

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

**HUMAN ANATOMY & PHYSIOLOGY – II**

(For 2021 admitted batch only)

Time: 3 hours

Max. Marks: 75

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
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|--|----|
| (a) What are the neurotransmitters of brain?                   | 2M |
| (b) List out the meninges covering the brain.                  | 2M |
| (c) Write about the basic anatomy of the wall of stomach.      | 2M |
| (d) What are the steps involved in the formation of ATP.       | 2M |
| (e) List the artificial methods of respiration.                | 2M |
| (f) Draw a neat labelled diagram of nephron.                   | 2M |
| (g) Write about the functions of thyroid hormone.              | 2M |
| (h) Write about the disorders of thyroid gland.                | 2M |
| (i) Draw a neat labelled diagram of testes.                    | 2M |
| (j) Define transcription and translation in protein synthesis. | 2M |

**PART – B**

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

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|---|----|
| 2 (a) Explain in detail about menstrual cycle and its associated physiological changes in ovary and uterus.     | 6M |
| (b) Explain the genetic pattern of inheritance.   | 4M |
| 3 (a) Write in detail about the composition of secretions from Gastrointestinal tract and its accessory organs. | 6M |
| (b) Explain in detail about the steps involved in digestion of various nutrients.                               | 4M |
| 4 (a) Write about the physiology of respiration and elaborate about the lung volumes and capacities.            | 6M |
| (b) Write about the structure of kidney.  | 4M |

**PART – C**

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

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|--|----|
| 5 Write in detail about the anatomy of liver and pancreas.       | 5M |
| 6 Write in detail about the structure and functions of cerebrum. | 5M |
| 7 Write about the physiology of urine formation.                 | 5M |
| 8 Explain about neuron and its electrophysiology.                | 5M |
| 9 Write about the mechanism of hormone action.                   | 5M |
| 10 Write in detail about the adrenal gland and its hormones.     | 5M |
| 11 Explain in detail about spermatogenesis.                      | 5M |
| 12 Explain in detail about the protein synthesis.                | 5M |
| 13 Write in detail about the upper respiratory tract.            | 5M |

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

**HUMAN ANATOMY & PHYSIOLOGY – II**

(For 2019 & 2020 admitted batch only)

Time: 3 hours

Max. Marks: 75

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Write about the functions of hypothalamus.
  - (b) Write about the composition of cerebrospinal fluid.
  - (c) Write about the functions of saliva.
  - (d) What is Basal metabolic rate?
  - (e) Explain the total lung capacity and inspiratory capacity.
  - (f) Draw a neat labelled diagram of nephron.
  - (g) Write about the functions of thyroid hormone.
  - (h) Write about the disorders of pancreas.
  - (i) Write about the hormones involved in regulation of oogenesis.
  - (j) Define transcription and translation in protein synthesis.

**PART – B**

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

- 2 Write in detail about the hormones of pituitary gland and explain their functions.
- 3 Write in detail about the anatomy of alimentary canal.
- 4 Explain in detail about the anatomy of urinary system.

**PART – C**

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

- 5 Write in detail about the steps involved in digestion of proteins.
- 6 Write in detail about the nervous tissue.
- 7 Write about the physiology of urine formation.
- 8 Explain about neuron and its electrophysiology.
- 9 Write about pancreas and explain about its secretions.
- 10 Write in detail about the adrenal gland and its hormones.
- 11 Explain in detail about various stages of pregnancy.
- 12 Explain in detail about the protein synthesis.
- 13 Write in detail about lower respiratory tract.

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

**HUMAN ANATOMY & PHYSIOLOGY – II**

(For 2020 admitted batches only)

Time: 3 hours

Max. Marks: 75

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Write the organization of nervous system.
  - (b) Write a note on neuralgia.
  - (c) Write the composition of gastric juice.
  - (d) What is pepsin? Write the role of pepsin in digestion.
  - (e) Write a short note on wind pipe.
  - (f) Write a short note on artificial respiration.
  - (g) Write the classification of hormones.
  - (h) List out the hormones related to hypothalamus.
  - (i) Draw a neat labelled diagram of sperm cell.
  - (j) Write a note on female sex hormones.

**PART – B**

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

- 2 (a) Write about the electrophysiology in CNS.  
(b) Write a note on neurotransmitters.
- 3 (a) Explain the mechanism of respiration.  
(b) Explain the physiology of urine formation.
- 4 (a) Explain the physiology of menstruation.  
(b) Write a note on genetic pattern of inheritance.

**PART – C**

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

- 5 What are synapses and explain anyone?
- 6 What is reflex arc and explain the spinal reflexes?
- 7 Explain the mechanical digestion in the small intestine.
- 8 Write a note on formation and role of ATP.
- 9 Explain about the regulation of respiration.
- 10 Describe the structure and write the functions of adrenal gland.
- 11 Describe the process of spermatogenesis.
- 12 Write a note on protein synthesis.
- 13 Explain the role of RAS in kidney.

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

**HUMAN ANATOMY & PHYSIOLOGY – II**

(For 2019 admitted batch only)

Time: 3 hours

Max. Marks: 75

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Discuss the ventricles of brain.
  - (b) Give a note on nerve fibre.
  - (c) Write the functions of stomach.
  - (d) Describe the Larynx and Pharynx as well as their functions.
  - (e) Write a note on resuscitation methods.
  - (f) Give the role of RAS in kidney.
  - (g) Write a note on physiological actions of Insulin.
  - (h) What are the actions of anti diuretic hormone?
  - (i) Describe the physiology of Oogenesis.
  - (j) Write brief note on chromosomes.

**PART – B**

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

- 2 (a) What are the functions of afferent and efferent nerves?  
(b) Give a brief note on anatomy and functions of brain.
- 3 (a) Describe the regulations of respiration.  
(b) Discuss the importance of respiratory system with the help of a neat diagram.
- 4 (a) Write a note on parathyroid gland.  
(b) Describe the physiology of menstruation.

**PART – C**

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

- 5 (a) Write a brief note on nerve fibre.  
(b) Discuss about action potential and nerve impulse.
- 6 (a) Give a brief note on disorders of digestive system.  
(b) Explain about the formation of creatinine phosphate.
- 7 (a) Discuss about micturition reflex.  
(b) Give a note on motility of small intestine.
- 8 (a) What are the functions of pituitary gland?  
(b) Write about the disorders of adrenal cortex.

Contd. in page 2

- 9 (a) Describe the parts of male reproductive system.  
(b) Give short note on physiology of spermatogenesis.
- 10 (a) Explain the structure of tongue.  
(b) Give a note on formation and role of ATP.
- 11 (a) Discuss the functions of urinary tract.  
(b) Give the anatomy of lungs.
- 12 (a) Explain the functions of hypothalamus.  
(b) Explain the chemical transmission at synaptic cleft.
- 13 (a) Write a brief note on regulation of growth hormone secretion.  
(b) Describe the disorders of thyroid gland.

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**HUMAN ANATOMY & PHYSIOLOGY – II**

Time: 3 hours

Max. Marks: 75

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Write a note on action potential in neuron.
  - (b) Write the functions of CSF.
  - (c) Give a note on neuronal regulation of acid secretion.
  - (d) Write about the role of creatinine phosphate.
  - (e) Write a note on gaseous exchange in lungs.
  - (f) Draw a neat labelled diagram of nephron.
  - (g) List out the pituitary hormone.
  - (h) Write a note on hyperthyroidism.
  - (i) What are male sex hormones and give a note on Leydig cells?
  - (j) Write a note on nucleic acids.

**PART – B**

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

- 2 (a) Explain the endocrine role of pancreas.  
(b) Describe the structure and functions of adrenal cortex and their secretions.
- 3 (a) Explain the chemical digestion involved in the stomach.  
(b) Write the composition and functions of pancreatic juice.
- 4 (a) Write a note on transport of respiratory gases.  
(b) Write about the role of kidneys in acid base balance.

**PART – C**

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

- 5 Write a note on nerve impulse conduction with examples.
- 6 Write the structure and function of efferent nerve tracts in spinal cord.
- 7 Explain the movements involved in digestion process in the G.I.T.
- 8 Write a short note on BMR.
- 9 Explain the gaseous exchange in the respiratory system.
- 10 Describe the structure and write the functions of parathyroid gland.
- 11 Describe the process of micturition reflex.
- 12 Write a short note on chromosomes.
- 13 Write a short note on lung volumes and capacities.

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B.Pharm I Year II Semester (R19) Supplementary Examinations September/October 2021  
**HUMAN ANATOMY & PHYSIOLOGY – II**

Time: 3 hours

Max. Marks: 75

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Describe the formation and functions of cerebrospinal fluid.
  - (b) Discuss about the neurotransmitters in peripheral nervous system.
  - (c) What are the different phases of gastric secretion?
  - (d) Write the functions of liver.
  - (e) Define vital capacity and tidal volume.
  - (f) Discuss the functions of kidney.
  - (g) Give a brief note on disorders of thyroid gland.
  - (h) What is goiter?
  - (i) Mention the female reproductive hormones.
  - (j) Discuss the physiology of parturition.

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

- 2 (a) What is reflex action and discuss about reflex arc?  
(b) Write the anatomy and functions of cerebrum.
- 3 (a) Discuss the importance of respiratory system.  
(b) Give a brief note on Internal respiration.
- 4 (a) Discuss the regulation of hormonal secretion of pituitary gland.  
(b) Explain the physiology of pregnancy.

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

- 5 (a) Write a short note on neuralgia and synapse.  
(b) Classify neurons based on their structure and functions.
- 6 (a) Enumerate the composition and functions of gastric juices.  
(b) Give a brief note on role of pepsin in digestion of proteins.
- 7 (a) Draw a neat labelled diagram of Nephron.  
(b) Discuss the importance of Lymphatic system.
- 8 (a) What are the functions of Thymus gland?  
(b) Write a brief note on Pineal gland.
- 9 (a) Give the anatomical considerations of female reproductive system.  
(b) Write an illustrative note on physiology of menstruation.

Contd. in page 2

- 10 (a) Describe the absorption of digested food material from GIT.  
(b) Write a short note on BMR.
- 11 Write a short note on artificial respiration.
- 12 (a) What do you know about EEG?  
(b) Give a brief note on Meninges.
- 13 (a) What are the functions of testosterone?  
(b) Write a note on disorders of pancreas.

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

Time: 3 hours

Max. Marks: 75

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Mention the anatomical location and functions of cerebrum.
  - (b) What is extra pyramidal tract?
  - (c) List out the various enzymes present in the secretions of GIT.
  - (d) Draw a neat labelled diagram of stomach.
  - (e) Define hypoxia and asphyxia.
  - (f) What are functions of kidney?
  - (g) What is cretinism?
  - (h) State functions of hormones of adrenal medulla.
  - (i) What is a vasectomy and tubectomy?
  - (j) What are chromosomes and its role in genetics?

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

- 2 (a) Explain the structure and functional areas of cerebellum.
- (b) Draw a neat labeled diagram of nephron and describe how urine is formed.
- 3 (a) Describe the digestion in small intestine.
- (b) Write a note on Renin-Angiotensin-Aldosterone system.
- 4 (a) Explain the physiological role of adrenal cortical hormones.
- (b) Describe anatomy of female reproductive system.

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

- 5 (a) Enlist the functions of different cranial nerves.
- (b) Write the composition and functions of Cerebrospinal Fluid (CSF).
- 6 (a) Give a note on pepsin role in protein digestion.
- (b) Write a note on creatinine phosphate.
- 7 (a) Describe anatomy and functions of lungs with neat labelled diagram.
- (b) Define dysbarism and tidal volume.
- 8 (a) Discuss formation and role of ATP.
- (b) Write a short note on disorders of kidney.

Contd. in page 2

- 9 (a) Classify endocrine hormones and enlist their functions.  
(b) Write the functions of glucocorticoids.
- 10 (a) What is Basal Metabolic Rate (BMR)?  
(b) Discuss spermatogenesis.
- 11 (a) Write a short note on oral contraceptives.  
(b) Discuss how digestion of fat takes place.
- 12 (a) Discuss anatomy and functions of thymus gland.  
(b) What is a ganglion? Give its role in nervous system.
- 13 (a) What is oogenesis?  
(b) Draw and label diagram of a neuron.

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B.Pharm I Year II Semester (R19) Regular Examinations November 2020

**HUMAN ANATOMY & PHYSIOLOGY – II**

Time: 3 hours

Max. Marks: 75

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- What are the functions of medulla oblongata and pons?
  - Mention the anatomical location and functions of Cerebellum.
  - Write composition and functions of gastric juice.
  - Name the salivary glands and functions of their secretions.
  - With a neat labeled diagram, write the functions of nephron.
  - Define vital capacity. Write its normal value.
  - What is goiter?
  - Write the functions of ADH and oxytocin.
  - What is contraception name few contraceptive methods?
  - What is DNA and inheritance?

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

- 2
- Describe the meninges and ventricles in the brain.
  - Explain the mechanism of respiration.
- 3
- Write the anatomy of pancreas. Discuss the endocrine and exocrine secretions of pancreas.
  - Discuss the role of kidneys in acid base balance.
- 4
- Explain the physiological role of adrenal cortical hormones.
  - Briefly explain anatomy of male reproductive system.

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

- 5
- Write effects of parasympathetic stimulation.
  - Give a note on functions of hypothalamus and Cerebrum.
- 6
- Give a note on anatomy and functions of salivary glands.
  - Write about digestion of Carbohydrates.
- 7
- Write the role of chemo receptors in respiration.
  - What is Internal and External respiration?
- 8
- Define micturation and add a note on micturation reflex.
  - What is renal clearance test? Mention its types?
- 9
- Write a short note on disorders of thyroid gland.
  - Discuss briefly about feedback mechanisms involved in the secretion of hormones.

Contd. in page 2

- 10 (a) Give a note on anatomy and functions of parathyroid gland.  
(b) Describe the functions of ovary.
- 11 (a) Discuss how digestion of protein takes place.  
(b) Write a short note on menstrual cycle.
- 12 (a) What is parturition?  
(b) What is synaptic cleft? State its function.
- 13 (a) Draw a neat and labelled schematic diagram of spinal reflex arc.  
(b) Briefly explain protein synthesis.

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