

Class : XIth
Date :

Subject : BIOLOGY
DPP No. : 5

Topic :- Respiration in Plants

- Which one of the following reactions is an example of oxidative Decarboxylation?
a) Conversion of succinate to fumarate b) Conversion of fumarate to malate
c) Conversion of pyruvate to acetyl Co-A d) Conversion of citrate to isocitrate
- If O₂ is not present, yeast cells break down glucose to
a) CO₂ + H₂O b) CO₂+ Lactic acid c) C₂H₅OH + H₂O d) C₂H₅OH and CO₂
- How many ATP is released respectively when NADH and FADH₂ molecules get oxidised?
a) 3 ATP, 2 ATP b) 2 ATP, 3 ATP c) 5 ATP, 4 ATP d) 3 ATP, 5 ATP
- Release of energy by breaking down of C-C bond of various organic molecules by oxidation process for cellular use is known as
a) Respiration b) Photorespiration
c) Oxidative phosphorylation d) Combustion
- Krebs' cycle was discovered by Krebs in pigeon muscles in 1940. Which step is called gateway step/link reaction/transition reaction in respiration?
a) Glycolysis b) Formation of acetyl Co-A
c) Citric acid formation d) ETS terminal oxidation
- Correct sequence of electron acceptor of ATP synthesis is
a) cyt-a, a₃, b, c b) cyt-b, c, a, a₃ c) cyt-b, c, a₃, a d) cyt-c, b, a, a₃
- The number of ATP produced when a molecule of glucose undergoes fermentation
a) 4 b) 36 c) 2 d) 38
- Oxidative decarboxylation is
a) Pyruvic acid is oxidised to carbon dioxide b) Pyruvic acid is subsidised to oxygen
c) Pyruvic acid is oxidised to oxygen d) Pyruvic acid is subsidised to carbon dioxide
- An example of Pasteur's effect is
a) *Penicillium* b) *Pinnularia* c) *Saccharomyces* d) *Nostoc*

10. Fermentation is
 a) Anaerobic respiration
 b) Incomplete oxidation of carbohydrate
 c) Complete oxidation of carbohydrate
 d) None of the above
11. Citric acid cycle is the alternate name of which of the following?
 a) HMP shunt
 b) Glycolysis
 c) TCA cycle
 d) Calvin cycle
12. When one molecule of glucose is completely oxidized during aerobic respiration, how many molecules of carbon dioxide are released due to Tricarboxylic acid cycle?
 a) One
 b) Two
 c) Three
 d) Four
13. Fat prior to its oxidation associate with
 a) Cyclic AMP
 b) Co-A
 c) GMP
 d) ATP
14. The RQ value of oxalic acid is
 a) 1.0
 b) 0.7
 c) 4
 d) ∞
15. Energy currency of cell is
 a) Mitochondria
 b) Chloroplast
 c) ATP
 d) Glucose
16. Break down process is also called
 a) Catabolism
 b) Anabolism
 c) Both (a) and (b)
 d) All of these
17. The energy-releasing metabolic process in which substrate is oxidized without an external electron acceptor, is called
 a) glycolysis
 b) Fermentation
 c) Aerobic respiration
 d) Photorespiration
18. How many times ATP is utilised in glycolysis?
 a) 2
 b) 3
 c) 4
 d) 5
19. Aerobic respiration takes place in
 a) Mitochondria
 b) Ribosome
 c) Glogi body
 d) Both (a) and (b)
20. Sequence of events in Kreb's cycle is
 a) Acetyl Co-A \rightarrow Citrate \rightarrow Pyruvate \rightarrow Oxaloacetic acid \leftarrow fumarate \leftarrow Malate \leftarrow Succinate α -ketoglutarate
 b) Acetyl Co-A \rightarrow Citric acid \rightarrow α -ketoglutarate acid \rightarrow Oxaloacetic acid \leftarrow Malic acid \leftarrow Fumaric acid \leftarrow Succinic acid
 c) Acetyl Co-A \rightarrow Citric acid \rightarrow Malic acid Oxaloacetic \leftarrow Oxaloacetic acid Succinic \leftarrow α -ketoglutaric acid \leftarrow
 d) All are wrong