

GYAN BHARATI SCHOOL  
SUMMATIVE ASSESSMENT 1 (2016- 2017 )  
CLASS M3  
SUBJECT-SCIENCE

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M3-A  
20  
MM -50

TIME: 2 Hours

GENERAL INSTRUCTIONS

- (i) This question paper carries 29 questions and 4 pages. All questions are compulsory.
- (ii) Questions No 1-8 are Multiple Choice Questions (MCQ). Each carrying 1 mark. Choose the correct option and write it along with the statement in the answer sheet.
- (iii) Questions No. 9-14 are very short answer questions. Each carrying 1 mark.
- (iv) Questions No. 15-23 are short answer questions. Each carrying 2 marks.
- (v) Questions No. 24-29 are long answer questions. Each carrying 3 marks.

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- ✓ 1. An electroscope is a device which is used to find if an object is 1
- a. Charged
  - b. Magnetic
  - c. Hot
  - d. Free of cracks
- ✓ 2. On which of the following a toy car will travel farthest? 1
- a. Dry marble floor
  - b. newspaper
  - c. Wet marble floor
  - d. carpet
3. In figure below, two boys A and B are shown applying force on a block. If the block moves towards boy B, which one of the following statements is correct? 1
- a. Magnitude of force applied by A is less than that of B.
  - b. Net force on the block is towards A.
  - c. Magnitude of force applied by A is greater than that of B.
  - d. Magnitude of force applied by A is equal to that of B.



4. The polymer which is used for making unbreakable plastic crockery is: 1

- a. Teflon.  b. Melamine.   
c. Bakelite.  d. PVC

5. The metal used for galvanization is: 1

- a. Iron.  b. Copper.   
c. Zinc.  d. Aluminium.

6. A microorganism X is used in the making of bread. In which of these productions is also X required? 1

- a. Cheese  b. Wine   
c. Curd  d. Vinegar

7. The process of loosening & turning of soil is called. 1

- a. Irrigation & manuring  b. Tilling & ploughing   
c. Digging & winnowing  d. Harvesting & storage

8. Under a microscope, Amit observes a cell that has a cell wall but no distinct nucleus. The cell that he observes is a 1

- a. Plant cell  b. An animal cell   
c. A nerve cell  d. A bacterial cell.

9. In the leaves, name the cell organelle and pigment that is responsible for green colour. 1

chloroplast and chlorophyll

10. Why can't paddy (rice) be grown in the winter season? 1

it is a kharif crop and needs a lot of water.

11. Why is copper used for making electrical wires? 1

highly ductile and good conductor of heat.

12. Which metal is the best conductor of heat? 1

Silver.

13. Name any one musical instrument which produce sound by vibrating air particles. 1

flute.

14. Mention any one method to reduce friction. 1

lubricants  
eg, oil, grease

15. Montu is learning to play the guitar. To get the notes he presses down on the string of the guitar at its neck and plucks the string further down. (1+1)

a. How do the strings make a sound? vibration

b. What does the sound from the string travel through to reach Montu's ear? air

16. Mention two precautions that you will take to protect yourself if lightning occurs while you are outside the house? 2

- ① Avoid using metal tipped umbrella  
② position of squashing down.



17. A snowboarder weighs 300N. The area of the snowboard is  $0.5 \text{ m}^2$ . What is the pressure on the snow?  $600 \text{ pa}$  2



18. What do you mean by tensile strength of a fibre? Arrange the following fibres in the increasing order of tensile strength. 2

- a. Cotton (1)    b. Nylon (3)    c. Silk (2)

19. There are two beakers A and B. Beaker A contains solution of ferrous sulphate and beaker B contains solution of Zinc sulphate. In beaker A we put a zinc granule and beaker B we put an iron strip. In which of the two beakers will the reaction take place and why? (A) 2

High rust, do not become yellow.  
Need less/no ironing.

20. Write any two advantages of synthetic fibres over natural fibres. 2

21. Why does the milk that comes in packets not get spoilt easily? Explain. *Pasteurisation* 2

22. Farmers in northern India grow legumes as fodder in one season & wheat in the next season. 2

a. What is this practice known as? *Crop rotation*

b. How does this practice help in replenishing the soil? *nitrogen replenishes.*

23. Draw a neat diagram of Euglena & label its 3 main parts. 2

- ① flagellum
- ② chloroplast
- ③ nucleus

24. Write down the causative microbe and mode of transmission of following diseases: 3

- a. Typhoid    b. Rust of wheat    c. Polio

25. Sohan scattered seeds manually in the field but his friend Raman used a seed drill. 3

a. What is Sohan's method of sowing seed called? Whose method is advantageous? *Broadcasting.*

b. Write any two advantages of this method. *ensures proper depth & Raman's*

*gets covered with soil. @ in proper rows & at equal intervals.*

26. Write the step wise formulae of the following compounds. 3

a. Magnesium phosphate.  $\text{Mg}_3(\text{PO}_4)_2$

b. Aluminium sulphate.  $\text{Al}_2(\text{SO}_4)_3$

c. Calcium nitrate.  $\text{Ca}(\text{NO}_3)_2$

27. With the help of labeled diagrams explain an activity to show that a metal key conducts electricity but a piece of rubber does not. *circuit.* 3

28. Give reasons for the following situations:

- a. It hurts to walk on sharp stones but not on round ones.
- b. Birds take on a streamlined shape to dive into water and catch fish.
- c. Pieces of papers gets pulled towards comb which is rubbed on hair.

area of contact (1+1+1)  
pressure

electrostatic force.

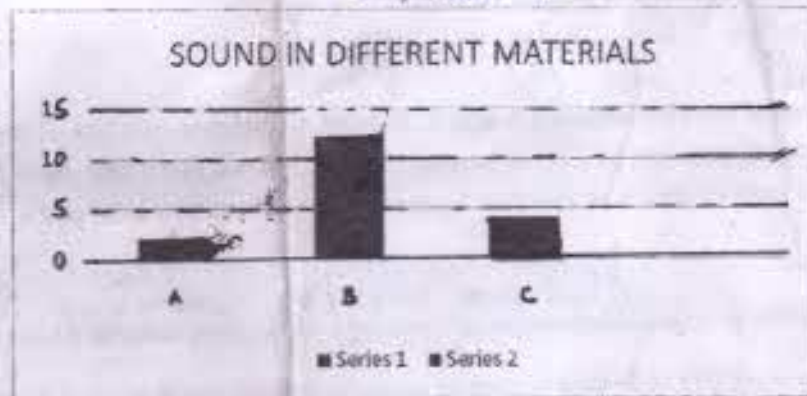
reduce friction.

29. Here is a bar chart showing the speed of sound (in multiples of 1000 m/s) in different materials A, B and C. (1+1+1)

- a. Which material is a solid? B
- b. Give reason for your answer.
- c. Arrange the materials in following order- solid, liquid and gas.

sound travels faster in solids.

B, C, A



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