

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2025 – 2026)

B. Sc. DEGREE EXAMINATION, APRIL 2026
PSYCHOLOGY
SECOND SEMESTER

COURSE : CORE
PAPER : PHYSIOLOGICAL PSYCHOLOGY - II
SUBJECT CODE : 25PY/MC/PH25
TIME : 3 HOURS **MAX.MARKS:100**

Q. No.	SECTION A ANSWER ALL THE QUESTIONS IN 50 WORDS EACH (4 x 3=12)	CO	KL
1	Define neuroplasticity.	CO1	K1
2	State the functions of Follicle-Stimulating Hormone (FSH) and Luteinizing Hormone (LH).	CO1	K1
3	What is osmotic thirst?	CO1	K1
4	Define engram in memory.	CO1	K1
Q. No.	SECTION B ANSWER ALL THE QUESTIONS IN 50 WORDS EACH (4 x 3=12)	CO	KL
5	Differentiate the sympathetic and parasympathetic nervous systems.	CO2	K2
6	Explain the three features of tics and Tourette's syndrome.	CO2	K2
7	Distinguish between homeostasis and allostasis.	CO2	K2
8	Explain the role of vasopressin in water regulation.	CO2	K2
Q. No.	SECTION C ANSWER ANY 2 QUESTIONS IN 600 WORDS (2 x 14=28)	CO	KL
9	<i>After a road accident, a patient remembers childhood events but cannot recall what happened just before the accident. Doctors suspect memory loss related to the injury.</i> Identify the type of amnesia reflected in the situation and illustrate the different types of amnesia.	CO3	K3
10	Imagine you have skipped meals for several hours. Explain the brain mechanisms that generate the feeling of hunger in this situation.	CO3	K3
11	Show how the phases of neurodevelopment contribute to brain development.	CO3	K3
12	<i>A mountaineer trekking in a very cold region experiences shivering, increased metabolism, and behavioural adjustments to maintain body warmth.</i> Explain how the body regulates temperature in extremely cold environments and discuss the advantages of maintaining a constant high body temperature.	CO3	K3
Q. No.	SECTION D ANSWER ANY 4 QUESTIONS IN 300 WORDS EACH (4 x 8=32)	CO	KL
13	Examine the physiological mechanisms involved in hypovolemic thirst and sodium-specific hunger.	CO4	K4
14	Differentiate the major types of memory and analyse their functional roles.	CO4	K4

15	Interpret the functions of emotions in regulating behaviour.	CO4	K4
16	Trace the postnatal development of the human brain and its behavioural implications.	CO4	K4
17	Investigate the activating effects of sex hormones in males and females.	CO4	K4
18	Analyze the psychological and social factors that contribute to the development of eating disorders in adolescents.	CO4	K4
Q. No.	SECTION E ANSWER ANY 2 QUESTIONS IN 300 WORDS (2 x 8=16)	CO	KL
19	Assess the role of the hippocampus in memory formation and retrieval.	CO5	K5
20	Evaluate the relationship between emotions and autonomic arousal.	CO5	K5
21	Discuss the characteristics of individuals with ASD and evaluate how genetic predisposition and neural abnormalities contribute to the manifestation of autism symptoms.	CO5	K5
22	Appraise how maternal behaviour influences the development and survival of offspring.	CO5	K5
