

## DPP

DAILY PRACTICE PROBLEMS

**Class : XI<sup>th</sup>**

**Date :**

**Subject : BIOLOGY**

**DPP No. : 3**

### Topic :- Respiration in Plants

- Oxidation of one molecule of NADH gives rise to
  - 3 ATP molecules
  - 12 ATP molecules
  - 2 ATP molecules
  - 1 ATP molecule
- Aerobic respiratory pathway is appropriately termed as
  - Catabolic
  - Parabolic
  - Amphibolic
  - Anabolic
- In alcohol fermentation,
  - There is no electron donor
  - Oxygen is the electron acceptor
  - Triose phosphate is the electron donor, while acetaldehyde is the electron acceptor
  - Triose phosphate is the electron donor, while pyruvic acid is the electron acceptor
- In respiration breaking down of glucose with oxygen is known as
  - Oxidation process
  - Reduction process
  - Oxidation-oxaloacitination process
  - All of the above
- Net gain of ATP molecules per hexose during aerobic respiration is
  - 12
  - 18
  - 36
  - 30
- Which of these are respiratory poisons or inhibitors of electron transport chain?
  - Cyanides
  - Antimycin-A
  - Carbon monoxide
  - All of these
- Kreb's cycle is completed with the formation of
  - Citric acid
  - Oxaloacetic acid (OAA)
  - Succinic acid
  - Malic acid
- Where is ATP synthesised in glycolysis?
  - When 1, 3 di PGA is changed into 3PGA
  - When glucose is converted into glucose-6-phosphate
  - Both (a) and (b)
  - When, 1, 6 diphosphate is broken in triose phosphate
- Maximum number of ATP is obtained from
  - Glucose
  - Palmitic acid
  - Malic acid
  - $\beta$ -amino acid
- Glycolysis takes place in
  - All living cells
  - Eukaryotic cells only
  - Prokaryotic cells only
  - None of these
- Krebs' cycle begins with the reaction
  - Citric acid + acetyl Co-A
  - Oxaloacetic acid + pyruvic acid
  - Oxaloacetic acid + citric acid
  - Oxaloacetic acid + acetyl Co-A

12. Co-Factor required for formation of acetyl Co-A is  
a) TPP                                      b) Lipoic acid                                      c)  $Mg^{2+}$ , Co-A                                      d) All of these
13. In anaerobic respiration in plants  
a) Oxygen is absorbed                                      b) Oxygen is released  
c) Carbon dioxide is released                                      d) Carbon dioxide is absorbed
14. The respiratory quotient (RQ) of some of the compounds are 4,1 and 0.7. These compounds are identified respectively as  
a) Malic acid, palmitic acid and tripalmitin                                      b) Oxalic acid, carbohydrate and tripalmitin  
c) Tripalmitin, malic acid and carbohydrate                                      d) Palmitic acid, carbohydrate and oxalic acid
15. The enzyme ..... is used to catalysed when condensation of acetyl group with oxaloacetic acid and to yield citric acid  
a) Citrate permeate                                      b) citrate synthase                                      c) Citrate burate                                      d) Citrate maliate
16. The respiratory quotient (RQ) of a germinating castor seed is  
a) Equal to one                                      b) Greater than one                                      c) Less than one                                      d) Equal to zero
17. Glycolysis  
I. causes partial oxidation of glucose (one molecule) to form 2-molecules of pyruvic acid and 2 ATP as net gain  
II. takes place in all living cells  
III. uses 2 ATP at two steps  
IV. scheme was given by Gustav Embden, Otto Mayerhof and J Parnas  
Choose the correct option containing appropriate statements from the above  
a) I, II and III                                      b) I, II and IV                                      c) I, II, III and IV                                      d) Only I
18. During oxidative phosphorylation, the net gain of ATP is  
a) 40                                      b) 38                                      c) 34                                      d) 30
19. Decarboxylation is involved in  
a) Electron transport system  
b) Glycolysis  
c) Krebs' cycle  
d) Lactic acid fermentation
20. Alternate name of TCA cycle is  
a) Kreb's cycle                                      b) Grab's cycle                                      c) Mayerhoff cycle                                      d) Embden cycle