GREENLAWNS HIGH SCHOOL
FINAL EXAMINATION YEAR 2016-2017

SUBJECT : BIOLOGY   CLASS : IX
TIME   : 2 HOURS   MARKS : 80

Answers to this paper must be written on the paper provided separately. You will be given 10 minutes to read the paper.
Section I is compulsory section. Solve all questions.
Section II has 5 questions. Solve any 4.
All diagrams must be neat and well labelled.

Section I

a) Name the following.   (10)
   i)   Vaccine for three diseases.
   ii)   Membrane surrounding the lungs.
   iii)   2 structures in plants that allow diffusion of gases.
   iv)   First antibiotic discovered.
   v)   Food poisoning.
   vi)   Bacteria used as a bio-weapon.
   vii)   Currency for energy in a cell.
   viii)   Organisms drawing nourishment from dead organisms.
   ix)   First substance to be produced by a GMO.
   x)   Muscles in the rib cage.

b) List 5 categories of wastes. Give 1 example for each.   (5)
c) Describe 5 ways to prevent spoilage of food.   (5)
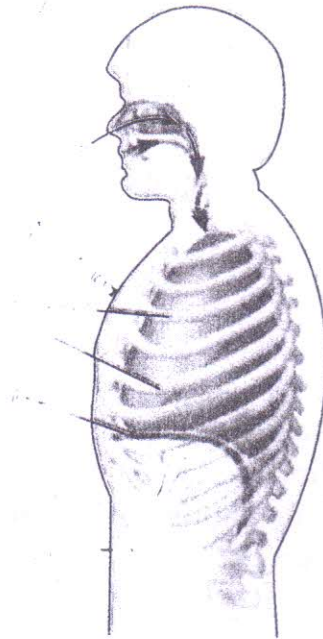d) Define the following terms.   (5)

   i)   Incubation period
   ii)   Composting
   iii)   Serum
   iv)   Toxoid
   v)   Putrefaction

e) Match the following: (5)

i)	Virus	a) Ringworm
ii)	Bacteria	b) Malaria
iii)	Mould	c) Polio
iv)	Protozoa	d) Filaria
v)	Worm	e) Tuberculoses

f) Drawn below is a diagram showing a particular phase of the respiratory cycle. Study it and answer the questions that follow.
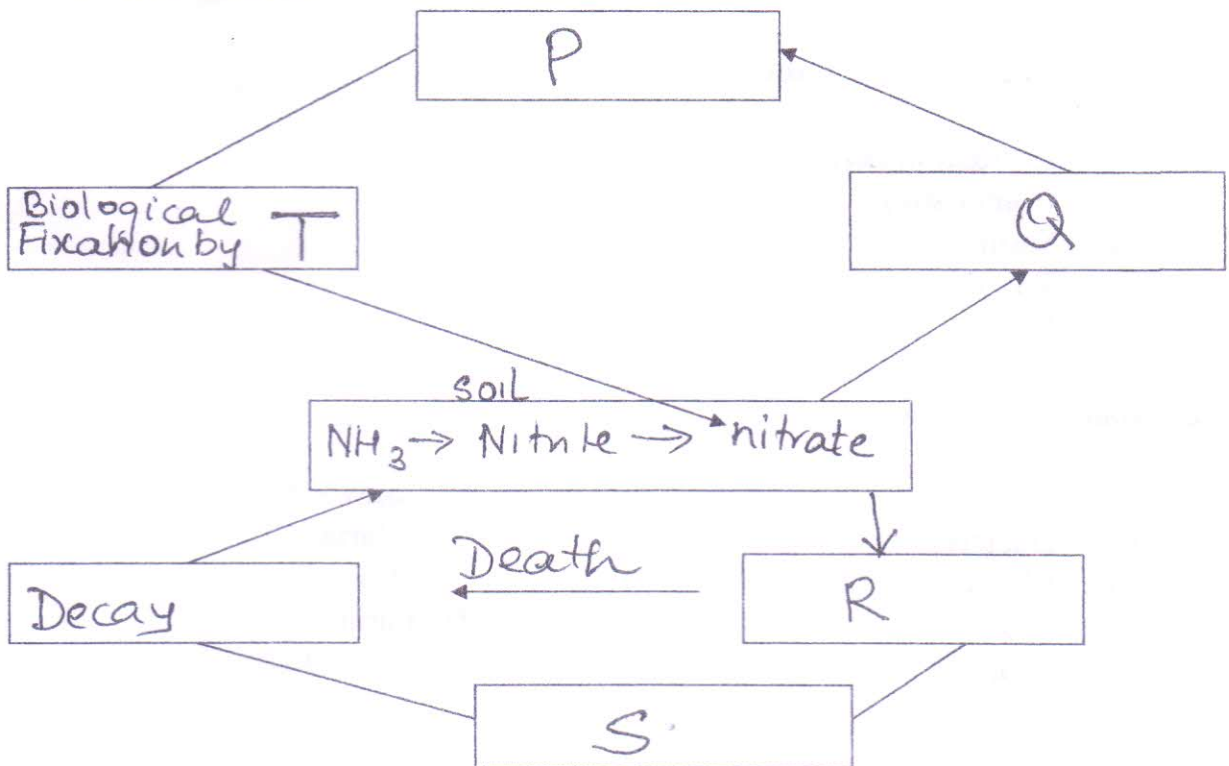
⑤

i)   Identify the phase.
ii)   Name 4 changes observed during this phase.
iii)   Name the structure that is stimulated by CO_2 content in the body.   ⑤
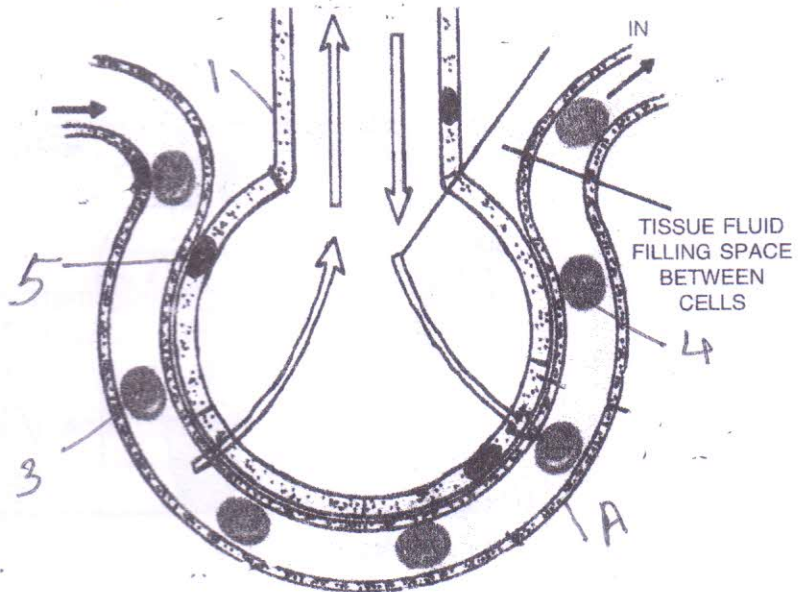iv)   Give 2 differences between inspired air/expired air.

g)

Name P, Q, R, S, T.

SECTION B

Solve any 4 from the given 5 questions.

Question 2

a) Drawn below is a diagram showing a specific structure. Study it and answer the questions that follow: (5)

i) Identify the structure.
ii) Label part 1.
iii) Why is A single layered.
iv) Give the function of 5.
v) Give 1 difference between the 3, 4.

b) Give 1 difference between the following pairs based on what is given in brackets. (5)

i) Virus/ bacteria (visibility under microscope)
ii) Aerobic/anaerobic respiration in plant(products formed)
iii) Glycolysis/kreb's cycle (process)
iv) Respiration/Burring (temperature)
vi) Hypoxia/Asphyxiation (definition)
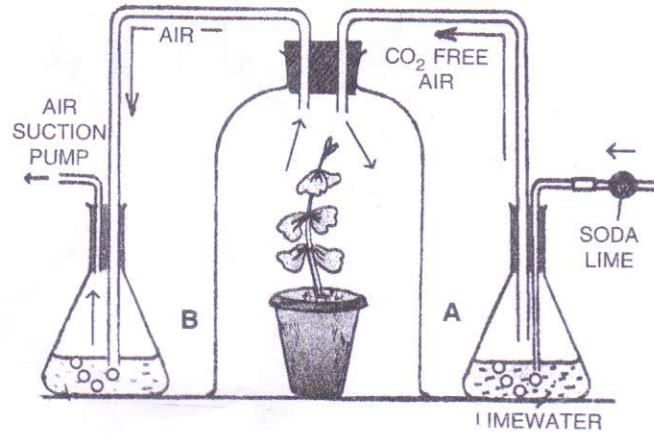
Question 3

a) Give 1 function of the following. (5)
i) Hair in the nostrils
ii)Antibodies
iii)Cartilage rings on trachea.
iv) Scrubber in control of air pollution.
v) Ciliated epithelium in trachea.

b) Describe 3 stages of sewage effluent treatment. (2)

c) i) What are antibiotics. (3)
ii)Name 2 antibiotics
iii)Give 2 criteria for a good antibiotic.

Question 4
   a) Describe 4 ways in which AIDS can be spread.   (4)
   b) Drawn below is a diagram to show a particular process in plants.   (6)

   i)   What is the aim of the experiment.
   ii)   Define the process being depicted in the experiment.
   iii)   What is the function of the soda lime.
   iv)   What change would you observe in flask B? Why?
   vi)   Give an equation for the process mentioned in (ii).

Question 5
   a) Drawn below is a diagram of a bacterial cell.   (5)
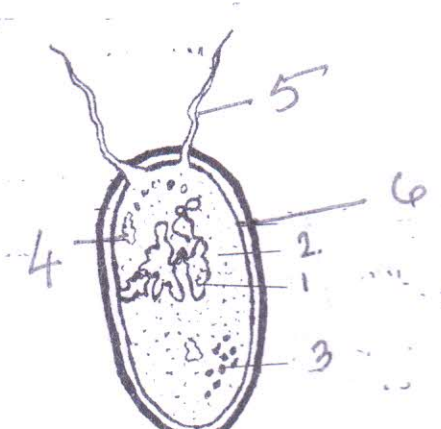
   i) Identify parts 1, 2, 3, 4.
   ii)Give the function of parts 5, 6.
   iii)Name the 4 groups of bacteria on basis of shape.

b) Fill in the blanks (Rewrite)   (5)
   i) Metabolism includes _____ and _____.
   ii)Different flavours of tea are produced using bacteria. This is known as _____.
   iii)_____ is a preparation of weakened germs or dead germs substances.
   iv) Bronchi branch to form _____.
   v) _____ is an example of a genetic disease.

Question 6
   Give reason for the following statement.   (10)
   i) Animals need more energy than plants.
   ii)Snake bite is treated with anti sera.
   iii)Ploughing of soil is important.
   iv)Yeast is added to flour to make breads.
   v) Bacteria generally live in on other organism.
   vi)We experience a lot of pain when carry out extensive exercise.
   vii)Our teeth chatter and we shiver when it is very cold.
   viii)An abdominal cavity appears to move front and back when we breathe.
   ix)Viral diseases generally take a longer time to get cured.
   x) Bacteria sometimes build a spore wall around themselves.