



# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2017-18)

Class:- VI  
Time- 3 Hrs.

Subject:- General Science  
F. M:- 80

## PHYSICS

1. (a) Name two devices used for measuring length.  
(b) Thickness of ten Re.1.00 coin is 1.7cm .What will be the thickness of one Re.1.00 coin?  
(c) When do we have a) Longest b) Shortest shadow when we walk in sunlight?  
(d) What do you mean by shadow?  
(e) On which principle does the pin-hole camera work? [1x5=5]
2. (i) Write whether given objects are under rotation or revolution during their functioning-  
(a) Cap of a bottle (b) A key used to open a lock  
(c) Moon around the earth (d) A screw driver  
(ii) (a) What is the standard unit of length?  
(b) Why can't a footstep be used as a standard unit of length?  
(iii) Give reasons why the moon is not called a luminous object whereas stars are called as luminous objects.  
(iv) State two differences between a shadow and an image. [2x4=8]
3. (i) (a) While measuring the length of a metallic rod, the reading of the scale at one end is 8.0cm and at the other end is 33.7cm .What is the length of the rod?  
(b) What is the type of the motion of a girl skipping a rope, if her position on the ground does not change? Define the type of motion.  
(ii) (a) In a completely dark room, if you hold up a mirror in front of you, will you see a reflection of yourself in the mirror? Justify your answer.  
(b) If you are standing 5m in front of a plane mirror, how far are you from your image?  
(iii) State any three characteristics of image formed by a plane mirror. [3x3=9]
4. Answer either A or B  
A. (i) What is pin-hole camera ? Draw a well labelled diagram of it.  
(ii) Explain an activity to show that light travels in a straight path.  
B. (i) Differentiate between motion and rest.  
(ii) Two passengers are travelling in a train and sitting on their seats. State whether they are in motion or rest with respect to each other and with respect to the trees besides the railway track.  
(iii) Show with the help of diagrams rotation and revolution followed by the earth. [5x1=5]

## CHEMISTRY

1. Name the property in which steel and sponge differ from each other? [1]
  2. You are given a salt solution. What method will you use  
(a) to recover only salt ? (b) to recover salt as well as water? [1]
  3. How do the following changes differ from each other?  
(a) inflating a balloon (b) bursting an inflated balloon [1]
  4. (a) State whether milk and petrol will form a single layer or two layers on mixing.  
(b) What will be the appropriate term for the above mixture? [2]
  5. Explain how a metal rim is fixed around the wooden wheel of car ? What changes take place during this process ? [2]
  6. X and Y are two types of materials. Material X can break into pieces easily when hit with an object but material Y does not break and can be hammered into thin sheet. Material X can be used for making windows and material y in making almirah.  
(a) What do you think material X could be ? Write the name of the property possessed by it?  
(b) What could material Y be ? Write the name of the property possessed by it? [1½+1½=3]
  7. (a) Define solubility of a substance .  
(b) How does solubility of a substance vary with temperature?  
(c) Differentiate between saturated and unsaturated solution? [3]
  8. (a) There are three mixtures A, B and C as given below  
A- sand & sugar  
B- chalk powder & salt  
C- salt & sugar  
Which one of the above mixture cannot be separated by using water as solvent ? Why ?  
b) What is sieve ? [3]
  9. (a) Differentiate between physical and chemical changes ?  
(b) Is it possible that the same material may undergo physical and chemical changes ?  
If yes, then support your answer with one example. [3]
  10. Which of the following changes given below are desirable / undesirable and reversible / irreversible ?  
(a) Rusting of iron (b) Ripening of fruits (c) Melting of ice cream [3]
  11. Answer any one of the following:  
(I) (a) Differentiate between evaporation and condensation?  
(b) Name the method in which evaporation is always followed by condensation?  
(c) Draw a well labelled diagram of that method? [5]
- OR
- (II) (a) Define sedimentation and decantation ?  
(b) Name the method where sedimentation can be speeded up by using alum ?  
(c) Draw a well labelled diagram of the above method ?

## BIOLOGY

### Section I

[1x4=4]

1. Rice is a grain or seed? Give reasons in support of your answer.
2. Draw 2 food sources of fat.
3. Write one difference between weaving and knitting.
4. What is Tepal?. Explain.

### Section II

[2x4=8]

1. What happens if we do not get enough food to eat? (Write 2 points)
2. What are the symptoms of
  - a. Beriberi
  - b. Rickets
  - c. Anaemia
  - d. Scurvy
3. How is jute obtained from jute plants? Name 2 items made from jute fibre.
4. Write 2 differences between parallel and reticulate venation.

### Section III

[3x3=9]

1. Ria has tendency of overeating. She also does not want to eat fresh fruits and vegetables. Instead she likes to eat Pasta, Chowmein, Pizza etc in her meals.

Answer the following questions based on the above paragraph:

- a. What problem Ria might get into due to her overeating habit?
  - b. If a person does not eat fresh fruits and vegetables which kind of disease she might suffer from?
  - c. Is it advisable to have junk food in our meals? If no, then why?
2. What is a loom? How is weaving done on a loom?
  3. Write 2 functions of leaf. Draw and label a diagram of leaf.

### Section IV (Attempt 1 or 2)

[5x1=5]

1. (a) Write 3 major parts of flower and explain about them.  
(b) Draw and label a diagram of a flower showing all its 4 parts.

OR

2. (a) Write 3 functions of root.  
(b) Draw and label a tap root and a fibrous root.