



# FUSCO'S SCHOOL (ICSE)

Indiranagar, Bangalore  
Annual Examination 2016-17  
Subject: Biology

Marks: 80  
Time: 2hrs.

Class: VIII

## SECTION I (40 Marks)

Attempt all questions from this section

### Question -1

- a) Name the following: 5
- i) The father of Biology.
  - ii) The study of insects
  - iii) The complex tissue present in plants.
  - iv) The pigment present in potato.
  - v) A cell organelle meant for protein synthesis
- b) Fill in the blanks: 5
1. -----are the openings found on older stems.
  2. Cell wall is made up o -----
  3. The ----- plastid in plants helps in photosynthesis.
  4. ----- are hereditary units
  5. A whitish oval scar on the seed is -----
- c) Define the following: 5
1. Microbiology    2. Cell wall    3. Respiration    4. Cytology    5. Ornithology
- d) Write any one difference between the following: 5
1. Aerobic and anaerobic respiration ( gas released)
  2. Parenchyma and Collenchyma( cell structure)
  3. Embryology and Ecology (Definition)
  4. Chloroplast and Chlorophyll ( Explain)
  5. Hypogeal and epigeal germination ( Position of cotyledon)
- e. Choose the correct option from the following and complete the following: 5
- i) ----- is known as the father medicine
- a) Aristotle    b) Hippocrates    c) Theophrastus

- ii) ----- is the protective layer of radicle.  
 a) Coleorhiza    b) Epithelium    c) Scutellum
- iii) ----- is the study diseases of plants and animals  
 a) Pathology    b) immunology    c) virology
- iv) The cell of human skin contains ----- number of chromosomes  
 a) 48    b) 46    c) 23
- v) The study of survival problems of living things in outer space -----  
 a) Exobiology    b) space biology    c) biometrics

**f) State whether the given statements are true or false, correct the false statement:    5**

- i) Anaerobic respiration in plants yields lactic acid.  
 ii) Plastids are found only in animal cell  
 iii) Maize grain is fruit and not a seed.  
 iv) Bones have no blood vessels in it  
 v) The Sclerenchyma consists of actively dividing cells.

**g) Draw a neat diagram of animal cell and label all its cell organelles.    5**

**h) Match the items in Column A with those in Column B    5**

- | A              | B                          |
|----------------|----------------------------|
| a) Vacuoles    | i) intercellular digestion |
| b) Nucleolus   | ii) Respiratory enzyme     |
| c) Lysosomes   | iii) covered by tonoplast  |
| d) Anthocyanin | iv) Dissolved in cytoplasm |
| e) Cristae     | v) Forms RNA               |

### SECTION-II (40 Marks)

**Attempt all questions from this section**

#### Question-2

- a) State one difference according to what is mentioned in the bracket.    5**
- i) Leucoplast and chloroplast (pigment present)  
 ii) Xylem and phloem (function)  
 iii) Rough endoplasmic reticulum and smooth endoplasmic reticulum (reason)

- iv) Aerobic and anaerobic respiration (end products)
- v) Tendons and ligaments (function)

**b) State the role of the following:**

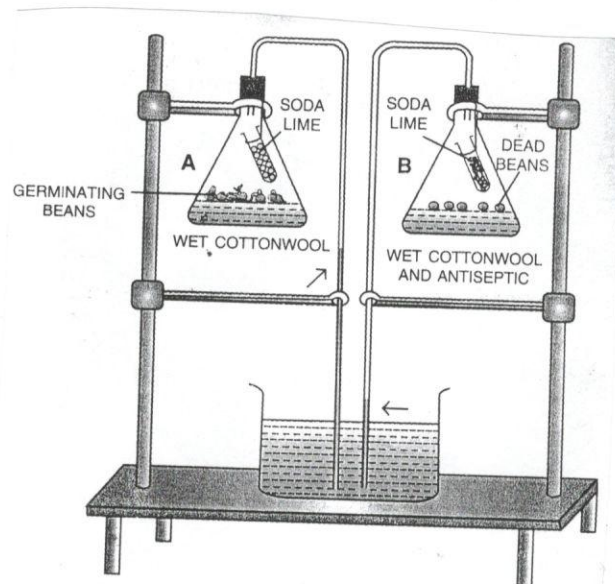
5

- i) cell membrane
- ii) centrosome
- iii) Cartilage
- iv) Nucleus
- v) ribosomes

**Question-3**

a) The following diagram refers to an apparatus which is used to demonstrate a physiological process:

5



- i) What is the purpose of keeping soda lime in the test tube?
- ii) What is the purpose of adding antiseptic to seeds?
- iii) Why the water level rises in tube connected with flask A?
- iv) Which of the two flasks A or B is control?

**b) Give technical terms for the following:**

5

- i) The category of plant tissues that have lost their ability to multiply.
- ii) Muscles found in the heart.
- iii) Cells can conduct impulses.
- iv) The tissue which binds one tissue with another
- v) Cells concerned with transportation and immunity

**Question-4**

- a) Draw a neat diagram of nerve cell and label the following parts 10
- i) Axon ii) cyton iii) mylene sheathe iv) dendrons v) nucleus

**Question-5**

- a) Name the kind of tissue found in the following 5
- i) At the tip of plant stem
- ii) In the inner lining of interstine.
- iii) At the joint between two long bones
- iv) As gritty masses in the pulp of pears.
- v) Elongated cells which are thickened at the corner

**b) Answer the following questions:**

- 1) Write the overaall chemical equations of the two kinds of respiration in plants: 3
- 2) Mention the function of the following in a seed. 2
- a) Seed coat    2) Radicle    3) Plumule    4) Micropyle

\*\*\*\*\*