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School of Biological and Life sciences**Bachelor of Science Honours in Zoology
Semester End Examination - May 2024****Duration : 180 Minutes
Max Marks : 100****Sem VI - P1UE602T - Chronobiology**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) What are proximate factors? K1 (2)
- 2) Discover the consequence on the Goldfish gonadal size if they kept in constant bright artificial light. K2 (4)
- 3) Associate the role how the of binding of Kai A with Kai C in bacteria changes Kai C its structure. K2 (6)
- 4) Identify a common method used in research to study the circadian rhythm of rats. K3 (9)
- 5) Apply your knowledge of the Drosophila molecular clock to predict how specific mutations in clock genes might impact the circadian rhythms of fruit flies. K3 (9)
- 6) Assess the role of thyroid hormone in control of seasonal reproduction. K5 (10)
- 7) Estimate the impact of recent advancements in chronobiology on our understanding of human health and well-being. K4 (12)
- 8) Summarize the organization of circadian system in multicellular animals. K5 (15)
- 9) Evaluate how the insects molecular machinery is different from mammalian clock. Explain with the help of feedback loops. K5 (15)
- 10) Compile the different types of peripheral clocks found in humans, highlighting their unique roles in coordinating rhythmic physiological processes. Evaluate the significance of the interactions between the central and peripheral clocks in maintaining overall circadian homeostasis K6 (18)