

# NEET EXAM

July 18, 2019

Max. Marks: 180

Duration: 3 Hrs

This paper consists of Chemistry, Physics and Biology

## Chemistry

- Multiple Choice Questions with one correct answer Question No. 1 to 45. A correct answer carries 1 Mark. A wrong answer carries a penalty of 0.25 marks.

## Physics

- Multiple Choice Questions with one correct answer Question No. 46 to 90. A correct answer carries 1 Mark. A wrong answer carries a penalty of 0.25 marks.

## Biology

- Multiple Choice Questions with one correct answer Question No. 91 to 180. A correct answer carries 1 Mark. A wrong answer carries a penalty of 0.25 marks.

## Useful Data

Atomic Wt.:

N = 14; O = 16; H = 1; S = 32; Cl = 35.5; Mn = 55; Na = 23; C = 12; Ag = 108; K = 39; Fe = 56;  
Pb = 207

Physical constants:

$h = 6.626 \times 10^{-34}$  J.sec,  $N_A = 6.022 \times 10^{23} \text{mol}^{-1}$ ,  $C = 2.996 \times 10^9 \text{ms}^{-1}$ ,  $m_e = 9.1 \times 10^{-31} \text{Kg}$

## Chemistry

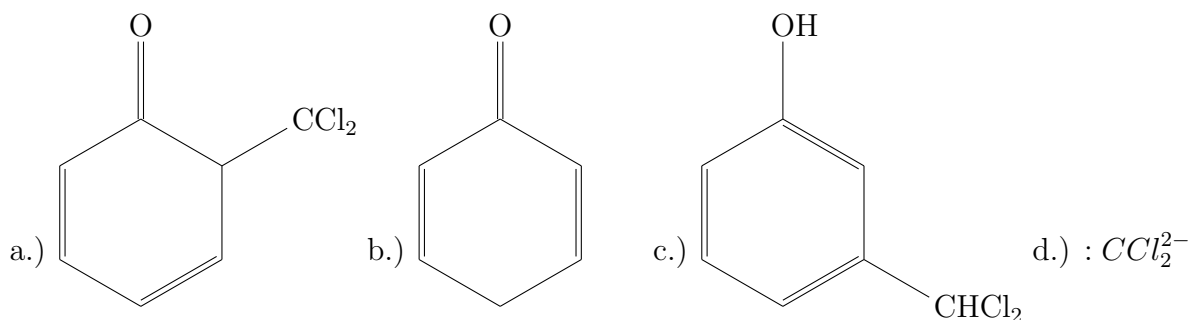
1. When a metal is burnt, its weight is increased by 24 percent. The Equivalent weight of metal will be

- a.) 2                      b.) 24                      c.) 33.3                      d.) 76

2. In which one of the following, the number of protons is greater than number of neutrons but number of protons is less than the number of electrons?

- a.)  $D_2O^{(+)}$                       b.)  $SO_2$                       c.)  $S^{2-}$                       d.)  $OH^-$

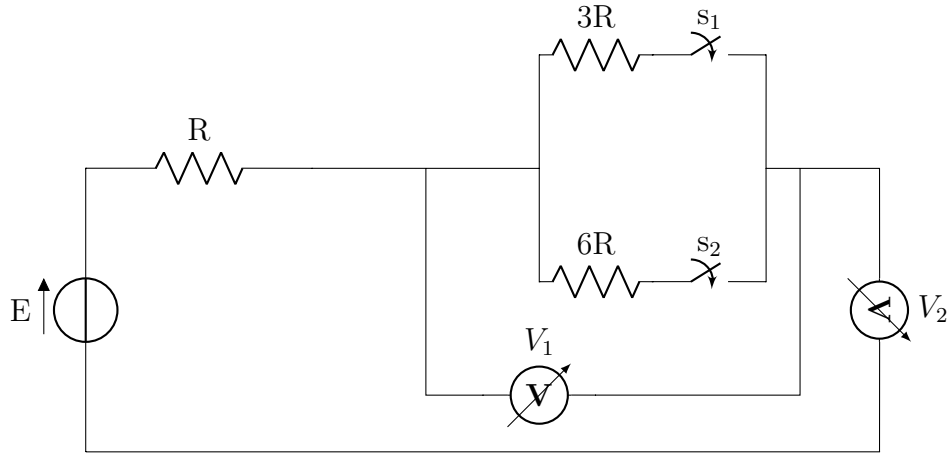
3. The correct order of decreasing dipole moment of  
 (I) toluene (II) m-dichlorobenzene  
 (III) o-dichlorobenzene (IV) p-dichlorobenzene
- a.)  $IV < II < I < III$       b.)  $IV < I < II < III$       c.)  $I < IV < II < III$   
 d.)  $IV < I < III < II$
4. The latent heats of fusion in  $Jg^{-1}$  of five substances A (mol. mass=18) B(mol. mass=20), C(mol. mass=30), D(mol. mass=60) and E(mol. mass=30) are respectively 80, 45, 90, 45, 45. Which of the following pairs has same value of " $\Delta H_{fusion}$ "?
- a.) A, C      b.) B, E      c.) D, E      d.) C, D
5. Which of the following is not formed as an intermediate in the Reimer-Tiemann reaction between phenol and alkaline chloroform?



6. Which of the following statement(s) is/are true?
- a.) At room temperature, formyl chloride is present in the form of CO and HCl  
 b.) Acetamide behaves as a weak base as well as a weak acid  
 c.)  $CH_3CONH_2 \xrightarrow{LiAlH_4} CH_3CH_2NH_2$   
 d.) All the above are true

### Physics

1. In the circuit shown in the figure, reading of voltmeter is  $V_1$  when only  $S_1$  is closed, reading of voltmeter is  $V_2$  when only  $S_2$  is closed and reading of voltmeter is  $V_3$  when both  $S_1$  and  $S_2$  are closed, then



- a.)  $V_3 > V_2 > V_1$   
b.)  $V_2 > V_1 > V_3$   
c.)  $V_3 > V_1 > V_2$   
d.)  $V_1 > V_2 > V_3$

## Biology

1. Diffusion pressure is directly proportional to:
  - a.) concentration of molecules diffusing
  - b.) kinetic energy of diffusion molecules
  - c.) concentration gradient
  - d.) all of the above
  
2. What happens when a formalin preserved filament of Spirogyra is placed in a hypertonic sugar solution?
  - a.) it losses turgidity
  - b.) it gains turgidity
  - c.) it is plasmolysed
  - d.) nothing happens
  
3. Nif genes occur in
  - a.) rhizobium
  - b.) Aspergillus
  - c.) Penicillium
  - d.) Steptococcus
  
4. Gibberellin induces flowering in
  - a.) some plants only
  - b.) in long day plants under short day conditions
  - c.) in short day plants under long day conditions
  - d.) day neutral plants
  
5.  $\alpha - 1$  Antitrypsin is
  - a.) an antacid
  - b.) an enzyme
  - c.) used to treat arthritis
  - d.) used to treat emphysema