



# St. Xavier's Sr. Sec. School

Delhi-54

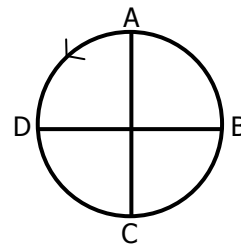
Class 9  
12-5-2015

Formative Assessment I in SCIENCE

Time : 1 hr.  
M. Marks : 20

## PHYSICS (M. Marks : 07; Time : 20 mts.)

1. Give an example to justify; rest and motion are relative terms. (1)
2. Define acceleration. When will you say acceleration is negative? (1)
3. The speed of a car decreases from 80km/hr to 50km/hr in 2 minutes. Calculate the acceleration of the car. (1½)
4. Calculate average speed and average velocity of a boy if he walks from his house to school at a speed of 20km/hr and returns back to home at 30km/hr. (1½)
5. If a physical quantity is -10m, is it distance or displacement? Justify your answer. Calculate distance and magnitude of displacement from A to B along a circular path of radius 7m in the following diagram. (2)



## CHEMISTRY (M. Marks : 07; Time : 20 mts.)

1. Write an activity to show that particles of matter have spaces between them. (1)
2. a) Convert 200 Kelvin temp. to Celsius scale. (½)  
b) Suggest a method to liquefy atmospheric gases. (½)
3. a) Define the term Latent heat of fusion. (½)  
b) Why does the temperature remain constant during the change of state. (½)
- 4 Name the process:  
a) Conversion of solid state to gaseous state without changing in liquid state. (½)  
b) Intermixing of particles on their own. (½)
5. Give reasons: (1x3=3)  
a) Steam causes severe burns than boiling water.  
b) We get the smell of perfume sitting several metres away.  
c) Liquids take the shape of container to which it is kept.



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## BIOLOGY (M. Marks : 06; Time : 20 mts.)

1. Fill in the blanks: ( $\frac{1}{2} \times 2 = 1$ )
  - a) Cell wall was discovered by \_\_\_\_\_.
  - b) \_\_\_\_\_ is the example of unicellular organism.
  
2. Define Endocytosis. (1)
  
3.
  - a) Why is Plasma membrane called as selectively permeable membrane?
  - b) Plasma membrane is made up of \_\_\_\_\_ and \_\_\_\_\_. (1+1=2)
  
4.
  - a) What would happen to a cell if it is placed in hypertonic solution?
  - b) Write any two differences between diffusion and osmosis. (1+1=2)

-X-X-X-X-X-X-