

SECTION - A
Biology

1. In human beings, the implantation of fertilised egg takes place in which part of female reproductive system ?

1

(A) Oviduct

(B) Cervix

~~(C) Uterus~~

(D) Vagina

2. Yeast multiplies by which of the following methods ?

1

(A) Fragmentation

~~(B) Binary Fission~~

~~(C) Multiple Fission~~

(D) Budding

3. Identify the part that controls the closing and opening of the stomatal pore in leaves of plants.

Select the correct option.

Morning

1

(A) Stomata

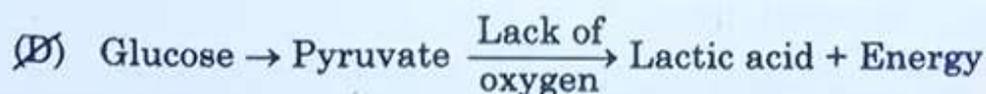
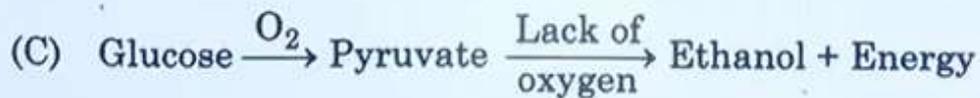
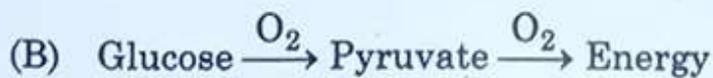
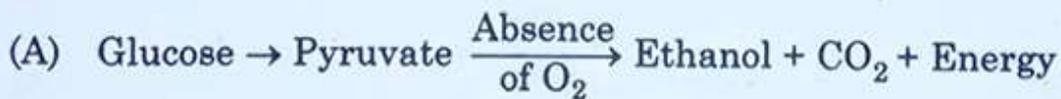
(B) Epidermal cells

(C) Guard cells

(D) Chloroplasts

4. Choose the equation of reaction that correctly represents anaerobic respiration in muscles :

1



5. Which of the following is a non-biodegradable pollutant ?

(A) Paper

~~(B) DDT~~

(C) Wood

(D) Vegetable peel

6. When a human egg is fertilized by a sperm having 'Y' chromosome, the zygote has the following combination of chromosomes :

1

(A) 44 + XX

(B) 22 + XX

(C) 44 + XY

(D) 22 + XY

pair
22 + XY

7. The reasons for excessive generation of wastes are :

- (i) Use and throw policy.
- (ii) Increased availability of packaged food.
- (iii) Increased construction wastes.
- (iv) Non-sorting of dry and wet wastes.

Options :

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

2 2 1 1 1
2 3 pair



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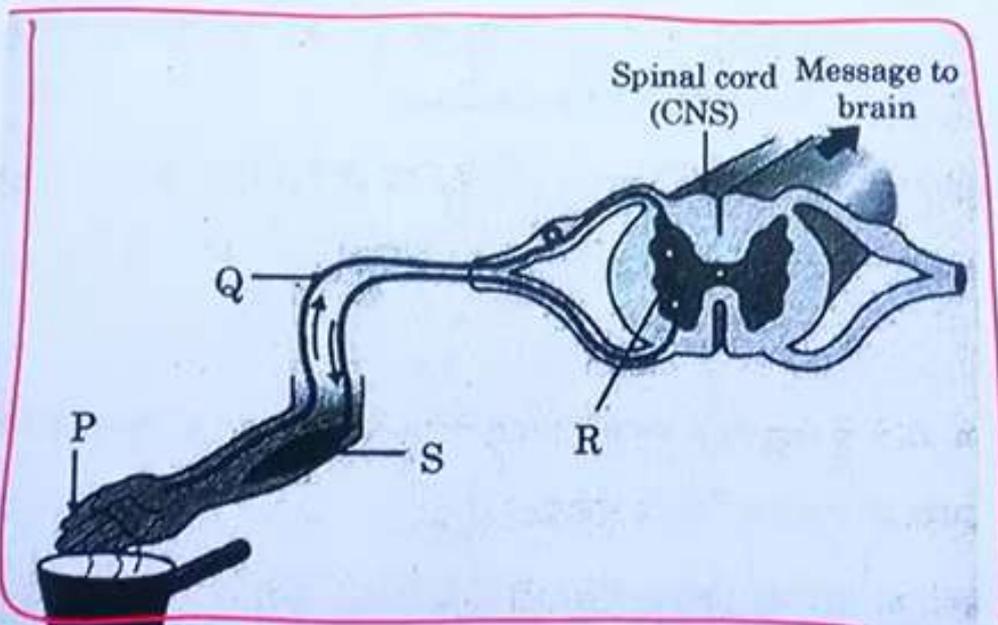
8. Assertion (A) : The peristaltic movements occur all along the gut. T 1

Reason (R) : The lining of the gut has muscles that contract rhythmically to push the food in regulated manner. T

9. Assertion (A) : Bacteria produced as a result of asexual reproduction would be similar. 1

Reason (R) : There would be only minor differences between the bacteria generated due to small inaccuracies in DNA replication. T

10. (A) Observe the given figure and identify the labelled parts P, Q, R and S : 2



OR

(B) Which of the plant hormones are responsible for the following processes ?

- (i) Promote cell division - cytokinin
- (ii) Inhibition of growth → Abscisic acid
- (iii) Detection of light → Auxin
- (iv) Wilting of leaves → Absisic Acid

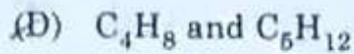
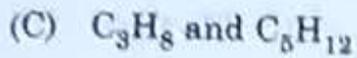
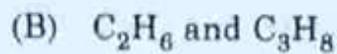
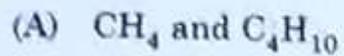
13. (a) Mention any one harmful effect of using plastic bags on the environment. Suggest better alternatives to the usage of plastic bags. 3
- (b) Paddy fields require a large amount of water. The pesticides and chemical fertilizers used are washed down into the soil or waterbodies. How do these chemicals reach our bodies ? What is this phenomenon known as ?

14. (a) Mention the gland and the hormone secreted by it in scary situation in human beings. 3
- (b) Write two responses that enable the human body to be ready to deal with such situation.

SECTION - B
Chemistry

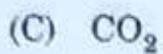
17. Which of the following set of compounds does not belong to same homologous series ?

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18. Which of the following is an amphoteric oxide ?

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19. In the following diagram, if acetic acid of same concentration is taken in place of dilute sulphuric acid, then

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