

DEVAMATHA CMI PUBLIC SCHOOL
HALF YEARLY EXAMINATION 2017-2018

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

- I Choose the correct answer from the options given below : (1x5=5)
1. The pressure at a particular point will be :
 - a) Maximum in the downward direction and minimum in the upward direction.
 - b) Maximum in the downward direction and minimum sideways.
 - c) The same in the downward direction, upward direction and sideways.
 - d) Minimum in the downward direction and maximum in the upward direction.
 2. Unit of force :
 - a) N b) Pa c) N/m² d) N/cm²
 3. Musical instruments in which sound is produced by allowing a leather membrane to vibrate are known as :
 - a) wind b) reed c) percussion d) stringed
 4. What is gravity ?
 - a) pressure b) Weight of an object
 - c) force d) push
 5. When lightning and thunder takes place they
 - a) Occur together and are also observed together.
 - b) Occur one after the other but are observed together.
 - c) Occur together but the thunder is observed a little after the lightning.
 - d) Occur together but the thunder is observed a little before the lightning.
- II Answer the following questions in one or two sentences each : (1x2=2)
1. Certain sounds are not audible to us even if they are loud. Give reason.
 2. Which of these surface offers least friction ?
 Wet marble floor, dry marble floor, News paper , towel.
- III Answer the following questions in two or three sentences each : (2x3=6)
1. a) Define : Friction
 b) Why is invention of Wheel considered as an important step of development in the history of Science ?
 2. a) Steel axles of machine are made to run in brass sockets or bearings.
 b) A car with worn out treads on its tyres is more likely to skid.
 3. How is sound produced in human beings ?

IV Answer the following questions in three or four sentences each :

(3x3=9)

- i) The frequency amplitude graphs - of two different sounds have been plotted above.
Study the graphs and answer the questions.
- Which sound has higher frequency ?
 - Which sounds has smaller amplitude ?
 - Which sound will be louder ?
 - Which sound will have a higher pitch ?
- ii) Why is the voice of men, women and children are different.
2. a) How is friction caused ?
b) Mention any four advantages of Frictional Force.
3. a) Why does a ball thrown upwards fall vertically downwards when only an upward force was applied on it ?
b) Define the force responsible for it
c) What are the effects of Force ?

V. Answer the following question briefly :

(5)

- a) Define : Pressure. Write the relation between Pressure, Force and Area.
b) A square tile having a 50 cm. side is designed to withstand a pressure of 200 Pa.
will it withstand a force of 45 N ?
c) How does medicine enter a dropper ?

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PART B - CHEMISTRY (27 marks)

I Choose the correct answer from the options given below :

(1x5=5)

- Nylon is prepared from :
a) Coal b) Water c) Air d) All of these
- PET is a very familiar form of :
a) Polyester b) Nylon c) Rayon d) Acrylic
- Which of the following metals is the best conductor of electricity ?
a) Copper b) Silver c) Aluminium d) Gold

4. Petroleum is separated by using the difference in
 a) Ignition temperature b) Melting points c) Freezing points d) Boiling points
5. A substance used for metalling the roads is
 a) Bitumen b) Coke c) Paraffin wax d) Carbon

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

- Lemon pickle cannot be stored in Aluminium containers.
- Handles of frying pans are made up of plastics.

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

- Define refining of petroleum. Where it is carried out ?
 - Give two examples of non metal oxides.
- Why should we use fossil fuels only when absolutely necessary ?
 - Why melamine is used for making Kitchenware ?
- In a Chemistry experiment a student by mistake put some magnesium strips in blue colour copper sulphate solution. What change will he observe in the colour of the solution and why ? Write the chemical equation also.

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

- Differentiate Thermoplastics and Thermo setting plastics.
- What happens when ash of magnesium is dissolved in water ? Is the solution acidic or basic. What effect does litmus shown in case of oxides of metals. Write the chemical equations involved.
 - Explain the terms : -
 - malleability
 - ductility
- Define Carbonisation. Name the products obtained after processing coal. Explain its uses.

V Answer the questions briefly : (5)

- Why is petroleum called 'blackgold' ?
 - Complete the following equation :
 - $Mg + H_2SO_4 \rightarrow \text{®}$
 - $SO_2 + H_2O \rightarrow \text{®}$
 - $2Cu + CO_2 + H_2O + O_2 \rightarrow \text{®}$
 - $Zn + FeSO_4 \rightarrow \text{®}$

c) Complete the table

Substance	Uses
i. Nylon	_____
ii. _____	aviation fuel, solvent for drycleaning
iii. Paraffin wax	ointments, candles etc.
iv. Sulphur	_____
v. _____	used as disinfectant

PART C - BIOLOGY (26 marks)

I Choose the correct answer from the options given below : [1x5=5]

1. Which of the following description is true for describing fertilizers ?
[a. used in large quantity, b. Organic in nature, c. does not cause, pollution, d. produced in factories]
2. Yellow vein mosaic of bhindi is a disease caused in plants by _____
a. Bacteria b. Virus c. Protozoa d. fungi
3. Which of the following is not a preservative ?
a. Sodium metabisulphate b. Sodium benzoate c. Sodium chloride d. Sodium carbonate
4. Which of the following is not a cause of deforestation ?
a. forest fire's b. droughts c. Constructing buildings d. desertification
5. Moat, Dhekli and Rahat are different _____
a. traditional methods of cultivation
b. traditional methods of weeding
c. traditional methods of seed sowing
d. traditional methods of irrigation]

II Give reason: [1x1=1]

Wild Mango is an endemic species.

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

1. Define the following terms :
 - a) Biosphere Reserve
 - b) Sanctuary
2. Explain Louis Pasteur's contribution to food preservation.
3. Organic manure is considered better than fertilisers. Why ?

IV Answer the following questions in three or four sentences each : [3x3=9]

1. Explain the important consequences of deforestation.
2. Is it advantageous to grow leguminous plants in the fields ? Justify your answer by giving suitable example.
3. Identify the pictures given below and mention the group to which they belong :

(a)

(b)

(c)

IV Answer the following questions : (3+1+1=5)

- a. Draw the schematic representation of Nitrogen Cycle.
- b. Mention the importance of Nitrogen to the living world.
- c. What are the two methods by which Nitrogen is fixed ?

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