



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

1. The system responsible for transporting blood around the body is :
  - A Urinary system
  - B Circulatory system
  - C Lymphatic system
  - D Digestive system
  
2. The left side of the heart is responsible for pumping :
  - A Oxygenated blood to the body
  - B Oxygenated blood to the lungs
  - C Deoxygenated blood to the body
  - D Deoxygenated blood to the lungs
  
3. Which of the following is an electromagnetic wave ?
  - A Cathode rays
  - B Sound wave
  - C Ultrasonic wave
  - D Infra red rays
  
4. What is the relation between wavelength, frequency and velocity ?
  - a.  $\text{velocity of wave} = \text{frequency} * \text{wavelength}$
  - b.  $\text{velocity of wave} = \text{frequency}/\text{wavelength}$
  - c.  $\text{velocity of wave} = \text{wavelength}/\text{frequency}$
  - d. None of above
  
5. What are audible sound waves ?
  - a. Having frequency less than 20 Hz
  - b. Having frequency between 20 Hz to 20000 Hz
  - c. Having frequency more than 20000 Hz
  - d. None of above

6. Chile saltpeter had the chemical formula
- (A)  $\text{NaNO}_3$                       (B)  $\text{KNO}_3$   
 (C)  $\text{Na}_2\text{B}_4\text{O}_7$                     (D)  $\text{Na}_2\text{CO}_3\cdot\text{H}_2\text{O}$
7. The ore  $\text{CaSO}_4\cdot 2\text{H}_2\text{O}$  has the general name.
- (A) Gypsum                      (B) Dolomite  
 (C) Calcite                      (D) Epsom salt
8. Down's cell is used to prepare.
- (A) Sodium carbonate  
 (B) Sodium bicarbonate  
 (C) Sodium metal  
 (D) Sodium hydroxide
9. Which element is deposited at the cathode during the electrolysis of brine in Nelson's cell?
- (A)  $\text{H}_2$                               (B) Na  
 (C)  $\text{Cl}_2$                             (D)  $\text{O}_2$
10. Ionic radius of potassium is.
- (A) 60 pm                          (B) 133 pm  
 (C) 99 pm                          (D) 169 pm
11. Among alkaline Earth Metals, the highest heat of hydration is of.
- (A) Be                              (B) Sr  
 (C) Rb                              (D) Cs
12. The chemical formula of sylvite is.
- (A)  $\text{Na}_2\text{CO}_3\cdot\text{H}_2\text{O}$               (B) KCl  
 (C)  $\text{KCl}\cdot\text{MgCl}_2\cdot 6\text{H}_2\text{O}$       (D) NaCl
13. The chemical formula of Alumite (Alum stone) is.
- (A)  $\text{KCl}\cdot\text{MgCl}_2\cdot 6\text{H}_2\text{O}$   
 (B) KCl  
 (C)  $\text{Na}_2\text{B}_4\text{O}_7\cdot 10\text{H}_2\text{O}$   
 (D)  $\text{K}_2\text{SO}_4\cdot\text{Al}(\text{SO}_4)_3\cdot 2\text{Al}(\text{OH})_3$

14. Among alkali metals the lowest atomic number is of.

- (A) Rb                      (B) K  
(C) Sr                      (D) Li

15. Due to the high reactivity nature of the alkali metals, they are found in.

- (A) Free in nature  
(B) Bounded with other elements  
(C) Not free in nature  
(D) All of the above

16. Magnesium is an essential constituent of.

- (A) Storaata              (B) Plants  
(C) Chlorophyll        (C) None of the above

17. Which of the alkali earth metal has radioactive nature.

- (A) Be                      (B) Rb  
(C) Both of the above    (D) Na

18. Calcium Phosphate  $\text{Ca}_3(\text{PO}_4)$  and calcium fluoride  $\text{CaF}_2$  are essential part of living organisms.

- (A) Bones, egg shells    (B) teeth  
(C) Sea-shells            (D) All of the above

19. Dolomite is a compound of which elements.

- (A) Be                      (B) Mg  
(C) Ca                      (D) Ba

20. The melting point and boiling point of which alkaline earth metal is high.

- (A) Sr                      (B) Mg  
(C) Be                      (D) Na