

3. BIOLOGICAL RHYTHMS

Choose the correct answers.

1. Biological rhythms are associated with the
a) Hormones b) Metabolic activities c) ~~Environmental frequencies~~
d) Internal body environment
2. Which of the following are nocturnal in nature?
a) Birds b) Butterflies c) ~~Moths~~ d) All of the above
3. The external behaviour of animals is controlled by
a) Endogenous activity rhythms b) Biological Clocks
c) ~~Both (a) and (b)~~ d) None of the above
4. Biological clock possesses repeating units known as
a) Periods b) ~~Cycles~~ c) Rhythms d) Motions
5. Which of the following statements about biological clock is false?
a) They are temperature compensated b) ~~They are affected by low temperature~~
c) They remain unaffected by metabolic inhibitors. d) They are controlled by the physiological process of the body.
6. Which of the following is not a type of celestial orientation?
a) Directional orientation b) Goal directed orientation
c) Nonsense orientation d) ~~Circular orientation~~
7. In an orientation, animal moves without any aim in diff. direction at a time and no biological purpose is served.
a) ~~Directional~~ b) Goal directed c) Circular d) ~~Nonsense~~.

8. Birds ~~take~~ use their biological clocks in the subcompass orientation to select a progressive change in the angle with relation to sun's position in the sky. This is called

a) Star hypothesis b) ~~sunarc hypothesis~~ c) Sundial hypothesis
d) Rhythmic hypothesis

9. Which of the following is not a rhythm?

a) Epicycle b) Lunar c) Tidal d) Solar

10. Which of the following are behavioural and physiological rhythms controlled by biological clocks occurring within the period of one year?

a) Lunar rhythms b) Circadian rhythms c) Circannual rhythms
d) Tidal rhythms

11. The pacemaker for biological clock has been studied in

a) Cockroaches b) Birds c) Mammals d) All of the above

12. _____ is mainly responsible for phase shifting in the biological pacemakers located in the eyes of the sea hare.

a) Non-cyclic ADP b) Cyclic ADP c) Non-cyclic AMP
d) Cyclic AMP

13. According to recent findings, the biological rhythms of invertebrates are controlled by

a) Neural products b) Neuroendocrine products c) Both (a) & (b)
d) None of the above