

# AMRITA VIDYALAYAM

## HALF YEARLY EXAMINATION 2018 - '19

Class : VII

Marks : 80

Time : 2½ hrs

### SCIENCE

#### GENERAL INSTRUCTIONS :

1. All questions are compulsory.
2. This question paper consists of Section A and Section B
3. Question number 1 and 2 carry 1 mark each.
4. Question numbers 3 to 5 carry 2 marks each.
5. Question numbers 6 to 15 carry 3 marks each.
6. Question numbers 16 to 21 carry 5 marks each.
7. Question numbers 22 to 27 are practical based questions and carry 2 marks each.

#### SECTION - A

1. Write the basic unit of time.
2. What is Sericulture?
3. Define Photosynthesis. Write the chemical equation.
4. What would happen to a plant if its leaves are coated with vaseline?
5. Farmers do not add nitrogenous fertilizers to the soil in which leguminous plants are grown. Why?
6. a) What is conduction and radiation?  
b) Does conduction and radiation require a medium?
7. a) Why the clinical thermometer has the range from 35°C to 42°C?  
b) What is the use of kink in a clinical thermometer?
8. Write any three differences between physical and chemical changes with example.
9. Give the steps in obtaining wool from sheep. Explain any two

processes.

10. Identify the changes given below as physical changes and chemical changes.
  - a) Burning of candle
  - b) Cutting of fruits
  - c) Digestion of food
  - d) Twinkling of stars
  - e) Beating aluminium metal into aluminium foil
  - f) Combustion of magnesium ribbon
11.
  - a) Distinguish between parasite and saprotroph.
  - b) What is the mode of nutrition in
    - a) cuscuta?
    - b) mushroom?
12. The 7D students conducted a discussion on silk and came to a conclusion that, "It is not a good practice to kill silkworm inside cocoon in order to obtain beautiful silk."
  - a) What is the process of obtaining silk from cocoon?
  - b) Do you think it is right to boil cocoon to take silk? Why?
  - c) What is the value shown by 7D students?
13. One day Rohan had severe tooth ache. The doctor examined his teeth and said that he had tiny holes in his tooth.
  - a) Do you know what are the major culprits of tooth decay?
  - b) What advice will you give to Rohan to avoid such dental problems?
14. If a cyclist covers a distance of 3 km in 5 minutes, what is the speed of cyclist?
15. Two objects at the same temperature are placed in contact. Will heat be transferred from one object to another? Explain.
16.
  - a) Explain the process of nutrition in amoeba with the help of suitable diagrams.
  - b) Write one similarity and one dissimilarity between the processes of nutrition in amoeba and human beings.
17. If you leave a piece of iron in the open for a few days, it acquires a layer of brownish substance called rust.
  - a) Do you think that rust is different from iron?
  - b) Can you change rust back into Iron by some simple

- method?
- c) Do you think formation of rust from iron is a chemical change?
  - d) Give two other examples of a similar type of change.
  - e) Represent formation of rusting by an equation.
18. a) Where does digestion begin in humans? Name the gland associated with this part and write its functions.
- b) List the three substances secreted by the stomach gland and write their functions.
19. Conduction takes place in solids. Show this with the help of an activity with diagram.
20. Explain with diagram sea breeze and land breeze.
21. a) Why is sheep shearing not done in the cold season?
- b) Does shearing hurt the sheep? Why?
- c) Why it is said that the sorters job is too risky in the processing of wool?

## SECTION - B

22. Nikita took two pieces of bread in two watch glasses A and B. She poured saliva on the bread on watch glass B and conducted starch test.
- a) Can you say, what changes would she observe?
  - b) Write the reason.
23. Rahul picked up a dry leaf from the school garden and tried doing iodine test. He observed that the colour of the leaf do not turn blue black. Can you explain why?
24. A simple pendulum completes 20 oscillations in 20s. What is the time period of the pendulum?
25. Take some hot water in a tumbler. Take a steel spoon, a copper rod, a plastic scale and a wooden stick. Dip one of each of these in hot water. Wait for 2-3 minutes. Then touch the other end of each articles.
- a) Which one becomes hot and which one does not?

- b) Classify the articles as conductor and insulator.
26. Take a teaspoonful of vinegar in a test tube. Add a pinch of baking soda to it. You would hear a hissing sound and see bubbles of a gas coming out.
- a) Which gas is produced there?
- b) Write the chemical reaction between that gas with lime water.
27. When a thin strip of Magnesium ribbon is cleaned with a sand paper and keep it near a candle flame,
- a) what change can you observe there?
- b) Represent the changes with a chemical equation.