

DEVAMATHA CMI PUBLIC SCHOOL
ANNUAL EXAMINATION 2017 - 18

Std. VII**SCIENCE****Time : 3 h.****PART A - PHYSICS (27 marks)****Marks : 80**

- I Choose the correct answer from the options given below : (1x5=5)
1. A distance time graph of a body at rest is a _____.
 a) straight line b) curved line
 c) irregular curve d) dotted line
 2. The eye of a Cyclone is
 a) an area of high pressure b) an area of low pressure
 c) an area of with high speed winds d) an area with heavy rainfall
 3. The melting point of electric fuse wire is
 a) low b) high c) medium d) changing
 4. The amount of heat produced in a wire depends on
 a) only its material b) only thickness
 c) material length and thickness d) temperature
 5. Name the mirror that always gives virtual erect and diminished image of an object.
 a) convex mirror b) concave mirror
 c) plane mirror d) none of these
- II Give reason for the following statements: (1x2=2)
1. Fuse wire should not be replaced with ordinary copper wire.
 2. Concave mirrors are used by dentist.
- III Answer the following questions in two or three sentences each: (2x3=6)
1. Kabir takes 50 seconds to run one round of his school ground of path 200 meters. Calculate his speed.
 2. Explain the formation of Cyclone.
 3. Draw a circuit diagram consisting of two cells, switch in the on position and a bulb.
- IV Answer the following questions in three or four sentences each: (3x3=9)
1. Explain the working of an electric bell.
 2. a) Distinguish between uniform and non uniform motion.
 b) convert 150 km/h to m/s.
 3. a) Explain in detail how wind currents are generated due to uneven heating on the earth?
- V Answer the following questions in brief: (5x1=5)
1. Name the type of mirror/lens used in
 1. Simple microscope
 2. Spectacles for correcting short sightedness
 3. Rear view mirror
 - 4 Automobile headlamps.
 2. Write down the characteristics of image formed by a convex lens and concave lens.
 3. With the help of simple experiment prove that white light is composed of seven colours.

PART B - CHEMISTRY (27 marks)

- I Choose the correct answer from the options given below : (1x6=6)
- Which of the following are low-cost onsite sewage disposal system?
a) composting pits b) chemical toilets
c) septic tanks d) a, b and c
 - Water which falls from the clouds as rain or snow
a) condensation b) precipitation
c) infiltration d) transpiration
 - Which of the following can be used to disinfect the clean water in a sewage treatment plant?
A) Iodine B) Ozone C) Oxygen D) Chlorine
a) A and B b) B and C c) B and D d) only D
 - Impure Copper Sulphate powder can be purified by the process of
a) galvanisation b) crystallisation c) evaporation d) sublimation
 - The minimum amount of water recommended by the United Nations per person per day is
a) 25L b) 50L c) 75L d) 40L
 - LPG is used as fuel in kitchen. It exist as a liquid in a cylinder. When it comes out of the cylinder, it becomes a gas (change A). It burnt to produce heat energy (change B). Which of the following statement is correct.
a) Change A is Physical change and change B is Chemical change
b) Change A is chemical change and change B is Physical change
c) Both A and B are Physical changes
d) Both A and B are Chemical changes
- II Answer the following question in one or two sentences: (1x1=1)
- A yellow curry stain on white shirt turn red when it is washed with soap. Give reason.
- III Answer the following questions in two or three sentences each: (2x3=6)
- What do you mean by sludge and activated sludge? How it is treated?
 - When an object made up of material P is kept immersed in the blue coloured solution Q, then a chemical change takes place to form a green coloured solution R and a brown layer of substance S is deposited on the object P is used for making electric wires.
a). What could be the material P?
b) Name the blue coloured solution Q.
c) Identify R and S.
 - Write the chemical formula for the following compounds.
a) Nitric acid
b) Sodiumhydroxide
c) Sulphuric Acid
d) Ammonium hydroxide.
- IV Answer the following question in three or four sentences each: (3x3=9)
- What is meant by rusting of iron? State any two conditions necessary for the rusting of iron to occur. Write any two methods to prevent rusting.

2. i) Describe any two causes for the depletion of water table.
ii) What is meant by (a) sewer ? b) sewerage?
3. i) Name the various waste which should not be thrown down the drain. Why?
ii) You have been asked to maintain a garden. Name any two ways by which you can minimise the use of water for the irrigation of plants.

V Answer the following questions briefly: (1x5=5)

1. a) Explain the term infiltration.
b) Differentiate Physical and Chemical changes.
c) Complete the Table:

Solution	Effect on china rose indicator	Nature
i) Baking soda solution	_____	_____
ii) HCL	Magenta	acidic
iii) Lime Water	_____	_____
iv) Vinegar	_____	_____
v) Soap solution	_____	_____

PART C - BIOLOGY (26 marks)

I Choose the correct answer from the options given below : (1x5=5)

1. Ripened Ovary is known as
a) flower b) embryo c) fruit d) seed
2. Vegetative propagation does not occur by
a) stems b) seeds c) roots d) leaves
3. Loss of forest area results in
a) disturbance in water cycle b) floods
c) occurrence of soil erosion d) a, b and c
4. Which part of alimentary canal receives bile from the liver?
a) oesophagus b) small intestine c) stomach d) large intestine
5. A blood vessel which carries impure blood.
a) artery b) vein c) capillary d) platelet

II Give scientific reasons: (1x1=1)

1. Swallowing of food hurriedly or laughing while swallowing causes violent coughing.

III Answer the following questions in two or three sentences each: (2x3=6)

1. The inner lining of the small Intesine has numerous finger like projections. What are they called? List their functions.
2. Deforestation may lead to floods. Why?

3. Name the parts A, B, C, D shown in the following diagram.

IV Answer the following questions in four or five sentences each: (3x3=9)

1. a) "Respiration is a vital function of the body". Justify this statement.
b) What is the main difference between aerobic and anaerobic respiration with equation?
c) What type of respiration takes place
 - i) in yeast
 - ii) human beings
2. Draw the schematic diagram of circulation of blood in the human body.
3. List the different kinds of asexual reproduction. Explain any two of them.

V Answer the following questions: (5)

1. Draw and label the structure of Human Excretory System.