



GRADE-X

CYCLE TEST -I

MARK: 20

DATE: 12/7/22

SCIENCE-BIO (086)

TIME: 20 min

I. Choose the best answer for the following:

(1x5=5)

1. How many molecules of ATP are produced by the one cell during anaerobic respiration?

- A) 2 B) 4 C) 16 D) 20

2. Transpiration has been described as a 'necessary evil' because it is inevitable, but potentially harmful. Which of the following statements describe this?

(i) It causes absorption of mineral salts.

(ii) It regulates plant temperature.

(iii) It causes wilting and injury in plants

(iv) It causes ascent of sap.

- A) (i) and (iv) only B) (i), (ii) and (iii) only
C) (i), (ii) and (iv) only D) (i), (ii), (iii) and (iv)

3. Which one of the following statements is correct?

Statement 1: In aerobic respiration, 38 molecules of ATP are produced by complete oxidation of one gram-mole of glucose.

Statement 2: In anaerobic respiration only 2 molecules of ATP are formed.

- A) Statement 1 B) Statement 2
C) Both the statement is correct D) Both statements are in correct

4. Which of the following acids is the end product of Fermentation?

- A) Lactic acid B) Hydrochloric acid
C) Citric acid D) Pyruvic acid

5. Lenticels are present in:

- A) Roots of small herbaceous plants.
- B) Stems of large plants and trees.
- C) Leaves of small herbaceous plants.
- D) All the above

II. Short answers type questions:

(2x2=4)

6. How does gaseous exchange take place in the lower plants?

7. After a vigorous exercise you may experience cramps in your leg muscles. Why does this happen?

III. Give brief answers for the following:

(3x2=6)

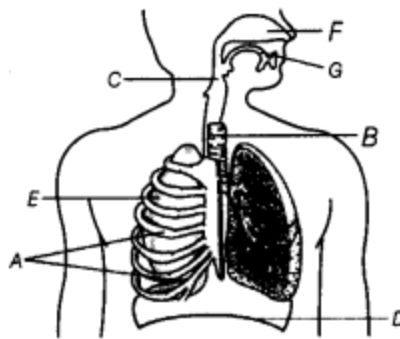
8. Compare and contrast aerobic respiration and anaerobic respiration.

9. State three common features of respiratory organs of animals.

IV. Long answer type question:

(1x5=5)

10. a. Observe the given diagram of human respiratory system. List any four organs from (A) to (G).



b. A girl was suffering from cold and was sneezing continuously. She joined her family at dinner and suddenly started sneezing without covering her nose, thus sending particles all over the place. On realizing her mistake, said sorry and next time covered her nose.

- (a) During sneezing, what are the precautionary steps to be followed?
- (b) Can infections be passed from one person to another via sneezing?
- (c) Is sneezing a respiration process?
- (d) What values do we pick from this situation?

GRADE-X

CYCLE TEST -I

MARK: 20

DATE: 12/7/22

SCIENCE-BIO (086)

TIME: 20 min

I. Choose the best answer for the following:

(1x5=5)

1. How many molecules of ATP are produced by the one cell during anaerobic respiration?

- A) 2 B) 4 C) 16 D) 20

2. Transpiration has been described as a 'necessary evil' because it is inevitable, but potentially harmful. Which of the following statements describe this?

(i) It causes absorption of mineral salts.

(ii) It regulates plant temperature.

(iii) It causes wilting and injury in plants

(iv) It causes ascent of sap.

- A) (i) and (iv) only B) (i), (ii) and (iii) only
C) (i), (ii) and (iv) only D) (i), (ii), (iii) and (iv)

3. Which one of the following statements is correct?

Statement 1: In aerobic respiration, 38 molecules of ATP are produced by complete oxidation of one gram-mole of glucose.

Statement 2: In anaerobic respiration only 2 molecules of ATP are formed.

- A) Statement 1 B) Statement 2
C) Both the statement is correct D) Both statements are in correct

4. Which of the following acids is the end product of Fermentation?

- A) Lactic acid B) Hydrochloric acid
C) Citric acid D) Pyruvic acid

5. Lenticels are present in:

- A) Roots of small herbaceous plants.
- B) Stems of large plants and trees.
- C) Leaves of small herbaceous plants.
- D) All the above

II. Short answers type questions: (2x2=4)

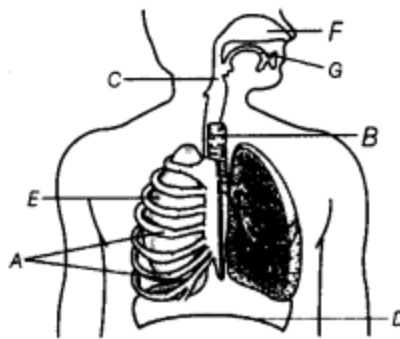
- 6. How does gaseous exchange take place in the lower plants?
- 7. After a vigorous exercise you may experience cramps in your leg muscles. Why does this happen?

III. Give brief answers for the following: (3x2=6)

- 8. Compare and contrast aerobic respiration and anaerobic respiration.
- 9. State three common features of respiratory organs of animals.

IV. Long answer type question: (1x5=5)

10. a. Observe the given diagram of human respiratory system. List any four organs from (A) to (G).



b. A girl was suffering from cold and was sneezing continuously. She joined her family at dinner and suddenly started sneezing without covering her nose, thus sending particles all over the place. On realizing her mistake, said sorry and next time covered her nose.

- (a) During sneezing, what are the precautionary steps to be followed?
- (b) Can infections be passed from one person to another via sneezing?
- (c) Is sneezing a respiration process?
- (d) What values do we pick from this situation?