



# BIOLOGY

## NEET & AIIMS

### MOCK TEST 22

#### Example

1. When  $C_3$  plants allowed to grow  $O_2$  enriched atmosphere ,it leads to

A. Increase in the name of photosynthesis

B. Decrease in rate of photosynthesis

C. Decrease in Photorespiration

D. Increase in rate of respiration

**Answer: B**



**Watch Video Solution**

2. Light saturation occurs at \_\_\_\_\_ of the total sunlight available to the plants

A. 2-4%

B. 0.1

C. 0.5

D. 0.05

**Answer: B**



**Watch Video Solution**

3. Major major limiting factor for the rate of photosynthesis under the natural environmental conditions is

A. Temperature

B. Light

C. CO<sub>2</sub> concentration

D. Water

**Answer: C**



**Watch Video Solution**

**4. Choose the correct statement w. r.t. RuBisCO**

- A. Binding of  $O_2$  and  $CO_2$  at active site is not competitive
- B. Can bind to  $O_2$  and  $CO_2$  with equal affinity
- C. Participate in photo respiration
- D. A in bundle sheath cells

**Answer: C**



**Watch Video Solution**

5. Select the correct statement with respect to photorespiration

A. There is neither synthesis of sugar nor

ATP

B. It results in the release of CO<sub>2</sub> without

utilisation of ATP

C. there is no synthesis of ATP but the

synthesis of NADPH occurs

D. it occurs in plants which have Kranz anatomy

**Answer: A**



**Watch Video Solution**

6. Photorespiration in low light intensity light in  $C_3$  plants is

A. high

B. negligible

C. moderate

D. very high

**Answer: B**



**Watch Video Solution**

7. Choose the correct option w.r.t. optimum temperature required for photosynthesis

A. wheat -  $30^{\circ}\text{C}$  to  $40^{\circ}\text{C}$

B. rice  $30^{\circ}$  -  $45^{\circ}\text{C}$  centigrade



C. Sorghum 20°-25°C

D. Maize- 30° -45° C

**Answer: D**



**Watch Video Solution**

**8.** Read the statements carefully and choose the correct option A) heat is well adapted to tolerate high temperature. B) Bundle sheath cells of maize seeds are larger thick walled without intercellular space. C) Breakdown of

C<sub>4</sub> acid and C<sub>4</sub> pathway occurs in bundle  
sheath cells D) C<sub>4</sub> plants shows CO<sub>2</sub>  
concentration mechanism

A. A, B and D are correct

B. B, C and D are correct

C. A and D are incorrect

D. B and C are incorrect

**Answer: B**



**View Text Solution**

9. Observe the graph between light intensity and the rate of photosynthesis. Choose the correct graph w.r.t. A,B,C,D,E mentioned in the graph. a. (A) (l) Value of light intensity after which there is no increase in the rate of photosynthesis.

A. a(iii), b(iv), c(i), d(ii)

B. a(iv), b(iii), c(i), d(ii)

C. a(iii), b(iv), c(i), d(ii) (2) a(iv), b(iii), c(i),  
d(ii)

D. a(iv), b(iii), c(i), d(ii)

**Answer: A**



**View Text Solution**

**10.** W are substrates of protein and protoplasmic respiration respectively

- A. Fat and carbohydrate
- B. Protein and carbohydrate
- C. Carbohydrate and protein
- D. Fat and lipid

**Answer: C**



**Watch Video Solution**

**11.** What is the site of glycolysis pathway in all living organisms

A. Cytoplasm in anaerobes whereas mitochondria in aerobes

B. Mitochondria in anaerobes whereas cytoplasm in aerobes

C. Cytoplasm in both anaerobes and aerobes

D. Mitochondria in both anaerobes and aerobes

**Answer: C**



**Watch Video Solution**

**12.** Step catalyzed by pacemaker enzyme of EMP pathway is

A. Phosphorylation of Glucose-6-phosphate to Fructose-6-phosphate

B. Phosphorylation of Fructose-6-phosphate to Fructose-1-6-bisphosphate

C. Phosphorylation of triose phosphate to triose bisphosphate

D. Splitting of Fructose 1-6-bisphosphate

**Answer: B**



**Watch Video Solution**

**13.** Choose the incorrect statement regarding glycolysis

A. The net gain of ATP in this process is 2 ATP molecules

B. During activation phase of this process, 1 mol of NADH is produced

C. Second half of this process is referred as Pay-off phase

D. Each glucose molecule produces 2 molecules of pyruvic acid after partial



oxidation

**Answer: B**



**Watch Video Solution**

**14.** Which of the following reaction involved substrate - level phosphorylation ?

A. 1, 3-bisphosphoglyceric acid  $\rightarrow$  3 phosphoglyceric acid

B. Glyceraldehyde 3-phosphate rarr 1. 3-  
bisphosphoglyceric acid

C. Phosphoenolpyruvate rarr  
phosphoglycerate

D. Fructose-6-phosphate rarr Fructose-1, 6-  
biphosphate

**Answer: A**



**Watch Video Solution**