DPP
DAILY PRACTICE PROBLEMS

Class : XIth **Subject : BIOLOGY**
Date : **DPP No. : 3**

Topic :- Respiration in Plants

1. Oxidation of one molecule of NADH gives rise to
   a) 3 ATP molecules b) 12 ATP molecules c) 2 ATP molecules d) 1ATP molecule

2. Aerobic respiratory pathway is appropriately termed as
   a) Catabolic b) Parabolic c) Amphibolic d) Anabolic

3. In alcohol fermentation,
   a) There is no electron donor
   b) Oxygen is the electron acceptor
   c) Triose phosphate is the electron donor, while acetaldehyde is the electron acceptor
   d) Triose phosphate is the electron donor, while pyruvic acid is the electron acceptor

4. In respiration breaking down of glucose with oxygen is known as
   a) Oxidation process b) Reduction process
   c) Oxidation-oxaloacitation process d) All of the above

5. Net gain of ATP molecules per hexose during aerobic respiration is
   a) 12 b) 18 c) 36 d) 30

6. Which of these are respiratory poisons or inhibitors of electron transport chain?
   a) Cyanides b) Antimycin-A c) Carbon monoxide d) All of these

7. Kreb's cycle is completed with the formation of
   a) Citric acid b) Oxaloacetic acid (OAA)
   c) Succinic acid d) Malic acid

8. Where is ATP synthesised in glycolysis?
   a) When 1, 3 di PGA is changed into 3PGA
   b) When glucose is converted into glucose-6-phosphate
   c) Both (a) and (b)
   d) When, 1, 6 diphosphate is broken in triose phosphate

9. Maximum number of ATP is obtained from
   a) Glucose b) Palmitic acid c) Malic acid d) β-amino acid

10. Glycolysis takes place in
    a) All living cells
    b) Eukaryotic cells only
    c) Prokaryotic cells only
    d) None of these

11. Krebs' cycle begins with the reaction
    a) Citric acid +acetyl Co-A
    b) Oxaloacetic acid + pyruvic acid
    c) Oxaloacetic acid + citric acid
    d) 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 in 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