



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

Multiple choice questions:-

1. Melting is
(a) An endothermic reaction (c) both
(b) An exothermic reaction (d) none
2. Chromosomes are made up of
(a) DNA (c) DNA and protein
(b) protein (d) RNA
3. A particle is moving in a circular path of radius r . The displacement after half a circle would be
(a) zero (c) $2r$
(b) πr (d) $2\pi r$
4. On converting 25°C , 38°C and 66°C to kelvin scale, the correct sequence of temperature will be
(a) 298K, 311K, 339K (c) 273K, 278K, 543K
(b) 298K, 300K, 338K (d) 298K, 310K, 338K
5. Which of the following are covered by a single membrane?
(a) mitochondria (b) vacuole
(c) lysosome (d) plastid
6. Area under a v - t graph represents a physical quantity which has the unit
(a) m^2 (c) m^3
(b) m (d) m/s
7. Which condition out of the following will increase the evaporation of water?
(a) Increase in temperature of water
(b) Decrease in temperature of water
(c) Less exposed surface area of water
(d) Adding common salt to water
8. Cell wall of which one of these is not made up of cellulose?
(a) Bacteria (c) hydrilla
(b) Mango tree (d) cactus
9. Slope of velocity –time graph gives
(a) The distance (c) the displacement
(b) The acceleration (d) the speed
10. In the sublimation process
(a) Solid changes directly to the vapour state
(b) Solid initially melts and then changes to vapour state
(c) Liquid changes to vapour state

- (d) None of the above
11. Kitchen of the cell is
(a) Mitochondria (c) chloroplast
(b) Endoplasmic reticulum (d) golgi bodies
12. Acceleration of an object is equal to
(a) speed /time (c) velocity / time
(b) change in velocity / time (d) change in speed / time
13. Alcohol exists as a liquid at room temperature because
(a) The intermolecular forces are strong enough to keep its particles bound to each other
(b) Its melting point is below room temperature
(c) It is highly compressible
(d) Both (a) and (b)
14. Lysosomes arises from
(a) Endoplasmic reticulum (c) golgi apparatus
(b) Nucleus (d) mitochondria
15. The velocity of a car increases from 36 km / hr to 108 km / hr in 10 s. The acceleration is
(a) 2 m / s^2 (c) 3 m / s^2
(b) 20 m / s^2 (d) 30 m / s^2
16. Butter may be evaporated by
(a) Heating and compression
(b) Heating and decomposition
(c) Cooling and decomposition
(d) Cooling and compression
17. 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
18. Melting points of four solids A, B, C and D are 78°C , 262°C , 100°C and 180°C . Inter particles forces of attraction are in the order
(a) $A > C > D > B$
(b) $B > C > D > A$
(c) $A > D > C > B$
19. Lipid molecules in the cell are synthesised by
(a) Smooth endoplasmic reticulum
(b) Rough endoplasmic reticulum
(c) Golgi apparatus
(d) Plastids
20. Amoeba acquires its food through a process termed
(a) Exocytosis (c) endocytosis
(b) Plasmolysis (d) both (a) and (b)

