

**Part-A**

**Q.1. Multiple choice questions:**

**(1 x 5 = 5)**

- i) The cells having nuclear material without nuclear membrane are \_\_\_\_\_ cells.  
a) eukaryotic                      b) prokaryotic                      c) both a and b                      d) none of these
- ii) In \_\_\_\_\_, fermentation was discovered by \_\_\_\_\_.  
a) 1657, Edward Jenner                      b) 1857, Louis Pasteur  
c) 1757, Alexander Flemming                      d) none of these
- iii) Forces applied on an object in the \_\_\_\_\_ add to one another.  
a) same direction                      b) different direction                      c) north direction                      d) none of these
- iv) The substances which \_\_\_\_\_ friction are called lubricants..  
a) increase                      b) decrease                      c) both of these                      d) none of these
- v) \_\_\_\_\_ is made up of large number of glucose units..  
a) Cellulose                      b) Protein                      c) Amino acids                      d) None of these

**Q2. Fill in the blanks.**

**(1 x 5 = 5)**

- i) The lowest temperature at which a substance catches fire is called its \_\_\_\_\_.
- ii) Incomplete combustion of a fuel gives off poisonous \_\_\_\_\_ gas.
- iii) \_\_\_\_\_ is a special plastic on which oil and water do not stick.
- iv) The property of metals by which they can be beaten into thin sheets is called \_\_\_\_\_.
- v) \_\_\_\_\_ is a device used for measuring the force action on an object.

**Q.3. Give one word answer:**

**(1 x 5 = 5)**

- i) They are units of inheritance in living organisms.
- ii) He discovered the vaccine for smallpox in 1798.
- iii) Name the force exerted by a charged body on another charged or uncharged body.
- iv) Give another name for artificial silk.
- v) The frictional force exerted by fluids is also known as this.

**Q.4. Write whether the following statements are true or false. Correct the false statements.(5)**

- i) The common examples of sliding friction are the use of ball bearings between the hubs and axles of the ceiling fans and the bicycles.
- ii) A mixture of antimony trisulphide, potassium chlorate and white phosphorus is used to make the head of a matchstick.

- iii) Common ailments like cold, influenza and most common coughs are caused by bacteria.
- iv) Metals like sodium and potassium are soft and can be cut with a knife.
- v) Esters are the chemicals which give wood and leaves their smell.
- vi) The pressure exerted by the air is known as atmospheric pressure.

**Q.5. Give reasons for the following:**

**(2 × 5 = 10)**

- i) People usually buy sweaters and shawls made out of acrylic.
- ii) The nucleus contains thread like structures called chromosomes.
- iii) Tyres are treaded.
- iv) When some people go on higher attitudes then they start to have a nose bleed.
- v) LPG is a better domestic fuel than wood.

**Q.6. Very short answer questions:**

**(1 × 7 = 7)**

- i) Define magnitude
- ii) Why is the function of cell wall?
- iii) What is static friction?
- iv) Name the two diseases associated with bacteria.
- v) Define calorific value.
- vi) Give the chemical symbol for the following:
  - a) Magnesium Chloride
  - b) Potassium Hydroxide
  - c) Sodium Chloride
  - d) Hydrochloric Acid
- vii) Write any two uses of plastics.

**Q.7. Short answer questions.**

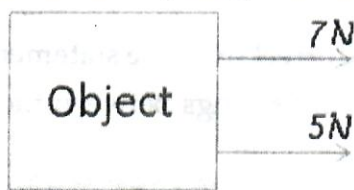
**(2 × 6 = 12)**

- i) Differentiate between contact force and non-contact force.
- ii) Differentiate between a combustible and non-combustible substance.
- iii) Why does a copper vessel acquire green coating if it is exposed to moisture for a long time? Write reaction also.
- iv) How is friction a nuisance?
- v) Write two uses of Polyvinyl Chloride.
- vi) What are preservatives? Name any one common preservative.

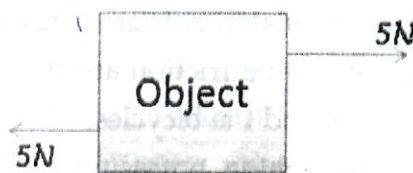
**Q.8. Long answer questions.**

**(3 × 7 = 21)**

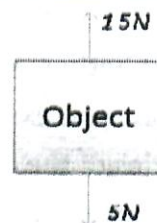
- i) From the figure given below, find out where the object will move in each case?



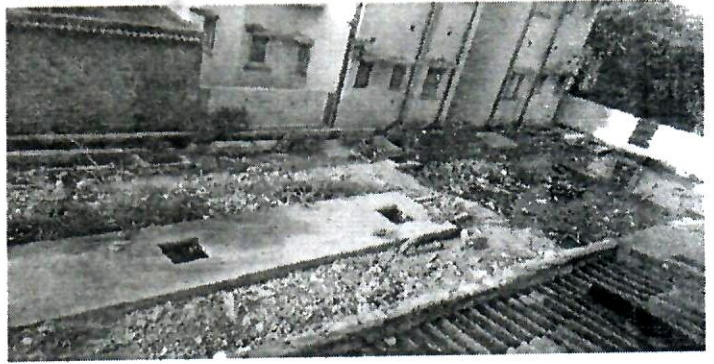
(a) (b)



(c)



- ii) Look at the picture given below. List various ways in which the residents of the society can clean their surroundings. (as given picture)



- iii) Observe the given pictures carefully and answer the following questions. a. Which is easier to ride a bicycle on? Why? b. Why is it difficult to ride a bicycle on wet sand?



(a)



(b)

- iv) What is a fire extinguisher? How is it useful to us?  
v) Complete the following table:

S.No	Cell part	Structure/ Function
1.	Plastids	
2.	Ribosomes	
3.	Lysosomes	

- vi) Define antibiotics. What can be the consequences if we are not careful while taking antibiotics?  
vii List the physical properties of metals and explain any two of them.
- Q.9. Complete the following diagrams:** (2 x 5 = 10)

- i) Draw a graphic organiser of the types of forces  
ii) Draw a neat and colourful Nitrogen Cycle