

AMRITA VIDYALAYAM

HALF YEARLY EXAMINATION 2018 -'19

Class :VIII

Marks : 80

Time : 2½ hrs

SCIENCE

GENERAL INSTRUCTIONS :

1. Questions 1 - 2 of section A carry 1 mark each. They are to be answered in one word or one sentence.
2. Questions 3 - 5 of section A carry 2 marks each. They are to be answered in about 30 words each.
3. Questions 6 - 15 of section A carry 3 marks each including a value based question.
4. Questions 16 - 21 of section A carry 5 marks each.
5. Questions 22 - 27 of section B are explanatory questions based on practical skills and carry 2 marks each.
6. All questions are compulsory. However an internal choice is provided in 2 questions of 3 marks each and 1 question of 5 marks.

SECTION - A

1. Name any two thermosetting plastics.
2. What do you mean by atmosphere?
3. Two blocks of iron of different masses are kept on a cemented floor as shown in figure. Which one of them would require a larger force to move it from rest position? Why?



4. Identify the following organells from their functions given below.

- a) The brain of the cell.
 - b) The protective layer of the cell.
5. Children / infants are given vaccinations. Is it necessary? Justify.
6. What are exhaustible natural resources and inexhaustible natural resources. Give examples.
7. Give reason.
- a) Phosphorous is stored in water.
 - b) Copper and aluminums are used for making cooking vessels.
 - c) School bells are made up of metals.

OR

Explain the process of formation of petroleum.

8. Classify different types of food preservation methods. Write their benefits.
9. Akhil and Ajay were playing football in the ground. It was rainy season. Ajay ran over the slippery area, fell down and injured. After giving him first aid, Akhil sprinkled sand over the slippery area. Why did he do so? What are the good qualities exhibited by him?
10. With the help of an activity show that metallic oxides are basic in nature.
11. Write ten lines on the usefulness of microorganisms in our lives.
12. A father and a son push their car to bring it to the side of the road as it had stopped in the middle of the road. They experienced that although they had to push with all their might initially to move the car, the push required to keep the car rolling was smaller. Explain?

OR

Give any one situation where,

- a) Force causes shape change.
- b) Force changes direction of motion.

- c) Force changes state of motion of an object.
13. The following table shows the total power shortage in India from 1991 to 1997. Show the data in the form of a graph. Plot shortage percentage for the years on the Y -axis and the year on the X-axis.
- | S.No | Year | Shortage (%) |
|------|------|--------------|
| 1 | 1991 | 7.9 |
| 2 | 1992 | 7.8 |
| 3 | 1993 | 8.3 |
| 4 | 1994 | 7.4 |
| 5 | 1995 | 7.1 |
| 6 | 1996 | 9.2 |
| 7 | 1997 | 11.5 |
14. While selecting school bags, will you notice the nature of strap? What type of strap will you select-broad or narrow? Give your justification.
15. List changes in the body that take place at puberty. Some boys and girls have disproportionate body structure during adolescence. Why?
16. Define the terms.
 a) Nitrogen cycle b) Menstruation c) Genes
 d) Fermentation e) Prokaryotes.
17. a) What do you mean by contact and non-contact force?
 b) Identify the followings as contact or non-contact force. Also explain why they are included in that category?
 (i) Frictional force (ii) Magnetic force
 (iii) Electrostatic force
18. a) Can you store lemon pickle in an aluminum utensil?
 Explain.
 b) One day Reeja went to a jewellery shop with her mother. Her mother gave an old gold chain to the goldsmith to

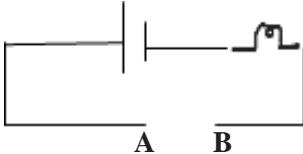
- polish. Next day when they brought the chain back, they found that there was a slight loss in its weight. Can you suggest a reason for the loss in weight?
19. Make a sketch of animal and plant cells. State three differences between them.

OR

- What are human hormones. Give 3 examples and state their functions.
20. What is force? What are non-contact forces? Explain three different types of non-contact forces.
21. 'Avoid plastics as far as possible'. Comment on this statement. Suggest any two ways to reduce the use of plastics.

SECTION - B

22. Liquids exert equal pressure at equal depth. How can you prove this through an activity?
23. If we push a book on a table, it stops after moving for some distance. If we push the book in the opposite direction we would observe the same. What do you conclude from this?
24. Give an activity to show that nylon fibres are very strong.
25. Take half kg flour add some sugar and mix with warm water. Add a small amount of yeast powder and knead to make soft dough. What do you observe after 2 hours. Did you find the dough rising? Explain.
26. Draw and write the functions of any two micro organisms.
- 27.



In the above diagram what would you observe

- a) when an iron nail is connected between A and B?
- b) when a coal piece is connected between A and B?