

Topic :- Respiration in Plants

- The released energy obtained by oxidation is stored as
 - A concentration gradient across a membrane
 - ADP
 - ATP
 - NAD⁺
- Respiratory Quotient (RQ) is one in case of
 - Fatty acids
 - Nucleic acids
 - Carbohydrates
 - Organic acids
- Which of the following substrates is used in the formation of alcohol?
 - Sucrose
 - Glucose
 - Galactose
 - Fructose
- Which one is correct sequence in glycolysis?
 - G-6-P → PEP → 3-PGAL → 3-PGA
 - G-6-P → 3-PGAL → 3-PGA → PEP
 - G-6-P → PEP → 3-PGA → 3-PGAL
 - G-6-P → 3-PGA → 3-PGAL → PEP
- Cyanide resistant pathway is
 - Anaerobic respiration
 - Aerobic respiration
 - Both (a) and (b)
 - None of these
- Common enzyme in glycolysis and pentose phosphate pathway is
 - Hexokinase
 - aconitase
 - Fumarase
 - Dehydrogenase
- In aerobic respiration complete oxidation of pyruvate by the stepwise removal of all the hydrogen atom makes molecule of CO₂
 - 2
 - 3
 - 4
 - 5
- Phase common in aerobic and anaerobic respiration is
 - TCA cycle
 - Glycolysis
 - Glycogenolysis
 - ETS
- 2NADH(H⁺) produced during anaerobic glycolysis yield
 - 6 ATP molecules
 - 4 ATP molecules
 - 8 ATP molecules
 - None of these
- In the production of ethanol, pyruvic acid is first converted to acetaldehyde by the enzyme.
 - Alcohol Dehydrogenase
 - Alcohol oxidase
 - Pyruvate Dehydrogenase
 - Pyruvate decarboxylase

11. The activity of succinate Dehydrogenase is inhibited by
 a) Pyruvate b) Glycolate c) Melonate d) Phosphoglycerate
12. Citric acid is industrially best produced by
 a) *Streptococcus lactis* b) *Aspergillus niger*
 c) *Penicillium purpurogenum* d) *Lactobacillus delbreukii*
13. Respiratory substrate are the organic substance which are during respiration to liberate energy
 a) Oxidised b) Reduced c) Both (a) and (b) d) Synthesised
14. The oxidation of pyruvic acid to CO₂ and H₂O is called
 a) Fermentation b) Citric acid cycle
 c) Glycolysis d) Oxidative phosphorylation
15. Preparatory phase before fermentation is
 a) Upstream process b) Downstream process c) Inoculation d) Filtration
16. For retting of jute the fermenting microbe used is
 a) *Helicobacter pylori* b) *Methophilic bacteria*
 c) *Streptococcus lactis* d) *Butyric acid bacteria*
17. The respiratory quotient during cellular respiration would depend on the
 a) Nature of enzymes involved b) Nature of the substrate
 c) Amount of carbon dioxide released d) Amount of oxygen utilized
18. Which one of following is complex V of the ETS of inner mitochondrial membrane?
 a) NADH Dehydrogenase b) Cytochrome oxidase
 c) Ubiquinone d) ATP synthase
19. Protein directly cannot be used as a respiratory substrate, it breaks down into
 a) Amino acid b) Fatty acid c) Glycolytic acid d) Fumaric acid
20. Ethyl alcohol is commercially manufactured from
 a) Bajra b) Grapes c) Maize d) Sugarcane