

AMRITA VIDYALAYAM

HALF YEARLY EXAMINATION 2017 - '18

Class : VII

Marks : 80

Time : 2½ hrs

SCIENCE

GENERAL INSTRUCTIONS :

- 1. This question paper consists of 3 sections, viz; Physics, Chemistry and Biology.*
- 2. Each section should be answered separately.*
- 3. All questions are compulsory.*
- 4. Write neatly and legibly.*

PHYSICS

- I. Name the following.** **3**
1. The discovery of this principle made accurate measurement of time possible.
 2. A method of transfer of heat in which a medium is not required.
 3. The temperature scale used for scientific work.
- II. Answer in one sentence.** **2**
1. Which principle is used in thermometer?
 2. What do you mean by time period of a pendulum?
- III. Answer in three or four sentences.** **12**
1. Why do woolen clothes keep us warmer in winters than cotton clothes?
 2. Give the SI unit for.
a) Length b) Mass c) Time d) Temperature
 3. Why do gases expand more than liquids and solids ?

II. Answer in short. 12

1. Write two differences between atoms and molecules.
2. Write the symbols of the following elements.
a) Gold b) Carbon c) Iron d) Copper
3. Write two differences between compound and mixture.
4. How does wool fibre helps in keeping our body warm?
5. Why should we not put stainless steel spoon in pickle jar?
6. Are the following equation balanced? Why? If it is not balanced then balance it.
a) $\text{Na} + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{H}_2$
b) $\text{MgO} + \text{HCl} \rightarrow \text{MgCl}_2 + \text{H}_2\text{O}$

III. Answer the following.

1. Differentiate between animal and vegetable fibres. Give two examples of each. **3**
2. Write any two characteristics of chemical change with one example. **3**
3. Identify what kind of reaction is in each of the following and define them. **4**
a) $\text{AB} + \text{CD} \rightarrow \text{AD} + \text{BC}$
b) $\text{AB} + \text{C} \rightarrow \text{AC} + \text{B}$
c) $\text{XY} \rightarrow \text{X} + \text{Y}$
d) $\text{M} + \text{P} \rightarrow \text{MP}$

BIOLOGY

I. Answer the following as directed. 5

1. Living organisms that can make their own food are called _____.
2. The muscles of esophagus push food to stomach in a wave like action called _____.
3. Name the instrument used to measure humidity.
(Barometer, Lactometer, Hygrometer, Perimeter)

4. The last part of digestion of food takes place in _____.
(stomach, small intestine, large intestine, rectum)

5. Which cells control the opening and closing of stomata?

II. Answer the following in one or two sentences. 8

1. Why is it cooler in regions further away from the equator?

2. Why is nitrogenous fertilizer not added in soil in which leguminous plants are grown?

3. What are stomata? Where are they normally found?

4. a) How does the presence of acid in the stomach help?

b) What is the function of pancreatic juice?

III. Answer the following. 9

1. Why are cloudy nights warmer than clear nights?

2. Explain the term.

a) Parasitic nutrition

b) Symbiosis

c) Saprotrophic nutrition

3. List three ways in which a polar bear is adapted to living in the Polar Regions.

IV. Answer in detail. 4

1. a) Explain through diagrams ingestion of food in amoeba.

b) Name the organs that make up the human alimentary canal.