Quality Checkers Only way to fulfill your dreams	XI-SCI : Biology Respiration and Energy Transfer,	**DATE:** **TIME: 1 hour 30 minutes** **MARKS: 25**
	SEAT NO:	

Note:-

1. All Questions are compulsory.
2. Numbers on the right indicate full marks.

Section A

Q.1 Select and write the correct answer. **(4)**

1. The reactions of the TCA cycle occur in

   A) ribosomes B) grana
   C) mitochondria D) endoplasmic reticulum

2. The intermediate between glycolysis and TCA cycle is

   A) Pyruvic acid B) Oxaloacetate
   C) Acetyl-CoA D) Glucose -1,6, bisphosphate

3. Respiration in cells takes place in

   A) ribosomes B) nucleus
   C) golgi body D) mitochondria

4. Reduced ubiquinone is called as

   A) Coenzyme Q B) Ubiquinine
   C) Ubiquine D) Ubiquinol

Q.2 Answer the following. **(3)**

1. Where is the respiration electron transport system located in a cell?
2. What is aerobic and anaerobic respiration?
3. Define the Terms :
   Anaerobic respiration

Section B
Attempt any Four

Q.3 Give overall reaction of lactic acid fermentation. **(2)**

Q.4 Why do athletes like sprinters have higher proportion of white muscle fibers? **(2)**

Q.5 What is the advantage of step wise energy release in respiration? **(2)**

Q.6 Name all the 5 complexes of electron transport system. **(2)**

Q.7 Why do organisms take up oxygen and release carbon dioxide? **(2)**

Q.8 Why is Krebs cycle referred as amphibolic pathway? **(2)**

Section C
Attempt any Two

Q.9 Describe the connecting link between glycolysis and Krebs cycle. OR Describe the acetylation of pyruvate. **(3)**

Q.10 Long answer questions: **(3)**
Compare : Photosynthesis and Respiration.

Q.11 Differentiate between : Glycolysis and Krebs cycle. **(3)**

Section D
Attempt any One

Q.12 Demonstrate an experiment to show anaerobic respiration in yeast. **(4)**

Q.13 Explain: (a) Photophosphorylation (b) Substrate-level phosphorylation (c) Oxidative phosphorylation **(4)**