PRACTICE SET
End Semester Examination, Spring- 2026

Program: Bachelor of Physiotherapy (BPT)
Semester: II
Subject: Physiology – II
Course Code: 23A202

Course Outcome:
On the completion of the Course, the students will be able to:

Course Outcomes	Description
CO1	Describe the function of various systems in human body.
CO2	Establish the role of individual system in maintaining homeostasis.
CO3	Deduce the abnormalities with corresponding systems.
CO4	Implement the skills of basic clinical examination.

UNIT I – Nervous System

Section A

1. Define neuron and classify different types of nerve fibers. (CO1) (LOT)(Remember)
2. Explain the concept of synapse and list its types. (CO1) (LOT)(Understand)
3. Describe the functions of the cerebellum. (CO1) (LOT)(Understand)
4. Define pain and outline its basic pathway. (CO1) (LOT)(Remember)
5. Define cerebrospinal fluid (CSF) and list its functions. (CO1) (LOT)(Remember)
6. Define autonomic nervous system and state its divisions. CO1(LOT) (Remember)

Section B

7. Analyze the relationship between structural damage and functional deficits in spinal cord injury. (CO3) (HOT)(Analyze)
8. Evaluate the role of basal ganglia in movement disorders. (CO3**)** (HOT)(Evaluate)
9. Analyze the role of hypothalamus in homeostasis. (CO2) (HOT)(Analyze)
10. Investigate the role of neurotransmitters in neurological disorders. **(**CO3) (HOT)(Evaluate)

UNIT II – Digestive System

Section A

11. Define digestion and outline its basic process with flow diagram. (CO1) (LOT)(Remember)
12. List the types of salivary glands and write about the functions of saliva. CO1 (LOT) (Remember)
13. Describe the composition of gastric juice and its function. CO1 (LOT) (Understand)
14. List the functions of the liver. CO1 (LOT) (Remember)
15. Define peristalsis and differentiate between peristalsis and segmentation. CO1 (LOT) (Apply)
16. List any four functions of the large intestine and explain its role in maintaining fluid balance. (CO2) (LOT) (Understand).

Section B

17. Analyze how gastric secretion have impact on different levels of digestion and explain its regulation in maintaining digestive homeostasis. (CO2) (HOT)(Analyze)
18. Evaluate the different intestinal movements and correlate their dysfunction with digestive disorders (CO3) (HOT) (Evaluate)
19. Analyze the role of bile in fat metabolism and correlate its impairment with clinical conditions. (CO3) (HOT) (Analyze)
20. Evaluate absorption in the small intestine and justify its role in maintaining nutritional homeostasis. (CO2) (HOT) (Evaluate)

UNIT III – Renal System

Section A

21. Describe the structure of a nephron. CO1 (LOT) (Understand)
22. Define glomerular filtration rate and list the major functions of the kidney (GFR). (CO2) (LOT) (Remember)
23. Define micturition and write about dialysis and its purpose. (CO2) (LOT) (Remember)

Section B

24. Analyze urine formation in the nephron and correlate its alteration with fluid balance (CO2) (HOT) (Analyze)
25. Evaluate the role of renin–angiotensin system in maintaining blood pressure and fluid homeostasis. (CO2) (HOT) (Evaluate)
26. Analyze the mechanism of urine concentration and its role in maintaining fluid and electrolyte homeostasis. (CO2) (HOT) (Analyze)
27. Evaluate the management of renal failure based on its effectiveness, treatment modalities, and patient outcomes. (CO4) (HOT) (Evaluate)

UNIT IV – Reproductive System

Section A

28. List the functions of male reproductive system. (CO1) (LOT) (Remember)
29. Define ovulation and describe phases of menstrual cycle. (CO2) (LOT) (Remember)
30. Define menopause and list hormones involved in pregnancy. (CO3) (LOT) (Remember)
31. Define lactation and write in detail about positive feedback mechanism. (CO1) (LOT) (Remember)

Section B

32. Analyze hormonal regulation of menstrual cycle. (CO2) (HOT) (Analyze)
33. Evaluate spermatogenesis and correlate its abnormalities with male infertility. (CO3) (HOT) (Evaluate)
34. Analyze physiological changes during pregnancy. (CO1) (HOT) (Analyze)
35. Evaluate the mechanism of parturition and explain its hormonal regulation in maintaining reproductive physiology. (CO2) (HOT) (Evaluate)

UNIT V – Endocrinology

Section A

36. Define hormone and list functions of pituitary gland. (CO1) (LOT) (Remember)
37. Define parathyroid hormone and write about thyroid hormone functions. (CO2) (LOT) (Remember)
38. Explain the role of insulin in glucose regulation and correlate its deficiency with diabetes mellitus. (CO3) (LOT) (Understand)
39. List functions of adrenal cortex. (CO1) (LOT) (Remember)

Section B

40. Analyze mechanism of hormone action. (CO2) (HOT) (Analyze)
41. Analyze the role of the endocrine pancreas in glucose regulation and apply this knowledge in the clinical assessment of a patient with diabetes mellitus.(CO4) (HOT) (Analyze)
42. Evaluate the role of adrenal hormones in stress response and justify their importance in maintaining physiological homeostasis and clinical outcomes.(CO3) (HOT) (Evaluate)

UNIT VI – Special Senses

Section A

43. Describe structure of eye and visual pathway. CO1 (LOT) (Understand)
44. Describe the structure of ear and hearing mechanism. CO1 (LOT) (Understand)
45. Apply your knowledge of the taste pathway to explain how taste perception is affected in nerve lesions. (CO3) (LOT) (Apply)
46. Describe the structure and function of olfactory receptors. (CO1) (LOT) (Understand)

Section B

47. Analyze the visual pathway and explain the effects of lesions at different levels. (CO1) (HOT)(Analyze)

48. Evaluate the mechanism of hearing and apply this knowledge in planning appropriate examination for hearing disorders. (CO4) (HOT) (Evaluate)
49. Analyze different refractive errors and correlate them with their clinical features.(CO3) (HOT) (Analyze)
50. Evaluate the physiology of taste and smell and their functional significance. (CO1) (BTL-HOT) (Evaluate)

Summary Sheet

CO Wise

CO	Q. No	Marks
CO1	1–5,11,21,28,31.34,36,39,46,47,50	170
CO2	9,16,17,20,22,23,24,2526,32,35,37,40	200
CO3	7.8,1018,19,30,33,38,42,45,49	160
CO4	27,41,48	60
Total		**590**

Unit Wise

Unit	Q. No	Marks
Unit 1	1–10	60
Unit 2	11–20	60
Unit 3	21–27	70
Unit 4	28–35	80
Uni5	36–42	70
Unit 6	43–50	80
Total		**590**

Blooms Taxonomy Level (BTL) Wise

BTL	Q. No	Marks
LOT	1–6,11–16,21–23,28–31,36–39,43–46	270
HOT	7–10,17–20,24–27,32–35,40–42,47–50	320
Total		**590**

Prepared By: Rashmi Kumari Hembrom

Disclaimer: -This is a Practice set. The Question in End term examination will differ from the Practice set. This Practice set is meant for practice only.