Biochemisrty 🧪🧬#

Q.1
All are true for renal handling of metabolic acidosis expect:

A.H+ secretion increased
B.HCO3- reabsorption decreased
C.urinary ammonia is increased
D.urinary acidity is increased

Ans:B

Q.2
Which of the following is most appropriate for a female suffering from insulin dependent diabetes mellitus with a ph of 7.2,HCO3- 17 and pco2 of 20?
A-metabolic acidosis
B-metabolic alkalosis
C-respirartory acidosis
D-respirartory alkalosis
Answer: A

Q.3
For an acid buffer solution ph=3, ph can be increased by:
A.increasing the conc of salt
B.increasing the conc of acid
C.decreasing the conc of acid and salt
D.independent of the conc of acid and salt.
Ans:A

Q.4
Calculate the ph of the following solution.
Solution contains:
500 ml H3po4. .4 M
500 ml H2po4 .6M
Pka=2.12, 7.21, 12.67
Ans:2.29

Q.5
What do we mean when we say water act as a heat buffer?

A-it keeps the temperature of an organism relatively constant
B-it increases the temperature of an organism as the temperature of the surroundings increases
C-it decreases the temperature of an organism as the temperature of the surroundings increases
D- it increases the temperature of an organism as the temperature of the surroundings decreases

Ans:A

Q.6
Which of the following bases have the highest pka value?
A.NaOH
B.NaNO3
C.KNO3
D.Kcl

Ans:A

Q.7
IF pkb for fluoride ion at 25c is 10.83 the ionization constant for hydrofluoric acid in water is :
A-1.74*10^-3
B-3.52*10^-3
C-6.75*10^-4
D-5.38*10^-2
Answer is C

Q.8
If the ph of a solution of NaOH is 12 what is the ph of a solution containing H2SO4 with the same molarity?
A)2 B)12 C)1.7 D)10.0387

Ans:C

Q.9

If you have 1M Nacl and 1M HCL are present in aqueous solution what it's type?

A. not a buffer ph<7

B. not a buffer ph>7

C. buffer ph<7

D. buffer ph>7

Ans:A

Q.10
Ph of a solution containing an equal volume of HCl=.01M and NaOH=.1M?
A.7
B.2
C.12.5
D.1.04

Ans:c

Q.11
Excessive cetrate in blood transfusion can cause?
A.metabolic acidosis
B.metabolic alkalosis
C.respiratory acidosis
D.respiratory alkalosis

Ans:B

Q12: concerning the following sentences choose the correct answer

A:PH of a buffer solution does not change on dilution
R: on dilution the ratio of concentration of salt and acid remains unchanged

A-A,R are correct,R is the correct explanation of A
B-A,R are correct,R is not the correct explanation of A
C-A is true but R is false
D-A is false but R is true
Answer IS A