City International School

FIRST TERMINAL EXAMINATION – 2015 - 2016

Date : 06/10/2015 **Marks : 80**

Std : VIII **Subject : Biology (Paper III)** **Time :** 2hrs

Answers to these questions must be written on the paper provided separately.
You will not be allowed to write during the first 15 minutes.
This time is to be spent in reading the question paper.
The time at the head of this paper is the time allowed for writing the answers.
Attempt all questions from SECTION A and any four questions from SECTION B.
The intended marks for questions or parts of questions are given in the bracket. ( )

SECTION A [40 MARKS]
Attempt all questions from this section.

Question 1

a. Give the Scientific / Technical term for the following. **(5)**
   i. The blood plasma contain a dissolved substance.
   ii. Seeds made up of two fleshy seed leaves.
   iii. The instrument used to measure blood pressure.
   iv. Tissue that helps in transportation of food.
   v. Transfer of blood from donor to recipient.

b. State whether the following statements are True or False. **(5)**
   If false, rewrite the correct statement by changing the last word only.
   i. Pulmonary vein carries deoxygenated blood.
   ii. During Transpiration, the leaves lose more water from their upper surface.
   iii. Pollen is produced in the pistil.
   iv. Air is necessary for the Germination of seed.
   v. Micropyle absorbs water for Germination.

c. Give the functions of - **(5)**
   i. Platelets ii. Haemoglobin iii. Sepals
   iv. Antibodies v. Endosperm

d. Define the following terms. **(5)**
   i. Pulse ii. Active Transport iii. Reproduction
   iv. Root pressure v. Blood pressure

e. Given below are five sets with four term each. In each set one term is off. **(5)**
   Choose the odd one out and name the category to which the other belongs.
   i. Filament, anther, pollengrain, style
   ii. Rose, Marigold, Dahlia, Maize
   iii. Tracheids, Spirogyra, Yeast, Ginger
   iv. Pea, Pumpkin, Tomato, Carrot

f. Match the column. **(5)**

i.	Layering	a.	Mango
ii.	Cutting	b.	Spirogyra
iii.	Fragmentation	c.	Ferns
iv.	Spore formation	d.	Jasmine
v.	Grafting	e.	Sugar Cane

g. Fill in the blanks. **(5)**

i. The liquid part of the coagulated blood _____
ii. System that carries out transportation in plant _____
iii. The flower is attached to the shoot by means of _____
iv. Water enters the root hair by the process of _____
v. The pulse can be measured by using a _____

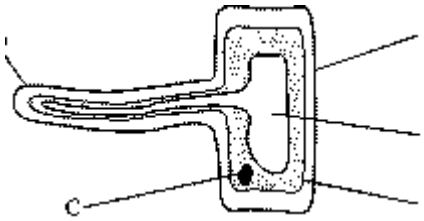
h. The figure below represent an experiment performed to demonstrate certain phenomenon in plant. The set up was kept in sun light for about 2 hours. **(5)**

i. What is the aim of the experiment?
ii. Define the process in (i) above.
iii. What do you observe in the experiment as an evidence of the process stated (i) And (ii) above?
iv. What precautions are taken for proper result in the experiment?
v. Suggest a suitable control experiment for comparison.

SECTION B [40 MARKS]
Attempt any four questions from this section.

Question 2

a. The diagram below represent a layer of epidermal cells showing fully grown root hair. Study the diagram and answer the questions. **(5)**



i. Name the parts labelled 1 – 4.
ii. State two functions of root.
iii. Write two speciality of root hair for absorbing water.

b. Given below are 10 statements followed by 3 choice. Select and rewrite the correct answer to the given statements from the 3 choices given below each set. **(5)**

i. Nucleus is absent in.
1. RBC's 2. WBC's 3. All blood cells

ii. The blood taste saltish due to the dissolved.
1. Sodium chloride 2. Potassium chloride
3. Ammonium Nitrate

iii. The oxygen rich blood is pumped into different parts of the body through.
1. Aorta 2. Pulmonary vein
3. Pulmonary artery

iv. Rasin swell when put in
1. Rain water 2. Tap water
3. Mustered oil 4. Baturated Sugar solution

v. Phloem is a living tissue consist of living cells.
1. Sieve tubes 2. Tracheids 3. Vessels

vi. Name the disease in which the number of platelets get reduced to as low as 25 – 30 thousand per cu mm.
1. Malaria 2. Dengue 3. Typhoid

vii. The chemical messengers which help to coordinate different body functions.
1. Enzymes 2. Hormones 3. Blood

viii. In mono coty ledonous seed the upper part which stores the food.
1. Angiosperm 2. Gymnosperm 3. Endosperm

ix. For Germination the enzyme act best at a temperature.
1. 35° and 40°c 2. 40° and 45°c 3. 30° and 35°c

x. Ovule develops into.
1. Ovary 2. Seed 3. Embryo

Question 3

a. Give one point of difference between the following pairs on the basis of what is indicated in the brackets. **(5)**

i. Osmosis and diffusion. (Define)

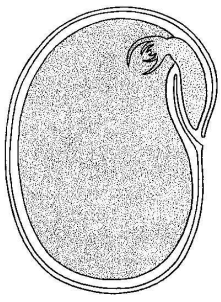
ii. Radicle and plumule. (Develops)

iii. Semi – permeable and freely permeable.
(Based on the movement of water molecule)

iv. Red blood cell and white blood cell. (Function)

v. Self pollination and cross pollination. (Define)

b. Given below is the longitudinal section of a dicot seed. Answer the question given below the diagram. **(5)**



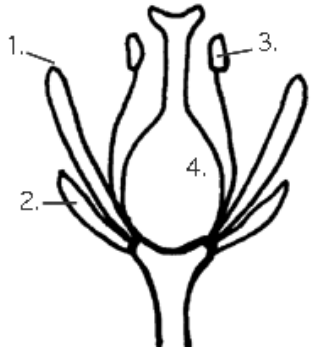
i. Name the parts labelled 1 – 4.

ii. State the function of the part 4, 1

iii. Define Gesmination.

Question 4

a. Given below is a sketch of a typical flower with its internal parts. **(5)**
Answer the questions given below the diagram.



i. Name the parts labelled 1 – 4.

ii. State the function of 1 and 4

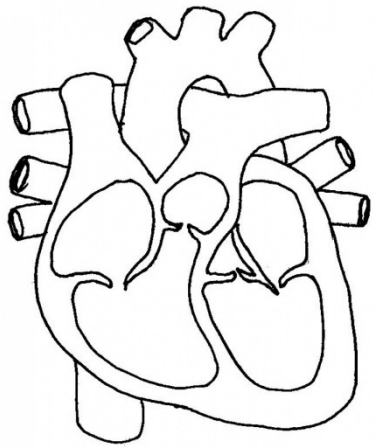
iii. Define flower

b. Name the following. **(5)**

i. A flower that bears both the male and the female parts.
ii. A plant whose leaves produce adventitious buds in their margin.
iii. A thick short, stem in the form of condensed disc, bears fleshy scaly leaves storing food material.
iv. The stem that has nodes and internodes and the nodes carry thin, dry, brown Sealy leaves.
v. The Enzyme used for the production of protein.
vi. The average life span of Erythrocyte.
vii. The mineral responsible for clothing of blood.
viii. Tissue responsible for ascent of sap.
ix. A monocot seed.
x. The organism that reproduce by multiple fission.

Question 5

a. Given below is a diagram sketch of the human heart. **(5)**
Answer the questions given below the diagram.



i. Name the parts labelled 1 – 4.

ii. Write the functions of the parts labelled 1 and 3.

iii. State the function of the value present on the right side of the heart.

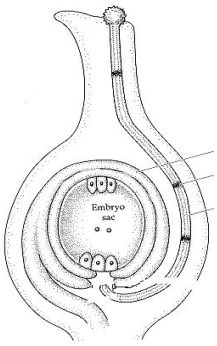
iv. Give one point of structural difference between artery and vein.

b. Answer the following questions. **(5)**

i. State any 2 functions of blood.
ii. Expand HIV.
iii. Name two characteristic of a wind pollinated.
iv. Give two advantages of vegetative reproduction.
v. Define cardiac cycle.

Question 6

a. Given below is a sketch of a pollen tube with its internal parts - Answer the questions given below the diagram. **(5)**



i. Name the parts labelled 1 – 4.

ii. State the function of parts labelled 3 and 1.

iii. Define fruit.

iv. Give two example of a dry fruit.

b. In the box given below are list of biological term that can be used to complete the statement that follow. Select the appropriate term from the box and rewrite the complete statement you may use the term only once. **(5)**

W.B.C,	R.B.C.,	Systole,	Diastole,	Ventricle,
Auricle,	Hypotention,	Hypertention,	Capillary tube	

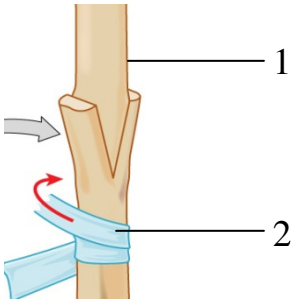
i. Xylem Tissue is the form of _____
ii. _____ is larger with distinct nucleus
iii. The contraction phase of the heart _____
iv. Lower chamber of the heart _____
v. A rise in blood pressure above 140 / 90 _____

Question 7

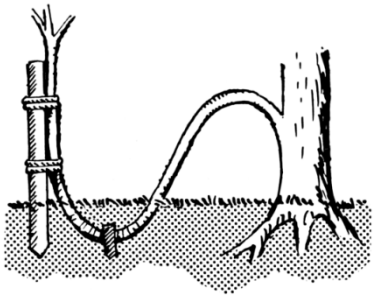
a. Given below is a diagram A and B representing methods of propagation observe these and answer the following questions. **(5)**

i. What is represented in A and B? ii. Label the parts in A.

iii. Describe the process in A and B.



A


B

b. In the table given below indicate the matching blood groups by a (✓) and a (✗) for non matching blood system. **(5)**

Blood group of donor	Blood group of recipient			
	A	B	AB (Universal recipient)	O
A				
B				
AB				
O (Universal donor)				