

# Chemistry Digital Assignment 3

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## ASSESSMENT

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VIT  
UNIVERSITY

SCHOOL OF ADVANCED SCIENCES

B.Tech (E1 Batch)

DA-III Winter Sem 2016-17 [Course: EC (CHV 102)]

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Time: 20 mins

Answer All Questions

Max. Marks: 10

1. Oxidation corrosion occurs  
a) With oxygen & moisture ☒ b) Without moisture c) Without oxygen d) None of them [b]
2. Alkalinity in water is due to  
a) Hydroxide b) Hydroxide and carbonate c) Carbonate and bicarbonate ☒ d) All of these [d]
3. The polymer membrane used in reverse process is  
a) Cellulose acetate b) Polymethylmethacrylate c) Polyamide ☒ d) All of them [d]
4. Calculate the quantity of lime required for softening 2500 litres of water containing  $\text{Ca}(\text{HCO}_3)_2$  (40ppm) for softening  
(a) 65.5g ☒ (b) 47.7g (c) 45.7g ☒ (d) 55.7g [b] d
5. Express in ppm if a hard water contains 5 meq  $\text{CaCO}_3$  per litre.  
a) 450 ppm b) 500 ppm c) 350 ppm ☒ d) 250 ppm [d]
6. Although Ag is a noble metal and forms stable film it becomes unstable when  
a) Exposed to HCl b) Exposed to  $\text{O}_2$  ☒ c) Exposed to  $\text{NH}_3$  d) Exposed to  $\text{Cl}_2$  [c]
7. In the marine environment the rate of corrosion is more due to  
a) Huge amount of water b) High viscosity ☒ c) High conductivity d) None of them [c]
8. The DI of an engine is 70 and its cetane number is  
a) 60 b) 57 c) 77 ☒ d) 67 [d]
9. A std hard water (50ml containing 100 mg  $\text{CaCO}_3$ ) requires 20 ml of EDTA while 50 ml sample water requires 20 ml after and 30 ml before heating. Its temporary hardness is  
a) 1500 ppm b) 1100 ppm ☒ c) 1200 ppm ☒ d) none of them [c] d
10. What will happen when precursor gas comes in contact with a heated substrate in CVD process  
a) Deposition of precursor gas ☒ b) Decomposition of precursor gas and deposition ☒ c) Precursor gas will react and deposit d) None of them [b] c