

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai — 600 044.

B.Sc. (Psy) END SEMESTER EXAMINATIONS NOVEMBER - 2023

SEMESTER - II

21UPCCT2004 - Biological Psychology-II

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Elucidate the functions of sleep.
2. Justify the possibility of resetting the human biological clock and its impact.
3. How does the maturation of the vertebrate brain, particularly during early development, influence complex cognitive functions and behaviour in adulthood?
4. Distinguish between Osmotic Thirst and Hypovolemic Thirst.
5. How does media portrayal of body image impact the onset and prevalence of eating disorders among young people?
6. Explain the functions of emotions and name the brain areas that are associated with emotions.
7. What neural mechanisms underlie the formation of long-term memories in the brain?
8. Draw and evaluate the role of the hippo campus in memory formation and retrieval.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Explain the different stages of sleep, incorporating a brain wave diagram for each stage, and emphasize the significance of Paradoxical sleep in the processes of learning and memory consolidation.
10. Relate the process of brain development and plasticity to the adaptability and learning potential of the human brain across different stages of life.
11. Correlate the role do neural pathways, particularly those involving the hypothalamus and related brain regions, play in sensing and regulating thirst to maintain proper hydration levels in the human body.

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12. Defend how the James-Lange theory links physiological responses to emotional experiences.
13. Propose and design a creative intervention or technique to aid individuals with amnesia in enhancing memory retrieval and retention, considering both technological and psychological approaches.
