



DELHI PUBLIC SCHOOL, RANCHI

ANNUAL EXAMINATION (2016-17)

Class:- VI
Time- 3 hrs.

Subject:- Science
M.M- 90

PHYSICS

- Q1. Shadows are shortest [1]
(a) in the morning (b) at the mid day
(c) in the evening (d) It remains same through out the day
- Q2. Electricity is a form of [1]
(a) Motion (b) energy (c) power (d) force
- Q3. A magnetic compass works on the [1]
(a) directive property of the magnet (b) attractive property of a magnet
(c) repulsive property of the magnet (d) magnetic power of the magnet
- Q4. An object completes one round of a square track of side 'r'. Calculate the distance covered by it. [1]
- Q5. Why electric cell is also called a dry cell? [1]
- Q6. State at least two precautions which should be taken while using a meter scale to measure the length of an object. [2]
- Q7. Why does an opaque object cast shadow when sunlight falls on it? [2]
- Q8. What does each of the following do in an electric circuit? [2]
(a) electric cell (b) electric bulb (c) switch (d) wire
- Q9. Why does a freely suspended magnet come to rest in north-south direction only? [2]
- Q10. Differentiate between the following [3]
(a) oscillatory & vibratory motion
(b) circular & rotatory motion
- Q11. (a) If you can see the faint glow of a lighted torch through an object, but not the torch itself, is the substance opaque, translucent or transparent? Give reasons for your answer.
(b) If all objects around us were to reflect light in regular way, what problem would we face? [3]
- Q12. (a) In the above circuit, will the bulb light up?
(b) What is the reason for your answer?
(c) State any two dangers of electricity if handled carelessly. [5]

Q13. Give reasons for the following **[3]**

- (a) Repulsion is the sure test of magnetism.
- (b) When a magnet is moved on iron filings most of the iron filings cling near the ends of the magnet.

Q14. Attempt any one (A or B)

- A)**
- (a) what should be the characteristics of the filament used in the electric bulb?
(at least three)
 - (b) What is an insulator? From where does electrical cell produces electrical energy ?
 - (c) Draw a well labelled sketch of an electric bulb. **[1½ + 1½ + 2 = 5]**

OR

- B)**
- a) What is the use of magnetic keepers?
 - b) List two causes of demagnetisation of a magnet ?
 - c) Describe briefly method of making a magnet. Draw a labelled sketch to illustrate the method. **[1+ 1+ 3 =5]**

CHEMISTRY

Q.1. Very short questions: **[1x5=5]**

- (a) What are desirable and undesirable changes? Mention one example of each.
- (b) Name the method which is used to separate grains from stalk.
- (c) Which of the following constituents of air used in photosynthesis?
(a) Nitrogen (b) Oxygen (c) Carbon dioxide (d) Dust
- (d) Which of the following gas is responsible for global warning?
(a) Oxygen (b) Carbon dioxide (c) Nitrogen (d) Smoke
- (e) Which of the following is the heaviest gas?
(a) Oxygen (b) Carbon dioxide (c) Nitrogen (d) Water vapour

Q.2. Short questions **[2 x4= 8]**

- (a) With an example, explain a process in which both physical and chemical changes are observed.
- (b) (i) Why is water an universal solvent?
(ii) Explain why it is easier to dissolve sugar in hot water than in cold water?
- (c) Explain how you will prove that air contains water vapour?
- (d) What is difference between fog and clouds?

Q.3. Long questions: **[3X4= 12]**

- (a) You are given a mixture of sand, salt and pebbles. Explain the methods of separation involved in sequence.
- (b) Give reasons for the following:
 - (i) An ironsmith heats the iron ring before fitting it on the wheel.

- (ii) A glass tumbler sometimes cracks when hot water is poured into it.
- (c) How will you show that air has mass and occupies space?
- (d) Pankaj asked his father to dig a hole near the house and make sure that the rainwater flowed into this hole. He also fixed wire mesh on the top of the hole to stop his sister and any animals from falling in.
What value did Pankaj show?

Q.4. Very long answer questions: [1 X 5 = 5]

- (a) Draw a well labeled diagram of roof top rain water harvesting.
- (b) As a responsible citizen, how can you contribute towards conservation of water?

OR

Make a diagram of water cycle and discuss how loss of vegetation can affect it.

BIOLOGY

Q.1. Write in short [1x5=5]

- (a) Explain what is nectar?
- (b) Why is it necessary to have a balanced diet?
- (c) What is a backbone? Which part of the body is protected by backbone?
- (d) Write one difference between garbage and sewage?
- (e) What is adaptation? Write any one adaptation of birds?

Q.2 Answer the following Questions [2x4=8]

- (a) Write one difference between
- (i) Natural and synthetic fibre (ii) Weaving and knitting.
- (b) Draw and label a diagram of snake.
- (c) Explain why speed is important for survival in grassland for the animals that live there?
- (d) Write any one difference between
- (i) Reticulate and parallel venation. (ii) Simple leaf and compound leaf.

Q.3 Answer the following questions [3x4=12]

- (a) What happens to the children who do not get enough food? Explain with three points
- (b) (i) What functions does the root perform? (Write two points)
(ii) Draw and label a diagram of a taproot and a fibrous root.
- (c) List any three features in a fish which help it to swim.
- (d) How have aquatic plants adapted to live in water? Explain with two points. Draw and label a diagram showing adaptation in water plants.

Q.4 Answer in detail [5x1=5]

- (a) Answer both the parts:
- (i) Write any three differences between biodegradable and non-biodegradable materials.
- (ii) Is it possible to reduce the problems relating to disposal of garbage? (Write two points).

OR

- (b) Answer both the parts:
- (i) What are the advantages of vermicomposting. Explain with three points
- (ii) How can we reduce the problems related to overuse of plastics (Write two points)