

## Biological clock BSc Part-II

Organisms possess a physiological mechanism for measuring time. This is known as biological clock.

Each biological rhythm is comprised of repeating units called cycle. The length of time required to complete an entire cycle is the rhythm's period.

The magnitude of the change in activity rate during a cycle is called the amplitude and any portion of the cycle is called phase.

Biological clocks or biological rhythms may be characterized by following properties:-

i) Whereas temperature change alters the rate of most chemical reactions and cellular processes, biological rhythms are temperature compensated.

ii) Biological clocks are generally unaffected by metabolic

Pathway or inhibitors that block biochemical pathway within cells.

iii) The period of biological rhythms occur with approximately the same frequency as one or more environmental features.

iv) Biological rhythms occur with approximately are self-sustaining, maintaining their normal cycle even in the absence of environmental cues.

v) The biological rhythm can be entrained to environmental cues. The self-sustaining mechanisms may be set and adjusted according to input from the external environment.

Parry