

UKA TARSADIA UNIVERSITY

B.Pharm. (2nd Semester)

Subject :030020203 - Human Anatomy & Physiology II

Duration: 3 Hours

Max. Marks: 70.

Instructions:

1. Attempt all questions.
2. Write each section in a separate answer book.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.
5. Draw diagrams/figures whenever necessary.

Section-1

Q-1 (A) Do as directed: [07]

- I) Define Synapse
- II) What do you mean by Cerebro Spinal Fluid?
- III) Write main function of Diencephalon?
- IV) What is Electroencephalography (EEG)?
- V) What do you mean by endocrine and exocrine gland?
- VI) Define Neurotransmitter
- VII) What do you mean by Amnesia?

Q-1 (B) Answer the following in brief: (Any 4) [08]

- I) Draw a labeled diagram of a neuron
- II) Write function of thyroid hormones
- III) Write functions of Blood Brain Barrier (BBB)
- IV) Explain the following terms: Psychosis, Parkinsonism
- V) Explain in brief about hormone responsible for maintenance of calcium level.
- VI) Explain the following : Dwarfism, Addison's disease

Q-2 Answer the following: [10]

A) Explain anatomy and physiology of spinal chord. Write a note on Reflex arc

OR

A) Write a note on Cranial nerves

B) Enlist hormones secreted by adrenal gland. Explain in brief functions of each hormone.

OR

B) Name hormones secreted by pituitary gland. Explain the functions of each hormone.

Q-3 Answer the following in detail. (Any 2) [10]

- A) Draw a neat and labeled diagram of Brain. Write the functions of cerebrum.
- B) Explain anatomy and physiology of pancreas. Describe functions of each hormone secreted by pancreas.
- C) Differentiate parasympathetic and sympathetic nervous system.

Section-2

Q-4 (A) Do as directed: [07]

- I) Name three smallest bones present in ear.
- II) Define Glomerular filtration rate (GFR)
- III) Define Forced expiratory volume (FEV1)
- IV) What is function of Sebaceous glands?
- V) How will you differentiate between somatic cells and germ cells?
- VI) What do you mean by myopia?
- VII) Name two types of nephron.

Q-4 (B) Answer the following in brief: (Any 4)

[08]

- I) Explain the process of Oogenesis
- II) Write functions of skin.
- III) Draw a labeled diagram of lungs
- IV) Explain accommodation of eye
- V) Explain: Asthma and emphysema
- VI) Draw a labeled diagram of Kidney

Q-5 Answer the following:

[10]

A) Write in detail the process of urine formation.

OR

A) Draw labeled diagram of male reproductive system. Explain the process of spermatogenesis

B) Write about mechanism and regulation of Respiration.

OR

B) Draw well-labeled diagram of eye. Write a note on retina

Q-6 Answer the following in detail. (Any 2)

[10]

- A) Enlist female sex hormones. Write a note on Menstrual Cycle.
- B) Write a note on counter current mechanism.
- C) Describe physiology of Hearing with suitable diagram.