

Lesson 2: Life processes of living things - Part 1

Q.1) Choose one option and fill in the blanks

- 1) The process of glucose dissolution or glycolysis takes place in.....
a) Cytoplasm b) Fibers c) Nucleus d) Cell membrane
- 2) One glucose molecule upon oxidation releases.....molecules of ATP
a) 14 b) 28 c) 29 d) 38
- 3)molecules are obtained at the end of the glycolysis process
a) Glucose b) Pyruvate c) ATP d) Glycogen
- 4) ATP is known as
a) The currency of energy b) Cell combustion c) the store of glucose d) the currency of protein
- 5) Genetic mutation takes place in the.....phase of prophase of meiosis -1
a) Leptotene b) Zygotene c) Pachytene d) Diplotene
- 6)molecule is necessary for the formation of the cell membrane
a) Fatty acids b) Phospholipids c) Proteins d) Carbohydrates
- 7) During exercise, our muscles perform.....type of respiration

- a) Aerobic respiration b) Anaerobic respiration c) cellular respiration d) None of the above
- 8) The chemical name of vitamin B2 is
- a) Riboflavin b) Nicotinamide c) Cyanocobalmine d) Pantothenic acid
- 9) Somatic and stem cells are formed after..... division
- a) Meiosis b) Mitosis c) Gemmation d) Cloning

Q .2) Find the odd man out

- 1) Progesterone- estrogen-testosterone-insulin
- 2) Actin-Auxin-Myosin-Melanin
- 3) Alcohol - Vinegar - Pyruvic acid - Lactic acid
- 4) Fats-Carbohydrates-Fatty acids-Proteins
- 5) Diabetes-Anaemia-Leukemia-Thalassemia

Q .3) Find the co-relation

- 1) Cytoplasmic process: Glycolysis::
- 2) Skin: Keratin: : Blood:.....
- 3) Energy derived from proteins: 4Kcal: : energy derived from fats:.....
- 4) Dissolution of glucose molecule: Glycolysis: : Glucose produced from proteins:.....
- 5) Chromosome division: Prophase: : Spindle formation:

Q. 4) Explain

- 1) Cellular respiration:
- 2) Aerobic respiration:
- 3) Glycolysis:
- 4) Gluconeogenesis:
- 5) Fermentation

Q. 5) Explain with a diagram

- 1) Glycolysis and Krebs cycle
- 2) Aerobic and Anaerobic respiration

Q. 6) Explain with diagrams

- 1) With the help of a diagram explain Mitosis
- 2) With the help of a diagram explain the five phases of Prophase in Meiosis

Q. 7) Concept-based questions

- 1) Explain anaerobic respiration taking place in different living things through a diagram