

**J B Academy, Ayodhya**  
**Subject: Science, Class - VIII**

**Time: 3hrs.**

**Max marks: 80**  
(1x20=20)

**Section - A (one mark each)**

1. Which fibre is obtained from hair of an animal?  
a) Silk                      b) cotton                      c) wool                      d) jute
2. The fibre that burns with smell of a paper is  
a) Polyster                      b) cotton                      c) Rayon                      d) Acrylic
3. A non metal which is a good conductor of heat and electricity.  
a) Chlorine                      b) Sulphur                      c) Phosphorus                      d) Graphite
4. Stainless steel is an alloy of  
a) Aluminium                      b) Zinc                      c) Silver                      d) Iron
5. Main component of natural gas is  
a) Carbon di oxide                      b) Methane                      c) Ethane                      d) Carbon monoxide
6. Which fuel is called 'Liquid Gold '?
7. Which national park is famous for Tigers?
- 8 . WWF works in the field of  
a) Wildlife conservation                      b) water conservation  
c) forest conservation                      d) Human resource conservation
9. Which of these is unicellular?  
a) Hydra                      b) Amoeba                      c) Mushroom                      d) money plant
10. Plant cell do not have  
a) Cell wall                      b) lysosomes                      c) Cell membrane                      d) mitochondria
11. A fertilised ovum develops into a baby in the  
a) vagina                      b) fallopian tube                      c) uterus                      d) ovary
12. What are egg producing animals called?
13. The SI unit of pressure is  
a) Newton                      b) Pascal                      c) Kg/ m<sup>3</sup>                      d) Kg / m<sup>2</sup>

14. At sea level, atmospheric pressure is  
a) 7.6 cm of mercury    b) 760 cm of mercury    c) 760 mm of mercury    d) 76 mm of mercury.
15. The amplitude of sound waves decides it's  
a) speed    b) pitch    c) loudness    d) frequency
16. Anions are attracted towards the  
a) cathode    b) anode    c) electrode    d) electrolyte
17. In electrolysis of water, gas produced at the anode is  
a) oxygen    b) hydrogen    c) carbon dioxide    d) water vapour
18. Hottest planet of solar system is  
a) Mars    b) Venus    c) Mercury    d) Pluto
19. Ozone is present in  
a) troposphere    a) stratosphere    c) ionosphere    d) exosphere
20. Hottest zone of candle flame is  
a) non luminous zone    b) dark zone    c) luminous zone    d) blue zone.

21. Read the passage carefully and answer the following questions. (1X5=5)

Taj mahal, the great wonder of the world, made of white marble, is chemically calcium carbonate and has been found turning yellow due to smoke coming from Mathura oil refinery, vehicular pollution and industries which contain high level of sulphur dioxide, nitrogen dioxide and carbon dioxide gases. These pollutants combine with rain water to form acid rain. Supreme court of India has given strict orders to the industries to switch to clean fuels as CNG , LPG and unleaded petrol in vehicles to prevent air pollution and protect the environment.

- a) What is marble chemically?  
b) List any two reasons for the discoloration of the monument.  
c) What is acid rain?  
d) Which gases are responsible for acid rain?  
e) What are the preventive measures to protect the monument?.

**Section - B (2 marks each question)**

(2x6=12)

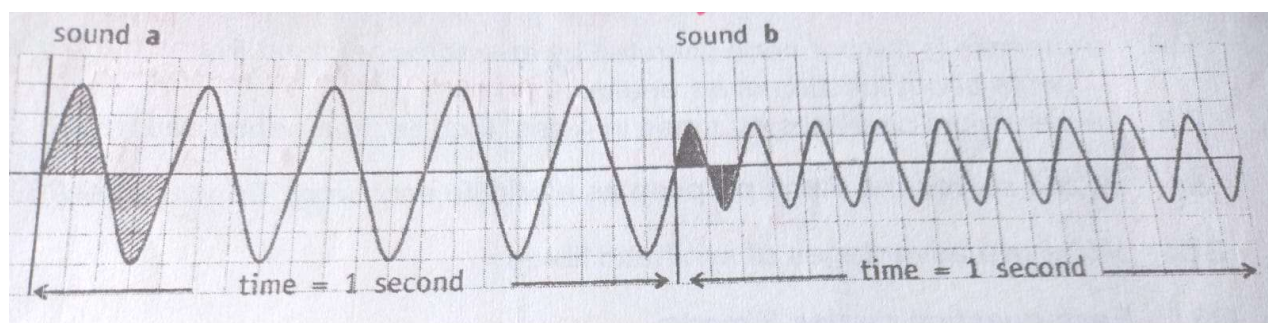
1. What do you mean by rusting? State the conditions necessary for it?  
2. What is ' Project Tiger'? Write names of two organisations involved in conservation of animals.

3. Give temperature range and two uses of any two products obtained by petroleum refining.
4. Cells vary in their shapes. Justify the statement by drawing two types of cells of different shapes.
5. Give two examples each of string and wind instruments.
6. Rohit took a rope with him while going for rock climbing. Can you tell which rope he will select. Give three reasons.

**Section - C (3 marks each question)**

(3x5=15)

1. A human heart beats on an average of 75 times/ min. Calculate it's frequency and time period.
2. A rectangular iron block of mass 10Kg is placed on the top of a table. The dimensions of the block is 20cm x 10cm. Find the pressure exerted by the block on the top of the table.
3. What happens when ( Give reactions)
  - a) Iron nail dipped in copper sulfate solution.
  - b) Carbon reacts with Oxygen.
  - c) Calcium reacts with water.
4. Which zone of the candle flame contains unburnt carbon particles. Explain with help of an activity.
- 5.



Questions based on above diagram.

- a) Which sound has greater frequency and why?
- b) Which sound has greater amplitude and why?
- c) Which sound is louder and why?

**Section - D (5 marks each)**

(5X4 = 20)

1. What are sex chromosomes? How is the sex of a child determined? Explain with flow chart.
2. Mayank took a 5 Rs coin and made an attempt to electroplate it with copper metal.
  - a) What should he use as an electrolyte?
  - b) What should he connect to the positive and negative terminal of the battery?
  - c) What did he observe after passing current for 15 - 20 min.
  - d) Mention two uses of electroplating.
  - e) Write the reaction involved.
3. Give reasons for the following (any 5)
  - a) Sportsmen use shoes with spikes.
  - b) It is difficult to burn green leaves.
  - c) It is difficult to jump on Mars.
  - d) Stars seem to twinkle at night.
  - e) Lysosomes are called suicidal bags.
  - f) During thunderstorm, flash and thunder are produced simultaneously but thunder is heard few seconds after the flash is seen.
4. List three properties of sound and define them. What are the factors on which frequency of sound of a string instrument depends. Also define quality of sound.

**Section - E (2 marks each) Any four**

(2X4=8)

Write difference between the following.

1. External and internal fertilisation.
2. Plant and animal cell.
3. Zoo and Biosphere reserve.
4. Bakelite and Polythene.
5. Audible and inaudible sound.