

ANNUAL EXAMINATION SAMPLE PRACTICE PAPER

BASIC SCIENCE

Time :2 Hours

Score : 30

1. There is a 'Cool-off time' of 15 minute in addition to the writing time.
2. Use the 'Cool-off time' to get familiar with questions and to plan your answers.
3. Read questions carefully before answering.
4. There are total 8 activities out of which answer 6 activities.

Activity 1

A) During the cleanliness drive held as part of the cleanliness week celebrations on Gandhi Jayanthi the following things were collected. Sort the things into appropriate groups.

Paper, banana leaves, plastic covers, mobile phone batteries, paper cups, thermocoal, plastic bottles, bulbs, glass pieces, shoe, bags and candy covers.

B) What is the importance of scientific segregation of wastes?

Activity 2

Shoe flower, Turmeric, Beetroot, Methyl orange, Phenolphthalein.

A. Classify the given things using the criteria.

B. Does any colour change occur when lemon juice is added to paper rubbed with Shoe flower? Explain the scientific reason for this?

Activity 3

The heart beat rate of children in a class is given below.

Name of the student	Heart beat rate	Pulse rate
Mary	154 bpm	154 bpm
Rani	101 bpm	101 bpm
Ajmal	120 bpm	120 bpm
Suresh	158 bpm	158 bpm

Heart rate after running and playing in the school ground is given below.

Name of the student	Heart beat rate	Pulse rate
Mary	200 bpm	200 bpm
Rani	160 bpm	160 bpm
Ajmal	180 bpm	180 bpm
Suresh	210 bpm	210 bpm

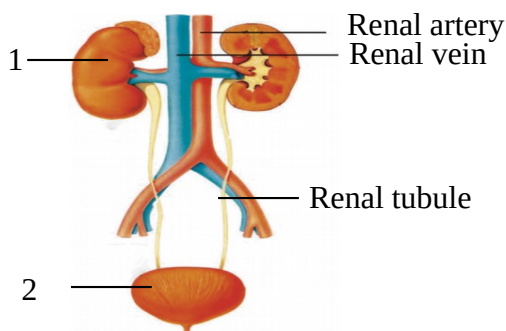
- A) Analyze the tables given above and draw a conclusion.
B) What are the precautions to be taken to protect heart health?

Activity 4

Kochi: Volunteer groups start more dialysis units centered around Kochi.

Did you notice the newspaper report?

- A) Dialysis is a treatment for which patients?
B) Write the names of the parts marked 1 and 2 in the picture.



C. What are the other excretory organs in the human body?

Activity 5

Mother said that I should wash the frozen fish I bought from the market several times before cooking it. She suspected that there was some chemical in it.

- A) Is this suspicion correct?
B) What could be the reason?
C) What methods can be adopted to keep the fish intact for a long time?

Activity 6

A pumpkin vine that had grown by itself behind the kitchen was growing well, but it only produced two or three fruits.

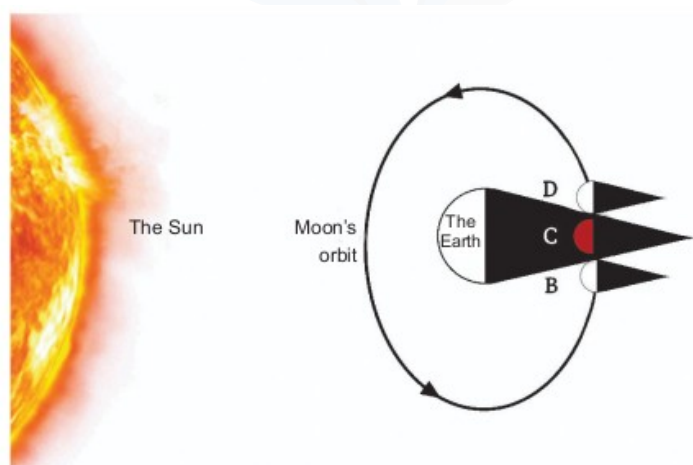
You heard what Babu said

A. why didn't it have many fruits?

B. What are the things to keep in mind for a good harvest?

Activity 7

Observe the picture given below..



A. Which eclipse does this refer to?

B. What is the peculiarity of 'C' in the picture?

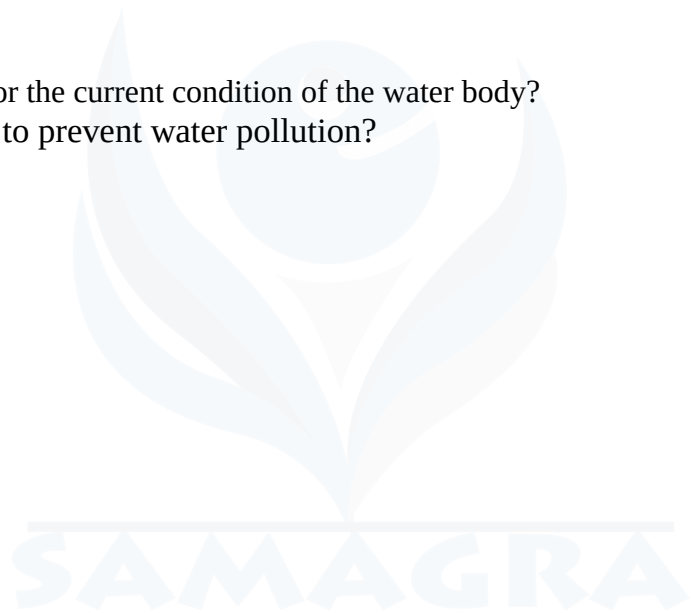
C. Lunar eclipse can be observed directly but we should not observe solar eclipse directly. Write the methods of observing solar eclipse?

Activity 8



Observe the picture

- A. What is the reason for the current condition of the water body?
- B. What are the ways to prevent water pollution?



	Keypoints	Score	Total
Activity 1	<p>A) Bio-waste - Paper banana leaves Bio-waste - Plastic, glass, thermocol, plastic bottle, shoes, bag, paper cup Hazardous waste - Mobile phone battery</p> <p>B) Prevents environmental pollution Reduces health problems</p>	<p>3</p> <p>2</p>	5
Activity 2	<p>A) Natural indicators Beetroot, Shoe flower, Turmeric Laboratory indicators Phenolphthalein, methyl orange</p> <p>C) When lemon juice is added to a paper rubbed with Shoe flower, the paper turns red. This is because the citric acid in lemon juice turns blue litmus red.</p>	<p>2</p> <p>3</p>	5
Activity 3	<p>A) Normally, heart rate and pulse rate are the same, but when we engage in strenuous activities, blood flow increases and energy efficiency increases. As a result the heart rate increases.</p> <p>B) Avoid eating too much fatty foods, avoid smoking and drinking alcohol, prevent lifestyle diseases, and exercise regularly....(Any three)</p>	<p>2</p> <p>3</p>	5
Activity 4	<p>A) For kidney patients B) Kidney Bladder C) Skin, Liver, Lung</p>	<p>1</p> <p>1</p> <p>3</p>	5
Activity 5	<p>A) True. B) NH_4Cl is ammonium chloride added to ice mining. It is used to preserve fish. Even small amounts can cause cancer. C) Can be stored Dried Salted Pickled in the refrigerator</p>	<p>1</p> <p>2</p> <p>2</p>	5
Activity 6	<p>A) Lack of care Infertile seeds B) Fertile Soil Suitable climate Good seeds and planting material</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	5
Activity 7	<p>A) Lunar eclipse B) The moon is completely hidden, hence lunar eclipse is possible. C) Solar filter, pinhole projector, telescope projector (any two)</p>	<p>1</p> <p>2</p> <p>2</p>	5

SAMAGRA PLUS

Activity 8	<p>A) Plastic waste Chemicals Cleaning animals, vehicles etc. In water bodies Hotel, household, factory waste (Any two)</p> <p>B) Scientifically separate and dispose of plastic waste. Eliminate chemical waste from factories and only allow clean water to flow out. Do not wash animals, vehicles, etc. in water bodies.</p>	<p>2</p> <p>3</p>	<p>5</p>
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