



**RAMAGYA SCHOOL, NOIDA**  
**IX/SCIENCE/2017-18**  
**OLYMPIAD PRACTICE WORKSHEET**

**Multiple choice questions:-**

1. The property to flow is unique to fluids. Which one of the following statements is correct?
  - (a) Only gases behave like fluids
  - (b) Gases and solids behave like fluids
  - (c) Gases and liquids behave like fluids
  - (d) Only liquids are fluids
  
2. A few substances are arranged in increasing order of 'forces of attraction' between their particles. Which one of the following represents a correct arrangement?
  - (a) Water, air, wind
  - (b) Air, sugar, oil
  - (c) oxygen, water, sugar
  - (d) salt, juice, air
  
3. Which of the following will not undergo sublimation
  - (a) Camphor
  - (b) Iodine
  - (c) Ammonium Chloride
  - (d) sodium Chloride
  
4. On converting  $25^{\circ}\text{C}$ ,  $38^{\circ}\text{C}$  and  $66^{\circ}\text{C}$  to kelvin scale, the correct sequence of temperature will be
  - (a) 298K, 311K, 339K
  - (b) 298K, 300K, 338K
  - (c) 273K, 278K, 543K
  - (d) 298K, 310K, 338K
  
5. Alcohol exists as a liquid at room temperature because
  - (a) the intermolecular forces are strong enough to keep its particle bound to each other
  - (b) Its melting point is below room temperature
  - (c) it is highly compressible
  - (d) both (a) and (b)
  
6. Melting is
  - (a) An endothermic process
  - (b) An exothermic process
  - (c) both (a) and (b)
  - (d) none
  
7. Which of the following can be made into crystal?
  - (a) A bacterium
  - (b) A virus
  - (c) an amoeba
  - (d) a sperm
  
8. Which of these is not related to endoplasmic reticulum?
  - (a) It behaves as transport channel for proteins between nucleus and cytoplasm
  - (b) It transports materials between various regions in cytoplasm
  - (c) It can be the site of energy generation
  - (d) It can be the site for some biochemical activities of the cell

9. Amoeba acquires its food through a process termed  
(a) Exocytosis (c) endocytosis  
(b) plasmolysis (d) exocytosis and endocytosis
10. Silver nitrate solution is used to study  
(a) Endoplasmic reticulum (c) golgi apparatus  
(b) Nucleus (d) mitochondria
11. Kitchen of the cell is  
(a) Mitochondria (c) chloroplast  
(b) Endoplasmic reticulum (d) golgi bodies
12. Lysosomes arises from  
(a) Endoplasmic reticulum (c) Golgi apparatus  
(b) Nucleus (d) mitochondria
13. The undefined nuclear region of prokaryotes are also known as  
(a) Nucleus (c) nucleolus  
(b) Nucleic acid (d) nucleoid
14. Which of the following equation is an equation of motion of a body  
(a)  $F = ma$  (c)  $p = mv$   
(b)  $v^2 - u^2 = 2as$  (d)  $Ft = mv - mu$
15. The velocity of a body moving at an initial velocity of 20 m/s and having an acceleration of  $4 \text{ m/s}^2$  after 2s will be  
(a) 24 m/s (c) 28 m/s  
(b) 32 m/s (d) 40 m/s
16. A body moving uniformly along a circular path has  
(a) Constant velocity (c) constant speed  
(b) Variable speed (d) same direction of motion
17. An object of mass 1 kg is moving with an acceleration of  $1 \text{ m/s}^2$ . Force acting on the object is  
(a) 10 N (c) 0.1 N  
(b) 0.001 N (d) 1 N
18. When the distance travelled by a body is directly proportional to time it is travelling with  
(a) Uniform acceleration (c) non-uniform acceleration  
(b) Constant speed (d) variable speed
19. The rate of change of momentum of an object is proportional to  
(a) Mass of the body (c) velocity of the body  
(b) Net force applied on the body (d) none of these

20. The sparks produced during sharpening of a knife against a grinding wheel leaves the rim of the wheel tangentially. This is due to

- (a) Inertia of rest
- (b) Inertia of direction
- (c) inertia of motion
- (d) force applied