



# INDIAN SCHOOL NIZWA - WORKSHEET

## BIOLOGY

### CH-14 PLANT RESPIRATION

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Class: XI-A

- 1 Define respiration
2. Why is stepwise release of energy useful to organisms?
3. What are respiratory substrates?
- 4 Give balanced equation of respiration.
- 5 Which are the organs for gaseous exchange in plants?
- 6 Why can plants get along without respiratory organs? Give reasons
- 7 Give schematic representation of mechanism of aerobic respiration
- 8 (a) Give schematic representation of glycolysis.  
(b) What are its end products?  
(c) How many ATP & NAOH produced by it.
- 9 Explain fermentation in yeast.
- 10 (a) Give schematic representation of Kreb's Cycle.  
(b) What is the net gain of NADH + A+ in the cycle?  
(c) What is the no. of CO<sub>2</sub> produced in it?  
(d) Give significance of TCA cycle
- 11 Give schematic representation of election transport chain in mitochondria & give role of complex I, II, III, IV & V.
- 12 In tabular form calculate the total No. of ATP produced from one molecule of glucose during aerobic respiration.
- 13 Justify the statement. "Respiratory pathway – An amphibolic pathway."
- 14 What is respiratory quotient? Give R.Q. values for carbohydrate, fats proteins & organic acids.
- 15 a)What is oxidative decarboxylation?  
b) What happens to pyruvate immediately after the reaction?  
c)Name the enzyme involved in the reaction.



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