

# AMRITA VIDYALAYAM

## ANNUAL 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 B.
3. Question numbers 1 and 2 carry 1 mark each.
4. Question numbers 3 - 5 carry 2 marks each.
5. Question numbers 6 - 15 carry 3 marks each.
6. Question numbers 16 - 21 carry 5 marks each.
7. Question numbers 22 - 27 are practical based questions and carry 2 marks each.

### SECTION - A

1. Write the SI unit of speed.
2. Name the base found in soap.
3. Does transpiration serve any useful function in plants?  
Explain.
4. Name four appliances which use heating effect of electric current.
5. A ray of light incident normally reflects on a mirror. Find the angles of incidence and reflection.
6. A compass needle placed near a current carrying conductor gets deflected. Explain why?
7. A body is moving with a speed 10 m/s. After one minute, what is the distance travelled by it?
8. Factory waste is neutralized before disposing it into water bodies. Why?
9. Explain the following terms.

- a) Water table                      b) Infiltration                      c) Aquifer
10. a) Coconut is a large and heavy fruit. How is it adapted for dispersal by water?  
b) Describe the various ways by which seeds are dispersed.
11. Ramu, a farmer, complains of less yield from his farm even after using excessive chemical fertilizers.  
a) What could be the reason for this?  
b) Suggest an idea to help Ramu to get better yield from his farm.  
c) Name the chemical reaction used here.
12. a) Differentiate between real and virtual image.  
b) Which mirror forms laterally inverted image?
13. a) Which gas present in air is essential for aerobic respiration? What is the role of oxygen during respiration?  
b) How can we increase the amount of oxygen in the atmosphere?
14. Draw a diagram of the human excretory system and label the following parts.  
a) Ureter    b) Urinary bladder  
c) Kidney    d) Urethra
15. Rohit was brushing his teeth in the morning. While brushing he forgot to close the water tap. Seeing this his grandmother told him to close the tap and gave awareness about the conservation of water. He obeyed his grandmother.  
a) What is conservation of water?  
b) Name two methods of water conservation.  
c) What value was shown by Rohit and his grandmother.
16. What is depletion of water? Explain the factors responsible for the depletion of water.
17. a) List the characteristics of image formed by a plain mirror.  
b) Which type of mirror is used  
(i) by dentist?    (ii) as rear view mirror?
18. When you keep food items like bread and fruits outside for a

long time especially during rainy seasons, you will observe a cottony growth on them.

a) What is this growth called?

b) How does the growth take place?

c) Name the different methods of asexual reproduction. Give examples.

19. Paheli participated in a 400 m race competition held at her school and won the race. When she came home she had cramps in her leg muscles. After a massage she was relieved of the pain.

a) What can be the possible reasons for the pain in her legs?

b) Why did she feel comfortable after a massage?

20. Four electromagnets with 20, 40, 60 and 80 turns are taken. One by one they are connected to a battery and brought near a box of pins. Which electromagnet will attract more number of pins? And which electromagnet will attract least number of pins? Why? Suggest a method to increase its strength further without changing the number of turns.

21. You are provided with three samples of colourless liquid A, B and C and also red and blue litmus paper. Find out which solution is acidic, basic and neutral. Justify your answer.

## SECTION - B

22. What is the difference in mode of transportation in xylem and phloem?

23. What will happen if there are no platelets in the blood?

24. A simple pendulum completes 20 oscillations in 20 seconds. What is the time period of the pendulum? What is its frequency?

25. A hollow rubber ball is cut. The inner side of one piece is marked as 'A' and outer side as 'B'. Among these which is concave and which is convex?

26. Identify the colour change for the following.

	Turmeric	China rose
Acid		
Base		

27. What is neutralization reaction? Explain with an example.