

B.Pharm I Year I Semester (R19) Supplementary Examinations September 2022

HUMAN ANATOMY & PHYSIOLOGY – I

(For 2019, 2020 & 2021 admitted batches only)

Time: 3 hours

Max. Marks: 75

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- | | |
|--|----|
| (a) Write short note on homeostasis. | 2M |
| (b) What are the functions of rough endoplasmic reticulum? | 2M |
| (c) What are the functions of the bone? | 2M |
| (d) Write in brief on ball and socket joint. | 2M |
| (e) Give the composition and functions of the blood. | 2M |
| (f) Explain haemophilia. | 2M |
| (g) Write the functions of sympathetic nervous system. | 2M |
| (h) Draw the structure of nose. | 2M |
| (i) Write a note on E.C.G. | 2M |
| (j) Define hypertension. | 2M |

PART – B
(Answer any two questions: 02 X 10 = 20 Marks)

- | | |
|---|----|
| 2 (a) Explain tissue level organization. | 5M |
| (b) Explain structure and functional classification of joints. | 5M |
| 3 (a) Write the composition and function of blood. | 5M |
| (b) Explain the blood grouping. | 5M |
| 4 (a) Write the differences between sympathetic and parasympathetic nervous system. | 5M |
| (b) Explain the physiology of vision. | 5M |

PART – C
(Answer any seven questions: 07 X 05 = 35 Marks)

- | | |
|--|------|
| 5 (a) Discuss in brief the homeostatic mechanism. | 2.5M |
| (b) Explain the structure and function of connective tissue. | 2.5M |
| 6 (a) Classify the bones with suitable examples. | 2.5M |
| (b) Write a note on functions of neuro muscular junction. | 2.5M |
| 7 (a) Explain different types of anaemia. | 2.5M |
| (b) Write about the functions of lymphatic system. | 2.5M |
| 8 (a) Draw the structure of ear. | 2.5M |
| (b) Explain the functions of cranial nerves. | 2.5M |

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B.Pharm I Year I Semester (R19) Regular Examinations July 2022

HUMAN ANATOMY & PHYSIOLOGY – I

(For 2021 admitted batches only)

Time: 3 hours

Max. Marks: 75

PART – A

(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- | | |
|---|----|
| (a) Write the functions of ribosomes. | 2M |
| (b) Write a note on nervous tissue. | 2M |
| (c) Name the facial bones. | 2M |
| (d) Write about the functions of skin. | 2M |
| (e) What are the functions of platelets? | 2M |
| (f) Give brief note on serum protein. | 2M |
| (g) Mention the origin of parasympathetic nerves. | 2M |
| (h) Explain the functions of spinal nerves. | 2M |
| (i) Give the factor involved in regulation of blood pressure. | 2M |
| (j) What is the congestive heart failure? | 2M |

PART – B

(Answer any two questions: 02 X 10 = 20 Marks)

- | | |
|---|----|
| 2 (a) Explain the general principles of cell communication. | 5M |
| (b) Describe the structure and functions of muscular tissue. | 5M |
| 3 (a) Explain the physiology of skeletal muscle contraction. | 5M |
| (b) Write the differences between compact and spongy bones. | 5M |
| 4 (a) Write a note on erythropoiesis. | 5M |
| (b) Mention various components of conductive system of heart. | 5M |

PART – C

(Answer any seven questions: 07 X 05 = 35 Marks)

- | | |
|---|----|
| 5 Write about: | 5M |
| (a) Mitosis and its significance. | |
| (b) Structure and functions of muscular tissue. | |
| 6 Write in detail about: | 5M |
| (a) Mechanism of coagulation. | |
| (b) Life cycle of RBC. | |
| 7 Write short notes on: | 5M |
| (a) Structure of ear. | |
| (b) Innervations of parasympathetic nervous system. | |

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B.Pharm I Year I Semester (R19) Supplementary Examinations April/May 2022

HUMAN ANATOMY & PHYSIOLOGY – I

(For 2019 & 2020 admitted batches only)

Time: 3 hours

Max. Marks: 75

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Write the scope of anatomy and physiology.
 - Write note on contact dependent signaling.
 - Draw a neat labelled diagram of skin.
 - List out the types of bones with examples.
 - Write the composition of blood.
 - Enlist the disorders related to blood.
 - Draw a neat labelled diagram of tongue with special emphasis on taste buds.
 - Write the classification of nervous system.
 - Draw a neat labelled diagram of heart.
 - Enlist the disorders related to CVS.

PART – B
(Answer any two questions: 02 X 10 = 20 Marks)

- 2
- Describe the cardiac cycle.
 - Explain the short term and long term regulation of blood pressure.
- 3
- Explain the physiology of hearing.
 - Write the functions of parasympathetic nervous system.
- 4
- Write about the transport across the cell membrane.
 - Write about the intracellular signaling.

PART – C
(Answer any seven questions: 07 X 05 = 35 Marks)

- 5 Write the functions of the cell.
- 6 Write the functions of the skin.
- 7 Explain the physiology of muscle contraction.
- 8 Explain the mechanism of coagulation.
- 9 Write about the disorders of eye.
- 10 Write about the conduction system in heart.
- 11 Enlist the functions of lymphatic system.
- 12 Write the functions of the sympathetic nervous system.
- 13 Write note on cell division.

B.Pharm I Year I Semester (R15) Supplementary Examinations February 2023
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
 (Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Write the scope of anatomy and physiology.
 - List out the functions of mitochondria and golgi apparatus.
 - Describe heart rate and stroke volume.
 - Classify WBC and write about its functions.
 - Write any two functions of estrogen.
 - How chemical digestion takes place in oral cavity?
 - Name the parts playing role in conduction of impulses in heart.
 - Mention any two functions of spleen.
 - Write the functions of cerebellum.
 - Write about composition of joints.

PART – B
 (Answer all the questions: 05 X 10 = 50 Marks)

- Discuss in detail types and subtypes of connective tissue.
 - Draw a labelled diagram of kidney and nephron.

OR

 - Write short notes on simple epithelial tissue and nervous tissue.
 - Draw a labelled diagram of urinary system.
- Explain the concept of blood groups, their determination and importance.
 - Describe mechanisms of regulation of respiration.

OR

 - Define asthma, emphysema, atelectasis, bronchitis and pneumonia.
 - Name various clotting factors and explain their role in various pathways of blood coagulation.
- Explain about Oogenesis.
 - Write a note on anatomy of gastrointestinal tract.

OR

 - Explain digestion of carbohydrates and proteins in different parts of digestive system.
 - Write a short note on fertilization.
- Describe the anatomy of eye with neat labelled diagram.
 - Discuss about the composition and functions of lymph.

OR

 - Which events occur during cardiac cycle? How these are linked with heart sounds and ECG?
 - Describe in brief composition, formation and circulation of lymphatic fluid.
- Explain about neurochemical transmission in central nervous system.
 - Write a note on electroencephalogram.

OR

 - Write a short note on synapse.
 - Describe in detail molecular mechanism of skeletal muscle contraction.

B.Pharm I Year I Semester (R15) Supplementary Examinations September 2022
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Write the scope of anatomy and physiology.
 - List out the functions of mitochondria and golgi apparatus.
 - Give the composition of blood.
 - Describe cardiac cycle.
 - What is reproduction?
 - Write a short note on pelvic diaphragm.
 - Draw a neat labelled diagram of lymph nodes.
 - Differentiate between arteries and veins.
 - Give the classification of peripheral nervous system.
 - Name the cranial nerves.

PART – B
(Answer all the questions: 05 X 10 = 50 Marks)

- Discuss in detail types and subtypes of connective tissue.
 - Draw a labelled diagram of kidney and nephron.

OR

 - Describe in detail physiology of urine formation.
 - Draw a neat labelled diagram of cell. Discuss about active transport.
- Define coagulation. Describe in detail mechanism of blood coagulation.
 - Describe location and gross anatomy of lungs.

OR

 - Define blood pressure. Discuss in detail mechanism involved in regulation of B.P.
 - Give a note on respiratory regulation.
- Write a note on physiology of menstruation.
 - Describe in detail different phases of digestion.

OR

 - Explain digestion of carbohydrates and proteins in different parts of digestive system.
 - Write a short note on fertilization.
- Explain its structure and functions of skin with neat labelled diagram.
 - Write a note on myelination of neurons.

OR

 - Describe the composition and functions of lymph.
 - Discuss about disorders of cardio vascular system.
- Describe the anatomy and physiology of cerebellum.
 - Write a note on reflex arc.

OR

 - Write a short note on synapse.
 - Describe in detail molecular mechanism of skeletal muscle contraction.

B.Pharm I Year I Semester (R15) Supplementary Examinations April/May 2022

HUMAN ANATOMY & PHYSIOLOGY – I

(For 2015, 2016, 2017 & 2018 admitted batches only)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Define anatomy and physiology.
 - Discuss about different types of tissues.
 - Describe heart rate and stroke volume.
 - Classify WBC and write about its functions.
 - Name the parts of alimentary system.
 - Write short note on diarrhoea.
 - Draw labelled diagram of tongue.
 - Define the term congestive heart failure and cardiac arrhythmia.
 - Enlist the bones of upper limbs.
 - Draw a neat labelled diagram of neuro muscular junction.

PART – B
(Answer all the questions: 05 X 10 = 50 Marks)

- 2 (a) Draw a neat labelled diagram of cell. Discuss about active transport.
(b) Describe Renin Angiotensin system.

OR

- 3 (a) Write short notes on simple epithelial tissue and nervous tissue.
(b) Draw a labelled diagram of urinary system.

- 4 (a) Explain the physiology of respiration.
(b) Write a short note on anaemia.

OR

- 5 (a) Explain platelet plug formation.
(b) Write a short note on blood groups.

- 6 (a) Write about spermatogenesis.
(b) Discuss the physiology of menstrual cycle.

OR

- 7 (a) Write functions of GIT.
(b) Describe the structure and functions of salivary gland.

- 8 (a) Describe the anatomy of eye with neat labelled diagram.
(b) Discuss about the composition and functions of lymph.

OR

- 9 (a) Define E.C.G. Discuss the interpretation of E.C.G.
(b) Explain the events of cardiac cycle.

- 10 (a) Describe in detail functions, formation and circulation of cerebro spinal fluids.
(b) Discuss about the structure and function of brain with neat diagram.

OR

- 11 (a) Explain the structure and functions of plasma membrane.
(b) List out the cranial nerves and its function.

B.Pharm I Year I Semester (R19) Supplementary Examinations February 2023

HUMAN ANATOMY & PHYSIOLOGY - I

(For 2019, 2020 & 2021 admitted batches only)

Time: 3 hours

Max. Marks: 75

PART – A

(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- | | |
|---|----|
| (a) Define cell. | 2M |
| (b) With example define receptor. | 2M |
| (c) What are centrioles? | 2M |
| (d) What is the function of lysosomes? | 2M |
| (e) Differentiate exocrine and endocrine gland. | 2M |
| (f) Define exocytosis. | 2M |
| (g) Write the different types of plasma proteins. | 2M |
| (h) Write down the types of leukocytes or WBC. | 2M |
| (i) Define cardiac output. | 2M |
| (j) Define Stroke volume. | 2M |

PART – B

(Answer any two questions: 02 X 10 = 20 Marks)

- | | |
|---|----|
| 2 (a) Write down the function of proteins present on the cell membrane. | 5M |
| (b) With a diagram describe about nucleus. | 5M |
| 3 (a) Describe in short about intercellular connection. | 5M |
| (b) What are the different types of intercellular communication? Illustrate about neuronal communication. | 5M |
| 4 (a) Classify tissue. | 5M |
| (b) Write a short note about epithelial tissue. | 5M |

PART – C

(Answer any seven questions: 07 X 05 = 35 Marks)

- | | |
|---|----|
| 5 (a) Write down the function of skin. | 2M |
| (b) With a proper sketch describe the structure of epidermis. | 3M |
| 6 (a) Define bone. Classify types of bone. | 2M |
| (b) Write a short note about osteogenesis. | 3M |
| 7 (a) What are the parts of appendicular skeleton? | 2M |
| (b) What are the bones present in shoulder girdle and upper limb? | 3M |
| 8 (a) Classify synovial joints. | 2M |
| (b) What are the characteristic features of synovial joints? | 3M |

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B.Pharm I Year I Semester (R19) Supplementary Examinations March 2021
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 75

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Write the function of cell.
 - Write the function of connective tissue.
 - What is neuromuscular junction?
 - Enumerate the bones present in axial system.
 - Write the composition of blood.
 - List the disease for the blood disorder.
 - Short list the function of ANS.
 - What is taste buds?
 - Write disorders of heart.
 - What is systolic and diastolic?

PART – B
(Answer any two questions: 02 X 10 = 20 Marks)

- Classify the tissues and write the structure and function of any two tissues.
- Discuss about the mechanisms of coagulation and blood grouping.
- Write about the structure and function of eye.

PART – C
(Answer any seven questions: 07 X 05 = 35 Marks)

- Write short notes on basic life processes and homeostasis.
- Write about the physiology of muscle contraction.
- Explain about the types of joints movements and its articulation.
- Write short notes on RBC and WBC.
- Write about function and disorder of blood.
- Write the functions of spinal and cranial nerves.
- Explain about the cardiac output and cardiac cycle.
- Write about the conduction system of heart and heart beat.
- Write about various cell stage of cell division.

B.Pharm I Year I Semester (R15) Supplementary Examinations October 2020

HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- Explain about Homeostasis.
- What are the functions of Muscular tissue?
- Explain about functions of Bronchi.
- Write a note on types of blood groups.
- Explain about sex differentiation.
- Describe the functions of Pancreas.
- Write a note on electrocardiogram.
- Write a note on functions of skin.
- Describe the functions of cerebellum.
- Write about composition of joints.

PART – B

(Answer all five units. 5 X 10 = 50 Marks)

UNIT – I

- Explain about structure and characteristic functions of connective tissue.
 - Describe the structure and functions of urinary tract.

OR

- Explain about the structure, components and functions of the cell.
 - Explain about structure and characteristic functions of nervous tissue.

UNIT – II

- Define coagulation? Write a detailed note on mechanism of coagulation.
 - Write a note on respiratory disorders.

OR

- Explain about disorders related to blood components.
 - Write a note on respiratory volume and vital capacity.

UNIT – III

- Explain about Oogenesis.
 - Write a note on anatomy of gastrointestinal tract.

OR

- Write about physiology of fertilization.
 - Explain about functions of liver.

UNIT – IV

- Explain about physiology of coronary and pulmonary circulation.
 - Describe the formation and circulation of lymph.

OR

- Write about anatomy and physiology of blood vessels.
 - Explain about structure and functions of nose.

UNIT – V

- Explain about neurochemical transmission in central nervous system.
 - Write a note on electroencephalogram.

OR

- Write a note on movements of synovial joints.
 - Explain about physiology and functions of autonomic nervous system.

B.Pharm I Year I Semester (R15) Supplementary Examinations October 2020
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
 (Compulsory Question)

Answer the following: (10 X 02 = 20 Marks)

- Explain about Homeostasis.
- What are the functions of Muscular tissue?
- Explain about functions of Bronchi.
- Write a note on types of blood groups.
- Explain about sex differentiation.
- Describe the functions of Pancreas.
- Write a note on electrocardiogram.
- Write a note on functions of skin.
- Describe the functions of cerebellum.
- Write about composition of joints.

PART – B
 (Answer all five units. 5 X 10 = 50 Marks)

UNIT – I

- Explain about structure and characteristic functions of connective tissue.
- Describe the structure and functions of urinary tract.

OR

- Explain about the structure, components and functions of the cell.
- Explain about structure and characteristic functions of nervous tissue.

UNIT – II

- Define coagulation? Write a detailed note on mechanism of coagulation.
- Write a note on respiratory disorders.

OR

- Explain about disorders related to blood components.
- Write a note on respiratory volume and vital capacity.

UNIT – III

- Explain about Oogenesis.
- Write a note on anatomy of gastrointestinal tract.

OR

- Write about physiology of fertilization.
- Explain about functions of liver.

UNIT – IV

- Explain about physiology of coronary and pulmonary circulation.
- Describe the formation and circulation of lymph.

OR

- Write about anatomy and physiology of blood vessels.
- Explain about structure and functions of nose.

UNIT – V

- Explain about neurochemical transmission in central nervous system.
- Write a note on electroencephalogram.

OR

- Write a note on movements of synovial joints.
- Explain about physiology and functions of autonomic nervous system.

B.Pharm I Year I Semester (R19) Supplementary Examinations February 2022

HUMAN ANATOMY & PHYSIOLOGY – I

(For 2020 admitted batches only)

Time: 3 hours

Max. Marks: 75

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Write the definition of anatomy and physiology.
 - (b) Write note on paracrine signalling.
 - (c) Write short note on integumentary system.
 - (d) List out the functions of bones.
 - (e) Write the functions of blood.
 - (f) Write short note on Rh factor.
 - (g) Write about the structure of sympathetic nervous system.
 - (h) Write the classification of peripheral nervous system.
 - (i) Write about the functions of artery.
 - (j) Write about the short term regulation of blood pressure.

PART – B

(Answer any two questions: 02 X 10 = 20 Marks)

- 2 List out the general principles of cell signalling.
- 3
- (a) Explain the physiology of vision.
 - (b) Write the functions of spinal nerves.
- 4
- (a) Write about the blood grouping.
 - (b) What is anaemia? Write about the aetiology of different types of anemia.

PART – C

(Answer any seven questions: 07 X 05 = 35 Marks)

- 5 Write the classification of tissues. Write note on epithelial tissues.
- 6 Write about the structure of the skin.
- 7 Explain about the neuromuscular junction.
- 8 Enlist the clotting factors. Write about the disorders related to coagulation.
- 9 Draw neat labelled diagram of ear and write about the disorders of ear.
- 10 Write about the electrophysiology of heart and ECG.
- 11 Enlist the functions of lymphatic system.
- 12 Write the structure and functions of somatic nervous system.
- 13 List out and write the functions of cranial nerves.

B.Pharm I Year I Semester (R15) Supplementary Examinations August/September 2021
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
 (Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Define terms: (i) Proximal. (ii) Inferior.
 - What are functions of distal convoluted tubule?
 - On what basis leucocytes are differentiated?
 - What is internal respiration?
 - Write any two functions of estrogen.
 - How chemical digestion takes place in oral cavity?
 - Explain the origin of heart sounds.
 - Mention any two functions of lymph nodes.
 - What are major components of synaptic transmission?
 - Name the movements done by ball and socket joints.

PART – B
 (Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 (a) Write composition and functions of connective tissue.
 (b) What are organelles? Give brief structure and function of rough endoplasmic reticulum.

OR

- 3 (a) How juxtaglomerular apparatus plays important role in maintenance of acid base balance?
 (b) Write meaning and one example each of any six directional terms used in anatomy.

UNIT – II

- 4 (a) Explain the concept of blood groups, their determination and importance.
 (b) Describe mechanisms of regulation of respiration.

OR

- 5 (a) Write a note on physiology of respiration.
 (b) Describe the extrinsic pathway of blood coagulation.

UNIT – III

- 6 (a) Discuss the roles of various hormones during menstrual cycle.
 (b) Describe the functions of each of the accessory glands of GIT.

OR

- 7 (a) How chemical digestion takes place in GIT? Mention organ wise chemical processes and their mediators.
 (b) Describe the process of spermatogenesis and oogenesis.

UNIT – IV

- 8 (a) Write a brief note on structure and functions of spleen.
 (b) Which factors play role in maintenance and regulation of blood pressure? How?

OR

- 9 (a) Explain the physiology of vision using a well labeled figure of eye.
 (b) What impact exercise causes on cardiovascular system? How?

UNIT – V

- 10 (a) Explain in brief anatomy & functions of sympathetic nervous system.
 (b) Describe the events taking place and role of various molecules during muscle contraction.

OR

- 11 (a) What are cranial nerves? Give name and functions of first five cranial nerves.
 (b) Explain briefly synovial joints. Give two examples of it and state which movements are possible with synovial joints.

B.Pharm I Year I Semester (R19) Regular & Supplementary Examinations August/September 2021
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 75

PART – A
(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- (a) Define homeostasis.
- (b) What is cell division?
- (c) Mention the different parts of skin.
- (d) Write the different types of joint.
- (e) Write the function of blood?
- (f) Write different types of anaemia.
- (g) Give the function of spinal cord.
- (h) Define the peripheral nervous system.
- (i) Define cardiac cycle.
- (j) What is ECG?

PART – B
(Answer any two questions: 02 X 10 = 20 Marks)

- 2 Explain the structure and function of heart.
- 3 Write the structure and function of ear.
- 4 Write the structure and function of skin.

PART – C
(Answer any seven questions: 07 X 05 = 35 Marks)

- 5 Write about the general principles of cell communication and intracellular signaling pathway.
- 6 Write the structure and function of epithelial tissue.
- 7 Write the salient features and functions of bones of axial skeletal system.
- 8 Write short notes on different synovial joints of the body.
- 9 Write about the formation of haemoglobin and types of anaemia.
- 10 Explain about Lymph organs and tissues.
- 11 Write about the difference between sympathetic and parasympathetic nervous system.
- 2 Explain about the blood vessels and blood circulation of heart.
- 3 Write about the regulation of blood pressure and disorders of heart.

B.Pharm I Year I Semester (R15) Supplementary Examinations March 2021
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
 (Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Define terms: (i) Distal. (ii) Superior.
 - What are functions of macula densa?
 - On what basis blood groups are differentiated?
 - What is external respiration?
 - Write any two functions of progesterone.
 - How chemical digestion takes place in stomach?
 - Name the parts playing role in conduction of impulses in heart.
 - Mention any two functions of spleen.
 - What are major components of simple reflex arch?
 - Name the movements done by synovial joints.

PART – B
 (Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 (a) Describe the structure and functions of cell membrane.
 (b) What are structural and functional aspects of epithelial tissue?

OR

- 3 (a) What are planes and what is their significance? Explain various planes used in anatomy.
 (b) Explain physiology of urine formation.

UNIT – II

- 4 (a) Write a note on respiratory volumes and capacities.
 (b) Differentiate between various anemias.

OR

- 5 (a) Define asthma, emphysema, atelectasis, bronchitis and pneumonia.
 (b) Name various clotting factors and explain their role in various pathways of blood coagulation.

UNIT – III

- 6 (a) What do you mean by contraceptive devices? How these devices function in male and females?
 (b) Write structure and function of liver.

OR

- 7 (a) Describe ovarian cycle including role of various hormones on it.
 (b) Write about male sex organs and functions of various male sex hormones.

UNIT – IV

- 8 (a) Explain the physiology of hearing using a well labeled figure of ear.
 (b) Describe various factors affecting blood pressure.

OR

- 9 (a) Which events occur during cardiac cycle? How these are linked with heart sounds and ECG?
 (b) Describe in brief composition, formation and circulation of lymphatic fluid.

UNIT – V

- 10 (a) What are structural and functional aspects of neuronal tissue?
 (b) What is blood brain barrier? How it is formed? What is its importance?

OR

- 1 (a) Explain briefly ball and socket joints, give two examples of it and state which movements are possible with ball and socket joints.
 (b) Explain in brief anatomy & functions of parasympathetic nervous system.

B.Pharm I Year I Semester (R15) Supplementary Examinations November/December 2019

HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Describe the functions of mitochondria.
 - Explain the structure of urinary system.
 - What are the types of anaemia?
 - Write a note on vital capacity and its significance.
 - Write a note on spermatogenesis.
 - Explain the functions of Gall bladder.
 - Describe the events of cardiac cycle.
 - Explain the functions of tongue.
 - Write a note on the structure of blood brain barrier.
 - Describe the components of skeleton.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 (a) What are the types of epithelial tissue? Describe their functions in detail.
(b) Describe the structure and functions of kidney.

OR

- 3 (a) Write a note on structure and functions of muscular tissue.
(b) Write a note on the physiology of urine function.

UNIT – II

- 4 (a) Write a note on the components and functions of blood.
(b) Describe the mechanisms of regulation of respiration.

OR

- 5 (a) Write a note on blood groups and their significance.
(b) Write a note on structure and functions of respiratory tract.

UNIT – III

- 6 (a) Write a note on structure and functions of female reproductive system.
(b) Explain about disorders of gastrointestinal tract.

OR

- 7 (a) Describe the physiology of menstruation.
(b) Explain about anatomy and physiology of pancreas.

UNIT – IV

- 8 (a) Write a note on anatomy and physiology of heart.
(b) Explain about structure and functions of the skin.

OR

- 9 (a) Explain about physiology of blood pressure and its regulation.
(b) Draw a neat labeled diagram of ear and explain its anatomy.

UNIT – V

- 10 (a) Write a detailed note on neurohumoral transmission in the autonomic nervous system.
(b) Explain about structure and functions of skeleton.

OR

- 11 (a) Classify cranial nerves and explain about their functions.
(b) Explain about structure and composition of joints.

Code: 15R00105

R15

B.Pharm I Year I Semester (R15) Supplementary Examinations May/June 2019

HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Define an organ.
 - What are the functions of muscle tissue?
 - What is the composition of blood?
 - Define pharyngitis.
 - What are the functions of testes?
 - Define constipation.
 - What are the histological layers of blood vessels?
 - Define lymph nodes.
 - What are Alpha waves?
 - Define "Fibrous joints".

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Describe the general characteristics and functions of muscular and nervous tissues.

OR

- 3 Describe the structure & functions of kidney.

UNIT – II

- 4 (a) Write a note on blood groups and their significance.
(b) What are the functions of blood?

OR

- 5 Describe the various parts of respiratory tract and their functions.

UNIT – III

- 6 Explain the physiology of menstruation.

OR

- 7 Describe the gross anatomy of the gastro-intestinal tract with the help of a neat labeled diagram.

UNIT – IV

- 8 Explain the basic anatomy and physiology of heart.

OR

- 9 Describe the structure and detailed functions of eye.

UNIT – V

- 10 (a) Write a note on electroencephalogram.
(b) Explain the mechanism of neurohumoral transmission in the ANS.

OR

- 11 Describe the structure of skeleton with the help of a neat labeled diagram and add a note on its functions.

Code: 15R00105

R15

B.Pharm I Year I Semester (R15) Regular & Supplementary Examinations February 2019
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What are the various modes of nutrition?
 - (b) Outline the classification of connective tissues.
 - (c) What are the tests for clotting?
 - (d) Define "Vital capacity".
 - (e) Define "Menstruation".
 - (f) Outline the functions of Saliva.
 - (g) Define Hodgkin's disease.
 - (h) Define homeostasis.
 - (i) What are the functions of hypothalamus?
 - (j) Define "Cartilaginous joint".

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Describe in detail about the structure of cell.

OR

- 3 Outline the physiology of urine formation.

UNIT – II

- 4 (a) Write a note on types of anemia.
(b) Explain the mechanism of coagulation of blood.

OR

- 5 Describe the mechanism and regulation of respiration.

UNIT – III

- 6 Explain the male reproductive system with the help of a neat labeled diagram and add a note on their hormones.

OR

- 7 What are the functions of different parts of gastrointestinal tract?

UNIT – IV

- 8 (a) Write a note on blood pressure & its regulations.
(b) Write a short note on composition & circulation of lymph.

OR

- 9 Describe the structure & detailed functions of skin.

UNIT – V

- 10 (a) Write a note on the functions of spinal cord.
(b) What is the importance of blood brain barrier?

OR

- 11 (a) Explain the functions of autonomic nervous system.
(b) Write a note on the types of movements of synovial joints.

Code: 15R00105

R15

B.Pharm I Year I Semester (R15) Supplementary Examinations May/June 2018

HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Write a note on Ribosomes.
 - Give an account on classification of connective tissues.
 - Write the role of secretion in formation of urine.
 - Write the composition of plasma.
 - Write about types of Anemia.
 - Give an account on sex differentiation.
 - Write about vital capacity.
 - Explain pulmonary circulation.
 - Write the importance of blood brain barrier.
 - Discuss about neurotransmitters at preganglionic nerve.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Define tissues. Classify the same. Write a note on epithelial tissues.
- OR
- 3 Explain in detail about the process of formation of urine.

UNIT – II

- 4 Write short notes on:
- Types of respiratory volumes.
 - Hemostasis.

OR

- 5 Explain the physiology and mechanism of respiration in detail.

UNIT – III

- 6 Describe the female reproductive system and its hormonal activity in detail.

OR

- 7 Explain the digestion of food substances in small intestine.

UNIT – IV

- 8
- Describe in detail about cardiac cycle.
 - Explain regulation of blood pressure.

OR

- 9 Draw a structure of ear and describe the physiology of audition.

UNIT – V

- 10 Write short notes on:
- Medulla oblongata.
 - Differentiate reflex arc & reflex action.

OR

- 11 Describe structural and functional differences between sympathetic and parasympathetic nervous systems.

B.Pharm I Year I Semester (R15) Supplementary Examinations June 2017
HUMAN ANATOMY & PHYSIOLOGY – I

hours

Max. Marks: 70

PART – A
(Compulsory Question)

Answer the following: (10 X 02 = 20 Marks)

-) Write the functions of cell.
-) Explain electrolyte balance.
-) Classify WBC.
-) Define Tidal volume.
-) Define ovulation.
-) What are the Secretions of salivary gland?
-) Write the composition of lymph.
-) What are the various heart sounds?
-) Write functions of skeleton.
-) Write functions of neuron.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

Explain in detail about the elementary tissues of the human body with neat diagram.

OR

Draw a structure of kidney and label it. Briefly explain the function of kidney.

UNIT – II

Define blood. Explain the formation of blood cells and its functions.

OR

Explain in detail about the gas exchange process.

UNIT – III

Draw a structure of digestive system and label it. Explain the neural innervation of GI tract.

OR

Explain Male reproductive system and its function.

UNIT – IV

With a neat diagram, explain the Anatomy of the Heart. Explain the cardiac cycle.

OR

Draw a neat diagram of eye. Discuss the physiology of vision.

UNIT – V

With a neat diagram, explain the Anatomy of Brain. Add a note on cranial nerves.

OR

Classify joints. Explain types of movement of synovial joint.

Code: 15R00105

R15

B.Pharm I Year I Semester (R15) Regular & Supplementary Examinations January 2017
HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- (a) Define reabsorption.
- (b) Define homeostasis.
- (c) Define blood groupings.
- (d) Define pulmonary ventilation.
- (e) Define deglutination.
- (f) Define menstruation.
- (g) Define blood pressure.
- (h) Name the lymphatic organs.
- (i) Write functions of ANS.
- (j) Write about types of joints.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Draw a structure of Nephron. Explain the mechanism of Micturition.

OR

3 Write about classification and functions of epithelial and connective tissues.

UNIT – II

4 Define coagulation. Explain the mechanism of coagulation of blood.

OR

5 Explain the transport of O₂ and CO₂ in blood.

UNIT – III

6 Explain the chemical digestion of food taking in small intestine.

OR

7 Explain female reproductive system and its hormonal activity.

UNIT – IV

8 Draw a structure of ear and describe the physiology of audition.

OR

9 Define blood pressure. Explain regulation and control of blood pressure.

UNIT – V

10 Explain the formation, circulation and functions of cerebrospinal fluid.

OR

11 Explain the mechanism of neurohumoral transmission in autonomic nervous system.

Code: 15R00105

R15

B.Pharm I Year I Semester (R15) Supplementary Examinations June 2016

HUMAN ANATOMY & PHYSIOLOGY - I

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 x 02 = 20 Marks)
- (a) What are the important functions of estrogen?
 - (b) What supporting structures ensure the heart valves to open and close?
 - (c) What are the major parts of a nephron?
 - (d) Which muscles and actions of the wrist, hand and digits are used when writing?
 - (e) What happens during fight (or) flight response?
 - (f) Describe the functions of RBCs.
 - (g) Name the four layers of G.I Tract. Write their functions.
 - (h) What characteristics are common to all epithelial tissues?
 - (i) How is the secretion of saliva regulated?
 - (j) How does the larynx function in respiration and voice production?

PART – B

(Answer all five units, 5 x 10 = 50 Marks)

UNIT - I

2 Write the anatomy and physiology of heart & blood vessels.

OR

3 Write the structure and detailed functions of eye.

UNIT - II

4 Explain the structure of skeletal muscle and its connective tissue coverings.

OR

5 Write various parts of respiratory tract and their functions.

UNIT - III

6 Write the different types of cell divisions. Explain diagrammatically about the different phases of cell division.

OR

7 Diagrammatically, explain about the female reproductive system & its functions.

UNIT - IV

8 Describe the structure, functions and production of white blood cells.

OR

9 Write the anatomy and histology of the kidney and write the path of blood flow to the kidney.

UNIT - V

- 10 (a) Write the significance of neurochemical transmitters.
(b) Write the structure and functions of skeleton.

OR

- 11 (a) What are cranial nerves & write their functions?
(b) Write the classification of joints.

Code: 15R00105

R15

B.Pharm I Year (R15) Regular Examinations December/January 2015/2016

HUMAN ANATOMY & PHYSIOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) How do you distinguish the parietal pleura from visceral pleura?
 - (b) What are the principal parts of the Uterus?
 - (c) Which muscles contract and relax in each eye when you gaze to your left without moving your head?
 - (d) Which Neurotransmitters bind to adrenergic receptors?
 - (e) What are the four basic types of human tissue?
 - (f) What is the role of Esophagus in digestion?
 - (g) What is the major chemical difference between blood plasma and glomerular filtrate?
 - (h) Write the formed elements in blood plasma and describe their functions.
 - (i) What is the role of thymus in Immunity?
 - (j) What is the function of the tissue which composes the fibrous skeleton of the heart?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Write the mechanism and regulation of respiration.
- OR**
- 3 Describe the sequence of events in protein synthesis.

UNIT – II

- 4 Diagrammatically explain different components of blood and their functions and write the composition of blood plasma.
- OR**
- 5 Describe the structure and detailed functions of Ear.

UNIT – III

- 6 What are the different types of skeletal muscles? Write their characteristics and functions.
- OR**
- 7 What is cardiac cycle? What are the events occurs during cardiac cycle?

UNIT – IV

- 8 Diagrammatically explain about the male reproductive system and its functions.
- OR**
- 9 Diagrammatically explain the structure of nephron and associated blood vessels.

UNIT – V

- 10 (a) Write the functions of different parts of brain and spinal cord.
(b) Write the types of movements of synovial joints.
- OR**
- 11 (a) Write the structure of Blood Brain Barrier and its importance.
(b) Write the functions of autonomic nervous system.
