

B.Sc. MEDICAL TECHNOLOGY (RADIOGRAPHY & IMAGING) (BRIT)
SEMESTER -II EXAMINATION, JUNE-2026

(BRIT202) HUMAN PHYSIOLOGY -II

[Time allotted: Three Hours]

[Max Marks: 100]

Note: Read all the instructions carefully

Answer all questions in serial order, Draw suitable diagrams wherever necessary

Q. 1. Objective type questions: (Attempt All)

(10 x 02 = 20)

(Very short/ Short answer/ MCQ/ One liners/ Fill in the blanks/ True/False)

- a. Define reflex. (CO3)
- b. Brodmann area no.17 located in the occipital cortex is primary visual area. **True or False** (CO3)
- c. The sensory relay station of all sensations to the brain is _____ (CO3)
- d. Define synapse. (CO3)
- e. Name any two primary taste sensations. (CO3)
- f. The audible range of sound frequency is Hz (CO3)
- g. The normal pulse rate is _____ (CO2)
- h. The normal temperature of the body is (CO2)
- i. Chronic kidney disease leads to anemia. Is the statement **True or False?** (CO3)
- j. Undescended testis can lead to infertility. Is the statement **True or False?** (CO3)

Q. 2. Short notes/ Short answer type questions (Attempt any Five)

(05 x 04 = 20)

- a. Functions of anti-diuretic hormone. (CO3)
- b. Structure and function of taste bud. (CO3)
- c. Non-Excretory functions of kidney. (CO3)
- d. Colour vision. (CO3)
- e. Regulation of body temperature. (CO3)
- f. Functions of cerebro-spinal fluid. (CO3)
- g. Juxta Glomerular apparatus of kidney. (CO3)

Q. 3. Structured questions (Attempt any Three)

(03 x 10 = 30)

- a. What is light reflex and its types. Explain its neural pathway with a suitable diagram. (4+6) (CO3)
- b. Describe the structure and functions of basal ganglia. Write a note on Parkinson's disease. (6+4) (CO3)
- c. Enumerate the hormones produced by pancreas. Write a note on diabetes mellitus. (3+7) (CO3)
- d. Draw a well labelled diagram of nephron. Discuss countercurrent mechanism in kidney. (5+5) (CO3)

Q. 4. Long Answer/ Essay type questions (Attempt any Two)

(02 x 15 = 30)

- a. What are the maternal responses or changes in mother's body during pregnancy? (CO3)
- b. Give the normal body temperature and sites of body temperature measurement. Discuss the role of skin and hypothalamus in maintaining the body temperature. (CO2)
- c. Draw a well labelled diagram of a synapse. What are the various types of synapses? Describe properties of a synapse. (CO3)