SIDDHANT CLASSES

Std.: X (Semi English) | Science And Technology - II | Marks: 40

Date: 21-May-2020 | practice c2 | Time: 2 hr

Chapter:

Q.1 Multiple Choice Questions **5**

1 Cytokinesis is the division of ..... .
a. cell b. cytoplasm c. cell wall d. nucleus

2 Cell division occurring in somatic cells is ..... .
a. mitosis b. meiosis c. diakinesis d. diplotene

3 Cell organelles involved in the cellular respiration are the ..... .
a. mitochondria b. plastids c. ribosomes d. lysosomes

4 The process of release of energy from the nutrients is called.....
a. Respiration b. Photosynthesis c. Nutrition d. Absorption

5 The nuclear membrane disappears completely in ..... .
a. Prophase b. Anaphase c. Metaphase d. Telophase

Q.2 Find the odd one out **1**

1 Riboflavin, Nicotinamide, Thiamine, Iron

Q.3 Find co-related terms **1**

1 Jaggary : Carbohydrates :: egg : ..... .

Q.4 Match the pair **1**

1

	Column "A"		Column "B"
i.	Telophase	a.	Chromosomes become arranged in a plane at the equator.
ii.	Metaphase	b.	Daughter chromosomes move to opposite poles of the cell
		c.	Chromosomes become visible and centrioles moves to opposite poles of the cell.
		d.	Chromosomes lose their distinctiveness and gradually become transformed into chromatin network.

Q.5 State True or False **1**

1 Energy is required for the functioning of all the life processes.

Q.6 Name the following **1**

1 Give the names of two co-enzymes that take part in the cellular respiration.

Q.7 Give scientific reasons (Any Two) **4**

1 Oxygen is necessary for complete oxidation of glucose.

2 Fibers are one of the important nutrients.

3 Sometimes, higher plants and animals too perform anaerobic respiration.

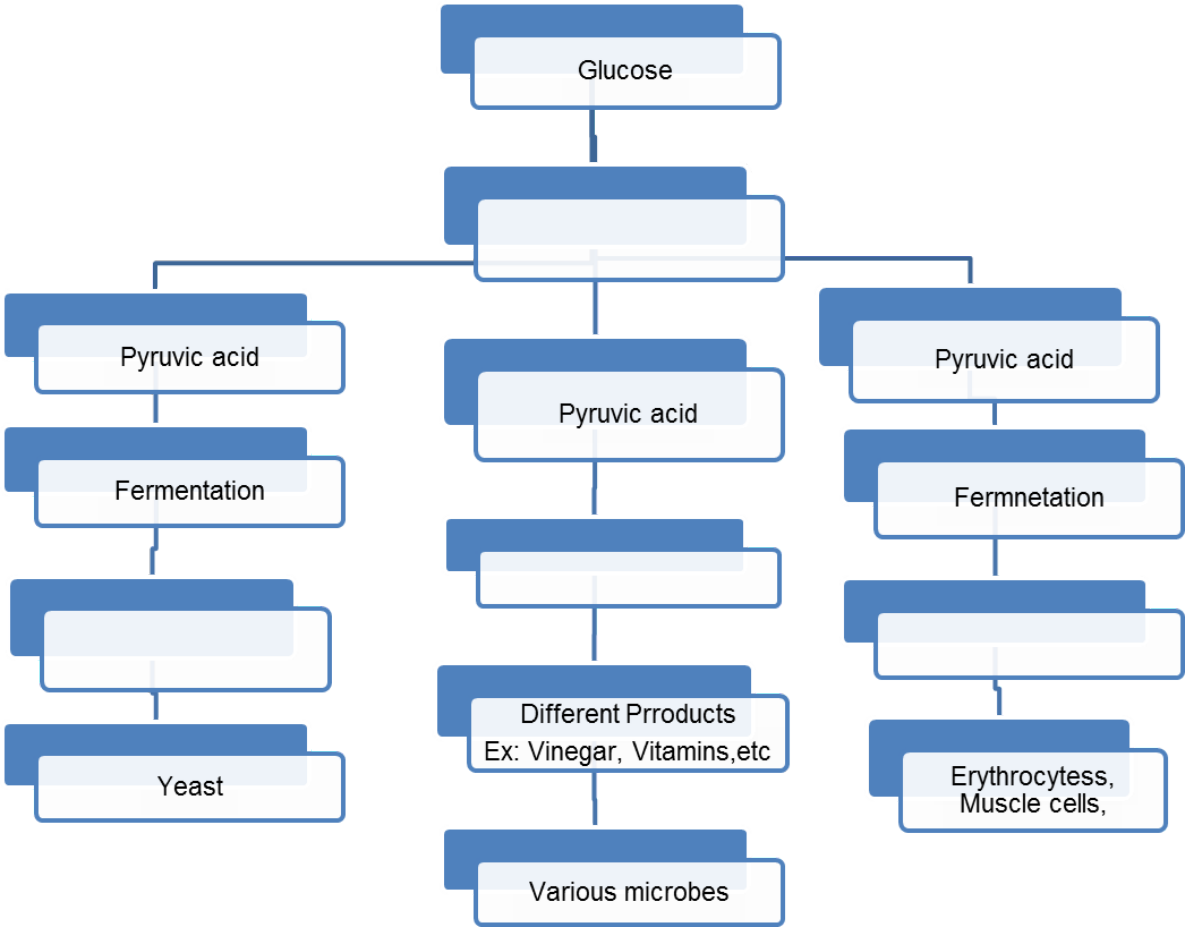
Q.8 Write Short Notes (Any One) **2**

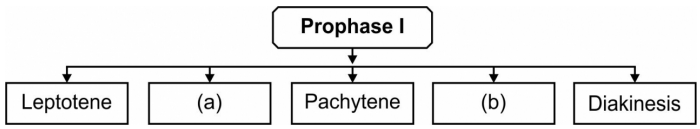
1 Write short note on Glycolysis.

2 Write short note on Electron transfer chain reaction.

Q.9 Complete the given flow chart / table (Any One) **2**

1 Complete the chart for anaerobic respiration in living organisms/ cells.



2 

Q.10 Distinguish between(Any One) **2**

1 Glycolysis and TCA cycle

2 Aerobic and Anaerobic Respirationa

Q.11 Give explanation using the given statements.(Any One) **3**

1 Fill in the blanks and explain the statements.
At the end of glycolysis, ... molecules are obtained.

2 Fill in the blanks and explain the statements.
For formation of plasma membrane, ... molecules are necessary.

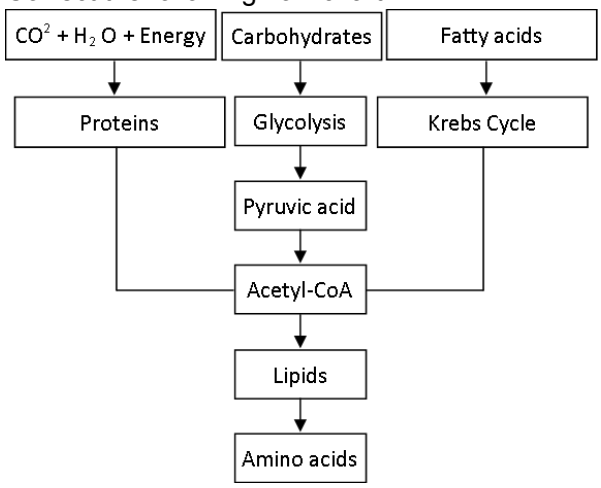
Q.12 Complete the table/ web/ flow chart (Any One) **3**

1 Complete the following table related to Proteins Amino Acids

Name of Protein/ Amino acids	Where it is found

i.	Skin
ii. Ossein	.....
iii.....	Pancreas
iv. Actin and Myosin	.....
v.	Blood

2 Correct the following flow chart.



Q.13 Complete the sentences in paragraph (Any One) **3**

1 Select the appropriate options and rewrite the following paragraph.
(Proteins, testosterone, 9 Kcal, epithelial, phospholipids, lipids, growth harmone, progesterone, 4 Keal, adipose connective)
Digestion of ..... results in formation of fatty acids and glycerol. Different cells use fatty acid to produce various substance necessary to themselves. For e.g. the molecules called ..... are required for production of plasma membrane. Fatty acids are required for production of hormones like ..... . estrogen, ... , aldosterone, etc, and the covering around the axons of nerve cells. We get ..... of energy per gram fo lipids. Excess lipids are stored in ..... tissue in the body.

2 Complete the paragraph.
(genetically, recombination, gamete, crossing over, haploid, diploid, Meiosis-II, meiosis-I, zygote)
..... is just like mitosis. In this stage, the two haploid daughter cells formed in ..... undergo division by separation of recombined sister chromatids and four ..... daughter cells are formed. Process of ..... production and spore formation occurs by meiosis. In this type of cell division, four haploid (n) daughter cells are formed from one ..... cell. During this cell division, ... occurs between the homologous chromosomes and thereby genetic ..... occurs. Due to this, all the four daughter cells are ..... different from parent cell and from each other too.

Q.14 Answer the following (Any Two) **6**

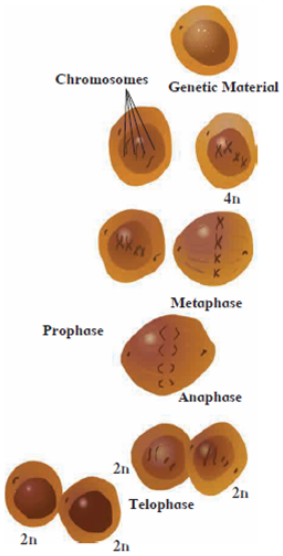
1 How all the life processes contribute to the growth and development of the body ?

2 i. Why some living organisms have to perform anaerobic respiration?
ii. Give examples of such living organisms.
iii. What are the two steps of anaerobic respiration?

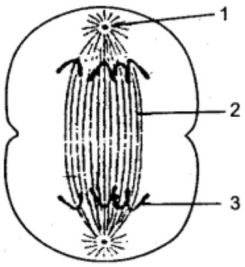
3 i. What is cell division ?
ii. Which type of cell division occurs in somatic cells of the body ?
iii. Where does meiosis occur in the body ?

Q.15 Answer the following in detail (Any One) **5**

1 Explain in detail the process mentioned in the diagram.



2 The diagram below represents a stage during cell division. Study the same and answer the questions.



i. Name the labelled parts 1,2 and 3 ?
ii. Identify the above stage and give a reason to support your answer ?
iii. Give an example of this type of cell division in the body ?
iv. Name the stage prior to this stage ?