

- Q.31 What is covalent bonding? Give example. (CO-2)
- Q.32 What is the difference between strong and weak electrolytes? (CO-4)
- Q.33 What are the characteristics of drinking water? (CO-3)
- Q.34 Describe in brief the cleansing action of soap. (CO-6)
- Q.35 What is electroplating? Write its any two applications. (CO-5)

### SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 (a) Write a short note on acid base titration. (CO-5)  
(b) How colloids are classified? Give examples. (CO-6)
- Q.37 Define PH of a solution. What is a PH scale? Write the applications of pH. (CO-4)
- Q.38 Explain the formation of ionic compounds with the help of an example. Write the characteristics of ionic compounds. (CO-2)

No. of Printed Pages : 4

121912/031912

Roll No. ....

### 1st Sem. Branch: DMLT Sub : Basic Chemistry

Time : 3Hrs.

M.M. : 100

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 The symbol of Copper is (CO-1)  
a) N b) Fe  
c) Cu d) Be
- Q.2 The SI unit of Pressure is- (CO-1)  
a) Mole b) Pascal  
c) Litre d) Kelvin
- Q.3 The charge on an electron is (CO-2)  
a) Positive b) Negative  
c) Neutral d) None of the above
- Q.4 What is the molecular formula of sodium chloride? (CO-4)  
a) KOH b) NaOH  
c) HCl d) NaCl
- Q.5 The example of conductors are- (CO-5)  
a) Silver b) Copper  
c) Iron d) All of the above
- Q.6 When an atom gain an electron it forms- (CO-1)  
a) Cation b) Anion  
c) Mole d) All of the above

- Q.7 The pure water should be- (CO-3)  
 a) Tasteless                      b) Free from ions  
 c) Colourless                      d) All of the above
- Q.8 Which of the following is a s-block element (CO-2)  
 a) Hydrogen                      b) Nitrogen  
 c) Carbon                      d) Oxygen
- Q.9 Which of the following is a colloid? (CO-6)  
 a) Gel                      b) Smog  
 c) Butter                      d) All of the above
- Q.10 What is the maximum number of electrons in an orbital? (CO-2)  
 a) 2                      b) 4  
 c) 6                      d) 8

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 The SI unit of time is \_\_\_\_\_ (CO-1)
- Q.12 A \_\_\_\_\_ is the mixture of solute and solvent. (CO-1)
- Q.13 Covalent bond is formed by \_\_\_\_\_ (sharing/transfer) of electrons. (CO-2)
- Q.14 (Soft/Hard) \_\_\_\_\_ water forms leather with soap solution. (CO-3)
- Q.15 What is unit of Normality? (CO-4)
- Q.16 Adsorption is a \_\_\_\_\_ (bulk/surface) phenomenon. (CO-6)
- Q.17 Give an example of a strong electrolyte. (CO-5)

- Q.18 The temporary hardness can be removed by boiling. (True/False) (CO-3)
- Q.19 Give an example of a natural buffer. (CO-4)
- Q.20 The mixture of oil in water forms \_\_\_\_\_ (emulsion/solution) (CO-6)

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Write any four disadvantages of hard water. (CO-3)
- Q.22 What are the molecular formula of Silver chloride and sodium hydroxide. (CO-1)
- Q.23 What are quantum numbers? (CO-2)
- Q.24 What is the difference between temporary and permanent hardness of water? (CO-3)
- Q.25 What is ionization? How does NaCl ionizes in water to make aqueous, solution? (CO-4)
- Q.26 Calculate the molecular mass of NaOH. The atomic weight of (H=1, Na=23, and O=16) (CO-1)
- Q.27 Write any two differences between Lyophilic and lyophobic colloids. (CO-6)
- Q.28 Define Molarity of a solution. Write its unit and formula. How does molarity varies with temperature. (CO-1)
- Q.29 What are the applications of electrolysis? (CO-5)
- Q.30 What is the difference between compound and mixture? (CO-1)