

M.C.Q.

Respiration in Plants. (C+1) class.

- Q.1. Most enzymes that take part in Kreb's cycle are located in:
- Mitochondrial matrix
 - cytoplasm
 - Inner mitochondrial membrane
 - plasma membrane.
- Q.2. Chemiosmotic theory of ATP synthesis in mitochondria is based on:
- Ca^{++} gradient
 - K^{+} gradient
 - H^{+} gradient
 - Na^{+} gradient.
- Q.3. Which of the metabolite is common to respiration mediated breakdown of fats, carbohydrates and proteins?
- glucose 6-Phosphate
 - fructose 1,6-biphosphate
 - Pyruvic acid
 - acetyl Co-A.
- Q.4. Oxidative phosphorylation refers to
- Anaerobic production of ATP
 - The citric acid cycle production of ATP
 - Production of ATP by chemiosmosis
- Q.5. The respiratory quotient during cellular respiration would depend on:
- The nature of enzyme involved
 - The nature of substrate
 - The amount of CO_2 released
 - The amount of O_2 utilized
- Q.6. The enzyme releasing process in which the substrate is oxidised without an electron acceptor is called:
- aerobic respiration
 - Glycolysis
 - fermentation
 - Photorespiration
- Q.7. Anaerobic respiration in muscles give rise to one of the following:
- $C_3H_6O_3$
 - CH_3COOH
 - C_2H_5OH
 - CH_3COOH .

- Q.8. How many citric acid cycles are required for each glucose molecule?
 a) 2 b) 4 c) 6 d) 8.
- Q.9. How many ATP molecules will be formed by one glucose molecule in aerobic respiration?
 a) 30 b) 38 c) 40 d) 28.
- Q.10. Which of the following processes makes direct use of oxygen?
 a) Glycolysis b) fermentation c) electron transport
 d) Kreb's cycle.
- Q.11. Respiratory cycle where mainly NADPH_2 are produced as
 a) Calvin cycle b) Kreb's cycle c) EMP pathway d) HMP shunt
- Q.12. During which stage in the complete oxidation of glucose are the greatest number of ATP molecules formed from ADP
 a) Conversion of Pyruvic acid to acetyl Co-A
 b) Electron transport chain
 c) Glycolysis
 d) Kreb's cycle.
- Q.13. Which of the following most commonly act as H⁺ acceptor?
 a) NAD and NADP b) FMN and FAD
 c) ~~FMN~~ FMN and NAD d) FAD and NAD
- Q.14. Injury to plants leads to:
 a) Increase in respiration
 b) decrease in respiration
 c) no change in respiration
 d) First decrease and then increase in respiration
- Q.15. Which is the first step of Glycolysis?
 a) Conversion of glucose to fructose
 b) dehydrogenation of glucose
 c) breakdown of glucose
 d) Phosphorylation of glucose