

MODERN COLLEGE

SUCCESS DEPENDS ON THE PROPER USE OF TIME

FORM 1 (Grade 7) REVISION

1 (a) which part of any cell contain the genetic material called chromosome?

- A. Cytoplasm B. Plasma Membrane C. Vacuole D. Nucleus

(b) A cell is observed under a microscope. Which feature identifies it as a plant cell?

- A. It has a large sap vacuole
B. It contain glucose and amino acids
C. It store fat
D. The plasma membrane is partially permeable

(c) Which group of organisms are unicellular?

- A. bacteria, amoeba and yeast
B. Sea urchin, sea cucumber and fish
C. Reptile, birds and mammals
D. Mosses, ferns and conifers

(d) For the word equation that represents the process of respiration, which is the missing substances?

Food + —————> Carbon dioxide + water

- A. Hydrogen B. Oxygen C. Water Vapour D. Carbon Dioxide

(e) Although organisms die, their kind continues to live on earth. Which characteristic of living things enable this?

- A. Excretion B. Movement C. Reproduction D. Respiration

(f) Which of the following pair is not living organism.

- A. Sea urchins, sea cucumbers
B. Whales, Sharks
C. Sea weeds, grasses
D. Timbers, Statues

(g) A butterfly is a living organism because it

- A. Can reproduce
B. Has jointed legs
C. Can pollinate flowers
D. Has wings

(h) Which group of organisms are unicellular?

- A. Coral polyps, sea urchins, starfishes.
B. Toads, Tad poles, Frogs
C. Amoeba, Paramecium, Bacteria
D. Crocodile, Lizard, Snakes

(i) The parasitic protozoa called plasmodia that cause malaria disease in man is transmitted by

- A. Butterflies
B. Houseflies
C. Dogs
D. Female anopheles mosquitoes

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(j) Structures found in cells are listed below

1. Cell membrane
2. Cellwall
3. Chloroplast
4. Cytoplasm
5. Nucleus
6. Sap vacuole.

Which of these structures are found in both plant and animal cells?

- A. 1, 2 and 4
- B. 1, 4 and 5
- C. 2, 4 and 5
- D. 3, 4 and 6.

2. (a) Copy and complete the table using (✓) for correct answer and a (X) for wrong answer

1	Plant cell have a sap vacuole	
2	Yeast are unicellular used in production of bread	
3	Bacteria are multicellular organisms	
4	Magnification is the number of time an object look bigger using a microscope	
5	All flowering plant are multicellular organism	
6	Iodine solution is used to stain plant cells	

(b) Use the terms listed below to state which best describe the statement below

Movement, sensitivity, excretion, reproduction, nutrition, respiration

- (i) Process that give rise to new individual of same species
- (ii) Ability of displacement among living organisms
- (iii) Ability to detect changes in the environment by organisms
- (iv) Removal of waste products by organisms.....
- (v) Process of feeding among living organisms
- (vi) Breakdown of food to release energy in body cells of organisms

[Total: 12 Marks]

3. (a) Copy and Complete the table using the following terms

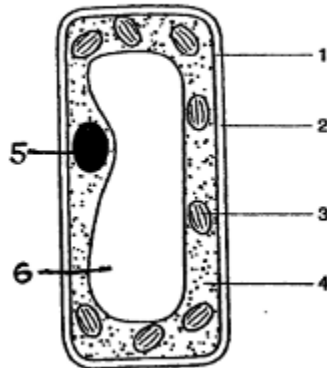
Organ, cell, organisms, tissue, organ system

	Definition	Term
1	Group of similar cell with same structure and function	
2	Group of same organ working together to perform a particular function	
3	The basic unit of life	
4	Group of tissue that work together to perform a particular function	
5	All the body system working together to make up the living thing	

- (b) (i) Name the organ that allows exchange of gases between the body and the atmosphere
- (ii) Which organs filter the blood and excrete wastes like urea and toxic substances

[Total: 7 Marks]

4. The figure below illustrates a generalised plant cell.



a) i) Part 1 controls movement of substances in and out of the cell. Name part 1.

ii) from the list below, which two molecules are small, simple and soluble that can enter the cell.

Water, proteins, starch, oxygen, fats.

iii) Which statement below best describes part 1. Copy and complete the table by using a (✓) for correct statement and a cross (X) for wrong one.

Part 1 is completely permeable	
Part 1 is partially (selectively) permeable	

b) i) Name part 2

ii) Part 2, is made up of a tough, resistant substance. Name it.

c) i) What are the small sac-like structure 3?

ii) Name its content, green in colour.

iii) State the function of this green substance

iv) Which important process takes place in the sac like structure 3.

d) What is 4, the jelly like fluid?

e)(i) Structure 5, contains thread like genetic materials made up of DNA. Name part 5.

(ii) Name the thread (or ribbon) like genetic materials

f) The large space 6, is filled with a mixture of salts, sugars and water.

Name (i) part 6

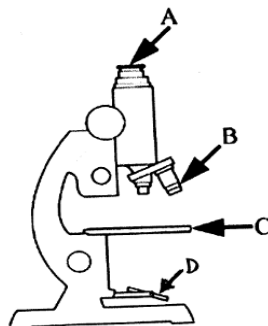
(ii) the mixture it contains.

[Total: 16 marks]

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5. The diagram given below shows the parts of a school microscope.



a) Mirror, objective lens, eyepiece, stage

Use the terms stated above to name parts A-D of the school microscope.

b) Copy and complete the table by putting a (✓) for correct statement and a cross (X) for incorrect statement.

(i)	Animal cells have large central vacuole	
(ii)	Yeasts, are the unicellular fungi used in production of breads, pizza, cakes, beers and wine.	
(iii)	Euglena, paramecium and Amoeba are unicellular organisms living in pond and river water	
(iv)	Magnification is the number of times and object looks bigger using a microscope.	
(v)	Bacteria are multicellular organism	
(vi)	All mammals including man and flowering plants are multicellular organisms.	

[Total: 10 marks]

6. a) The following include the various subunits that make up a living organism.

Organ, Cell, Organ system, Tissue, Organism.

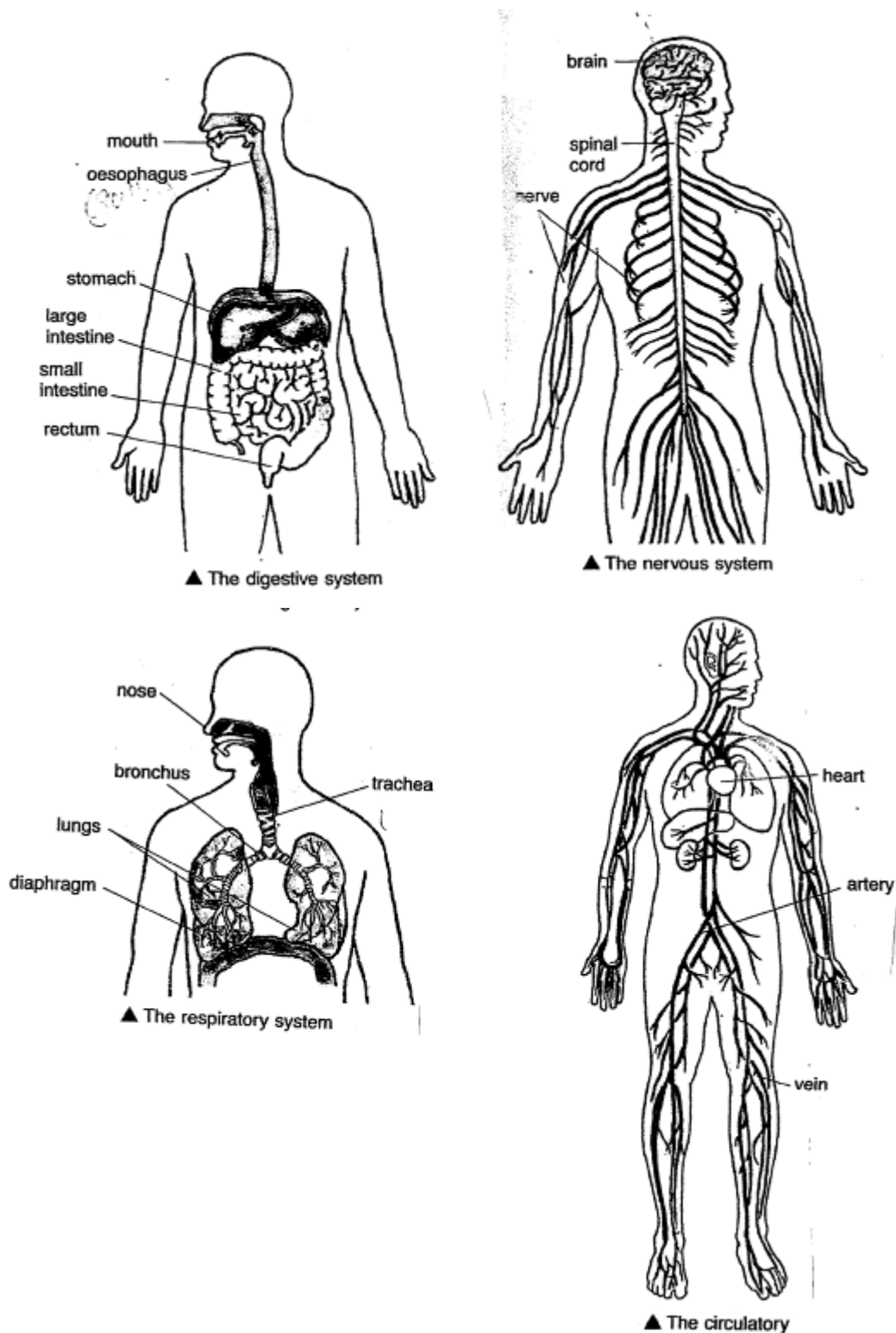
Copy and complete the table by selecting the term that correspond with the definitions.

	Definition	Term
i)	Group of similar cells with same structure and function	
ii)	Group of related organs working together for a particular function of vital importance to the body.	
iii)	Group of tissues that work together to perform a particular function.	
iv)	The basic unit of all living organisms.	
v)	All the body systems working together that make up a living thing.	

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b) Use the figures given below that best describes the following human body system.



- (1) Consists of nerves to carry messages around the body
- (2) Consists of vessels that carry blood to distribute food and oxygen to all body cells
- (3) Made up of organs that breakdown, digest and absorb food
- (4) Consists of airways and airsacs to allow exchange of gases

[Total : 9 marks]

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7. a) Tabulate three main differences between a plant cell and an animal cell.

Plant cell	Animal cell

b) i) Name the tissue that can contract to bring about movement in animals.

ii) State the organ in plants that makes food (sugars).

iii) Which organ in the plants absorb water and mineral salts from the soil.

iv) Name the organ that pumps blood around the body.

v) Name the most important organ in man that controls all body parts, body activities both mental and physical.

vi) Which plant part or organ that transports water and minerals from root to leaves.

vii) Which special cells, transfer oxygen from lungs to all body parts in man?

[Total : 10 marks]