PG-CET-BOTANY

PRACTICE BITS ON "RESPIRATION"-I

1) Respiration is a _____ process.

1) Oxidative, catabolic, exergonic, exothermic
2) Oxidative, anabolic, exergonic, exothermic
3) Oxidative, catabolic, endergonic, exothermic
4) Oxidative, anabolic, endergonic, endothermic

2) Which of the following is not required during glycolysis?

1) Mg 2) ATP 3) NADP 4) Glucose

3) If DHAP is not isomerised during Glycolysis, what would be the yield of net energy in Glycolysis?

1) only 2 $NADH_2$ 2) only 1 $NADH_2$ 3) I $NADH_2$ & 2 ATP 4) I $NADH_2$ & 1 ATP

4) Anaerobic respiration is low energy yielding process because

1) Mitochondria is not involved
2) Glucose is not completely oxidised
3) Lactic acid is produced which prevents further oxidation
4) Accumulation of more CO_2, inhibits aerobic respiration

5) Which of the following enzyme is not common in Glycolysis & Calvin cycle?

1) Aldolase 2) Triose phosphate isomerase
3) Phospho glycero mutase 4) Phospho glycero kinase

6) During Lactic acid fermentation

1) O_2 is used & CO_2 is released 3) O_2 is not used & CO_2 is released
2) O_2 is used & CO_2 is not released 4) O_2 is not used & CO_2 is not released

7) ATP is formed during

1) Photo phosphorylation 2) Oxidative phosphorylation
3) Substrate level phosphorylation 4) All of these

8) The number of glucose molecules required to produce 36 ATP molecules under anaerobic conditions by yeast cell is

1) 1 2) 2 3) 18 4)36

9) Inhibition of anaerobic respiration by high O_2 concentration is called

1) warburg's effect 2) Pasteur's effect
3) Gibb's effect 4) Black man's effect

Answers-- 1-1, 2-3, 3-2, 4-2, 5-4, 6-4, 7-4, 8-3, 9-2

10) During aerobic respiration

1) Glucose is reduced 2) CO_2 is reduced
3) 0_2 is reduced 4) H_2O is oxidised

11) During aerobic respiration most of the energy formed from glucose is

1) Released in the form of ATP 2) Stored in the form of ATP
3) Stored in the form of $NADH_2$ 4) Released in the form of Heat

12) $NADH_2$ formed during anaerobic glycolysis yields

1) 1 ATP 2) 2 ATP 3) 3 ATP 4) No ATP formation

13) Which of the following is not a Tri caryboxylic acid formed during Kreb's Cycle?

1) α-KGA 2) Oxalosuccinic acid 3) Cis-aconitic acid 4) Isocitric acid

14) Decarboxylation does not occur during

1) Alcoholic fermentation 2) Glycolysis
3) Formation of acetyl Co-A 4) Kreb's Cycle

15) Biologically most active form for oxidation during glycolysis is

1) Fru-1,6-bis phosphate 2) DHAP 3) G-3-P 4) Glucose

16) During aerobic respiration, maximum number of ATP are synthesized in

1) Glycolysis 2) Link reaction 3) Krebs cycle 4) ETS

17) The enzyme code for hexokinase (Glucose-6-phospho transferase) is

1) 2.1.7.2 2) 2.7.1.2 3)2.1.2.7 4)2.7.2.1

18) Which of the following is required for both Photo phosphorylation & Oxidative phosphorylation?

1) Cytochrome-C 2) Ferredoxin 3) ATPase 4) H_2O

19) Which enzyme of Krebs cycle is located in inner mitochondrial membrane?

1) ATP synthase 2) Cytochrome -C-oxidase
3) Succinic dehydrogenase 4) NADH dehydrogenase

20) "Connecting link" between aerobic and anaerobic respiration is

1) Acetyl CoA 2) Pyruvic acid 3) G-3-P 4) Fru-1,6-bis phosphate

21) During aerobic respiration, oxygen is required for

1) Glycolysis 2) Kreb's cycle 3) Link reaction 4) ETS

Answers—10-3, 11-4, 12-4, 13-1, 14-2, 15-3, 16-4, 17-2, 18-3, 19-3, 20-2, 21- 4.

22) During ETS, 2 $FADH_2$ formed in Krebs cycle give

1) 2 ATP 2) 4 ATP 3) 6 ATP 4) No ATP formation at all

23) Glycolysis is a

1) oxidative process 2) reductive process
3) anabolic process 4) endergonic process

24) Which of the following reduced Co-enzymes will give more ATP during ETS?

1) $NADH_2$ formed in Glycolysis 2) $FADH_2$ formed in Krebs cycle
3) $NADH_2$ formed in Link reaction 4) All of these

25) The one & only 5C compound formed during Krebs cycle is

1) α-KGA 2) Succinyl Co-A 3) Fumaric acid 4) Malic acid

26) One Sucrose gives ------ATP during Aerobic respiration

1) 18 2) 36 3) 38 4) 76

27) The enzyme that catalyses phosphorylation of the substrate without involvement of ATP during Glycolysis is

1) G-3-P dehydrogenase 2) Phosphofructokinase
3) Hexokinase 4) Pyruvate kinase

28) The Competitive inhibitor for succinic dehydrogenase is

1) Malic acid 2) Succinic acid 3) Malonic acid 4) Succinyl Co-A

29) The no of CO_2 molecules released during Krebs cycle from 1 glucose are

1) 1 2) 2 3) 3 4) 4

30) The final electron acceptor during ETS is

1) O_2 2) H_2O 3) ATP 4) CO_2

Answers—22-2, 23-1, 24-3, 25-1, 26-4, 27-1, 28-3, 29-2, 30-1

ALL THE BEST

By

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