

SYLLABUS OF BIOLOGY OLYMPIAD

Biology : Diversity in Living World, Structural Organization in Plants & Animals, Cell Structure and Functions, Plants physiology, Human physiology

CLASS
11

1. Linneaus system of classification is
(A) Artificial (B) Progressive
(C) Natural (D) Phylogenetic

2. Two similar holotypes are called
(A) Isotypes (B) Syntypes
(C) Neotypes (D) Mesotypes

3. In short day plants, flowering is induced by
(A) photoperiod below a critical length and uninterrupted long night.
(B) long night
(C) short photoperiod and interrupted long night.
(D) photoperiod less than 12 hours.

4. Which of the following types of phytohormones resemble the nucleic acids in some structural aspects ?
(A) Cytokinin (B) ABA
(C) Auxin (D) Gibberellin

5. Pseudostratified epithelium is found in
(A) respiratory tract (B) kidney
(C) oesophagus (D) urinary tract

6. The nucleolus is the site of formation of
(A) ribosomes (B) spindle fibres
(C) chromosomes (D) peroxisomes

7. The cell as a basic unit of structure of living beings was discovered by
(A) Schleiden and Schwann (B) Gregore Mendel
(C) Robert Hooke (D) Aristotle

8. Soil can easily become deficient in_____ because these ions are negatively charged and do not stick to negatively charged clay particles.
(A) Nitrate (B) Ammonium
(C) Both (D) None of these

SPACE FOR ROUGH WORK

ANSWERS

(1) A (2) A (3) C (4) B (5) C (6) A (7) A (8) A

SYLLABUS OF BIOLOGY OLYMPIAD

Biology : Reproduction, Genetics and Evolution, Biology and Human welfare, Biotechnology and its Applications, Ecology and Environment

CLASS
12

1. Oestrus cycle is seen in
(A) cows and sheep (B) rats and deers
(C) dogs and tiger (D) all of the above

2. Syngamy means
(A) fusion of gametes
(B) fusion of cytoplasm
(C) fusion of two similar spores
(D) fusion of two dissimilar spores

3. What is common amongst whale, seal and shark ?
(A) Homiothermy (B) Seasonal migration
(C) Thick subcutaneous fat (D) Convergent evolution

4. In humans, male germs cells differentiate into ___ at the end of first meiotic division.
(A) spermatid (B) spermatogonium
(C) secondary spermatocyte (D) primary spermatocyte

5. Primary productivity
(A) is equal to the standing crop of an ecosystem.
(B) is greatest in freshwater ecosystems.
(C) is the rate of conversion of light to chemical energy in an ecosystem.
(D) is inverted in some aquatic ecosystems

6. Appearance of antibiotic resistance bacteria is an example of
(A) Adaptive radiation (B) Transduction
(C) Pre-existing variation (D) Divergent Evolution

7. Desired properties plants and Animals are possible by Which reproduction.
(A) Genetic Engineering
(B) Chromosomal Engineering
(C) Ekabana technology
(D) Bonsai technology

8. In an ecosystem of abiotic components which of the following occur ?
(A) Flow of energy (B) Cycling of materials
(C) Consumers (D) Flow of energy & cycling of materials

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ANSWERS

(1) D (2) A (3) D (4) C (5) C (6) A (7) A (8) B