.
8. Name the hormones of Adrenal gland.
9. Diseases associated with respiratory system.
10. What are rods and cones?

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

[BPHARM 1022] OCTOBER 2022 Sub. Code: 4253
(AUGUST 2022 EXAM SESSION)

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
FIRST YEAR (Regulation 2009-2010)
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION
Q.P. Code: 564253

Time: Three hours **Answer ALL questions** **Maximum: 100 Marks**

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

1. Classify hormones, write the functions and deficiency of adrenal hormones.
2. Draw the structure of Human heart and explain the cardiac cycle.

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

1. Draw the structure of a neuron and label the parts. Give its functions.
2. Explain the process of color vision.
3. Give the functions of white blood cells.
4. Name the clotting factors.
5. Explain the regulation of Blood pressure.
6. Give the composition and functions of gastric juice.
7. With a diagram explain lung volumes.
8. What are sex hormones? Give the physiological functions of estrogen.

III. Short answers on: **(10 x 2 = 20)**

1. What is leukocytosis? Give its significance.
2. Name the bones of Lower limb.
3. What are immovable joints? Give example.
4. What is Micturition response?
5. Name the hormones regulating Glomerular Filtration Rate.
6. What are posterior pituitary hormones?
7. Define Rh. Factor.
8. State two physiological functions of parasympathetic system.
9. What is Hematocrit? Give its physiological importance.
10. State the parathormone functions.

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

[B.PHARM 0524] MAY 2024 Sub. Code: 4253
(FEBRUARY 2024 EXAM SESSION)

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
FIRST YEAR (Regulation 2009-2010)
PAPER III – ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Q.P. Code: 564253

Time: Three hours **Answer ALL questions** **Maximum: 100 Marks**

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

1. a) What is meant by Blood Coagulation? Name the factors affecting blood coagulation.
   b) Explain the extrinsic pathway of blood coagulation. Name the factors that prolong clotting time.

2. A) Draw the cross section of human brain and name its parts.
   B) Explain the anatomical features and physiological functions of mid brain.

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

1. Name the bones of skull.
2. Classify tissues.
3. Explain the formation of Elbow joint.
4. Name the valves of heart and write their functions.
5. Lung capacity.
6. Functions of glucocorticoids.
7. How to prevent disease spreading?
8. Contraceptive Methods.

III. Short answers on: **(10 x 2 = 20)**

1. Name two properties of cardiac muscle.
2. What is erythropoietin and Lymph?
3. Name the movements of intestine.
4. Write the normal value of:
   a) Heart rate b) BP c) Respiratory rate d) GFR rate
5. What is meant by anatomical dead space?
6. Name the hormones of ovary.
7. Name the disorders of growth hormone.
8. Name the nerves that control micturition response.
9. Give the composition of CSF.
10. What are Rods and Cones?

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