

DEVAMATHA CMI PUBLIC SCHOOL
HALF YEARLY 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)
- Convection currents give rise to _____ in coastal region.
a) lightning b) rain c) Radiation d) breeze
 - The time taken to complete one to and fro movement of a pendulum is called _____.
a) Oscillation b) time period c) Length d) second
 - The heat energy felt while standing around a camp fire is due to _____.
a) Conduction b) Convection c) Radiation d) Vapourisation.
 - A simple pendulum takes 45 seconds to complete 30 oscillations time period of the simple the pendulum is _____.
a) 10s b) 1.5s c) 1.6s d) 1s
 - The normal temperature of human body is _____.
a) 37°F b) 42°C c) 37°C d) 32°F
- II Give reasons for the following statements : (1x2=2)
- Hollow bricks are used for house construction to keep our houses cool.
 - Sand clock and water clocks are not an appropriate instruments to measure time.
- III Answer the following questions in two or three sentences each : (2x3=6)
- The average speed of a car is 50km/hr. What distance will the car cover if it travels for 4 hours? Express the answer in meters.
 - What are Conductors and Insulators? Give two examples each.
 - Study the distance time graph given below and answer the following questions.

- i) What is the distance travelled by the object at the end of 15 second?
- ii) What is the total distance travelled by the object?
- iii) Is the object stationary at any point? If so mention the time interval.
- iv) What is the time taken by the object to cover 55 meter?

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

1. a. Mention the precautions to be taken while reading a laboratory thermometer.
b. Differentiate between Clinical Thermometer and Laboratory Thermometer.
2. a. What is an Odometer?
b. Which of the two is moving faster - a) A car going over a distance of 400 km in 5 hours, or
b) A train covering a distance of 500 km in 6 hours?
3. a) How does sea breeze and land breeze occur? Explain.
b) How is temperature different from heat?

V Answer the following: (5x1=5)

1. Draw a Distance - Time graph for the given data:

time (hours)	0	1	2	3	4	5
distance (km)	0	5	8	10	14	20

- a) What is the type of motion of the object?
- b) Mention the advantages of drawing distance time graph?

PART B - CHEMISTRY (27 marks)

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

1. Blue litmus paper dipped in an unknown solution remains red because it is _____.
a) Neutral b) Acidic c) Basic d) colourless
2. An acid reacts with a base to produce.
a) Acid b) Base c) Only salt d) Salt and water
3. It took 25 min for 400ml of water to percolate through a soil sample. What is the percolation rate?
a) 16mL/sec b) 16mL/min c) 16sec/ml d) 16L/min
4. The maximum water is retained by _____.
a) Sandy Soil b) Clayey Soil c) Silt d) Loamy soil
5. Baking Soda solution turns pink china rose indicator green, it is _____ solution.
a) An acidic b) A basic c) A neutral d) None of these

II Give reasons for the following statements: (1x2=2)

1. Loamy soil is the best soil for growing crops.
2. Calamine Solution is applied on the skin when an ant bites.

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

1. Give the differences between Clayey Soil and Sandy Soil.
2. A farmer tested his farmland soil with a moist litmus paper. It turned red. How can he neutralise the soil?
3. Define the following terms:
a) Weathering b) Soil profile

- IV Answer the following question in three or four sentences each: (3x3=9)
- Describe an experiment to show that soil contains water.
 - What are Physical Changes? Write any two characteristics of Physical Changes.
 - What are organic acids?
 - Name any two organic acids.
 - How are mineral acids different from organic acids?

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

CHEMICAL NAME	CHEMICAL FORMULA
Magnesium hydroxide	_____
Calcium Chloride	_____
_____	H ₂ SO ₄
_____	AgNO ₃
Hydrochloric acid	_____
_____	NH ₄ OH

- Differentiate between soil pollution and soil erosion.

PART C - BIOLOGY (26 marks)

- I Choose the correct answer from the options given below : (1x5=5)
- Hydrochloric acid is secreted in
 - Stomach
 - Gall bladder
 - Pancreas
 - Lungs
 - Which of the following is not a part of sericulture?
 - hatching
 - reeling
 - moulting
 - shearing
 - The mode of nutrition shown by Cuscuta is
 - Parasitic
 - Symbiotic
 - Saprophytic
 - Autotrophic
 - A carnivore has stripes on his body and moves very fast to catch its prey. It is likely to be found in.
 - North pole
 - South pole
 - Desert
 - Tropical Rain Forest.
 - The simplest form of Carbohydrates is
 - Fatty acids
 - Amino acids
 - Glucose
 - Sugar.
- II Give scientific reasons: (1x1=1)
- If a piece of Chapatti is chewed for a longer time, it tastes sweeter.
- III Answer the following questions in two or three sentences each: (2x3=6)
- Name some breeds of sheep reared in our country.
 - What do you mean by sorter's disease?

2. Why do herbivores have longer, small intestine than carnivores?
3. Why do insectivorous plants eat insects when they can carry out photosynthesis?

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

1. Give a brief account of wool manufacturing.
2. What are the various adaptations of polar bear and their advantages to the bear?
3. List the role of each of the following in our Digestive System:
 - a) Hydrochloric acid
 - b) Mucus
 - c) Villi.

V Answer the following questions: (5)

1. Explain the process of digestion in amoeba with the help of a labelled diagram.