Reg. No.: .....

Name: .....

University of Kerala

W6929

Third Semester FYUGP Degree Examination, November 2025

Discipline Specific Core Course

ZOOLOGY

UK3DSCZOO204 - Body Functions and Regulation

Academic Level: 200-299

2024 Admission

Time: 2 Hours(120 Mins) **Max. Marks: 56**

Part A.6 Marks:Time 5 Minutes.(Cognitive Level :Remember(RE)/Understand(UN)) Objective Type.1 mark each, Answer all questions

Qn No.	Question	CL	CO
1	The part of the hypothalamus that functions as the satiety centre is Options : A)Lateral hypothalamus B)Ventromedial hypothalamus C)Arcuate nucleus D)Orbitofrontal cortex	RE	1
2	The lipostatic theory of hunger regulation is based on: Options : A)Gastric motility B)Secretion of hormones C)Blood glucose level D)Fat storage level	RE	1
3	Identify the primary trigger for renin release. Options : A)Increased blood volume B)Increased sodium concentration C)Decreased arterial blood pressure D)Decreased blood glucose levels	UN	2
4	Which hormone is known as satiety hormone? Options : A)Ghrelin B)Leptin C)Dopamine D)Serotonin	UN	1
5	Jet lag is due to: Options :	UN	3

Qn No.	Question	CL	CO
	A)Poor eating habits B)Alcoholism C)Hormonal imbalance D)Disruption of circadian rhythm		
6	Which part of the brain plays a major role in forming new memories ? Options : A)Hypothalamus B)Cerebellum C)Hippocampus D)Medulla Oblongata	UN	4

Part B.10 Marks.Time:20 Minutes (Cognitive Level:Understand(UN)/Apply(AP))Two-three sentences.2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	Identify any two reasons for hypovolemic thirst	UN	2
8	Match the following: A B 1. Interference theory A. Hippocampus 2. Principle of equipotentiality B. Skill learning 3. Consolidation C. Forgetting 4. Procedural memory D. Karl Lashley	UN	4
9	Identify any four regions of brain involved in learning and memory	AP	4
10	List the hormones involved in the regulation of hunger.	AP	2
11	A person loses a large amount of blood in an accident. Explain briefly why they feel thirsty.	AP	2

Part C.16 Marks.Time:35 Minutes.(Cognitive Level :Apply(AP)/Analyse(AN))Short Answer.4 marks each, Answer all 4 questions,choosing among options * within each question

Qn No.	Question	CL	CO
12	A) Discuss the symptoms and causes of narcolepsy. OR B) Discuss the functions of sleep.	AP	3, 1

Qn No.	Question	CL	CO
13	A) Identify and explain different anticipatory signals of thirst. OR B) Describe the symptom and causes of any two disorders of water balance	AP	2, 4
14	A) Compare the lipostatic and glucostatic theories related to hunger and eating. OR B) a) Identify the role of the arcuate nucleus in feeding regulation.	AN	3, 1
15	A) A. Differentiate between declarative (explicit) and non-declarative (implicit) memory with examples. OR B) Examine the role of long term potentiation.	AN	4, 2

Part D.24 Marks.Time: 60 Minutes.(Cognitive Level :Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer 6 Marks each.Answer all 4 questions choosing among options * within each question

Qn No.	Question	CL	CO
16	A) Explain how the feeding centres in the hypothalamus regulate hunger and satiety. OR B) Describe the causes and management of obesity.	AN	1, 1
17	A) Evaluate the neural control of sleep OR B) Evaluate the sleep disorders and their management strategies	EV	4, 4

Qn No.	Question	CL	CO
18	A) Describe the physiological basis of drinking and how water balance is maintained in the human body. OR B) Describe the hypothalamic control of thirst with reference to osmoreceptors and the renin-angiotensin system.	EV	2, 2
19	A) Describe how information is coded, stored and consolidated in human memory. OR B) Prepare an essay on early learning discoveries like Pavlov's experiment, Lashley's work and Thompson 's work.	CR	4, 4