1) increase in the plasma concentration of ph can lead to an increase PAH:

#### A excretion rate

- B)clearance rate
- C) filtration fraction
- 2) hemodyalsis can correct all the following except Hemoglobin concentration
- 3) in normal individual under normal diet and physical activity, -----the plasma urine has:

### A)lower ph, high osmolarity, higher k

- B)Higher ph higher osmo higher k
- C)Lower oh lower osmo lower k
- D)Higher ph lower osmo lower k
- E)Equal pg higher osmo equal k
- 4)the consumption of oxygen by the kidney
- A)Decreases as blood flow increases
- B)Is regulated by erythropietin
- C)Renin constant as blood flow increases

### D)Directly reflect the level of Na transported

E)Is greatest at the medulla

5)in the presence of ADH the filtration will be isotonic to the plasma in

- -cortical collecting duct
- -descending limb of henle

6)a pt takes excessive amount of bicarbonate to treat his heartburn which one of the following blood gas value will be observed

-PaCo2 45 Ph 7.5 PaCo2 55 ph 7.4 PaCo2 65 ph 7.3

7)Na is reabsorbed from the basolateral membrane by

-Na-K pump

8)respiratory acidosis that rsult in an increase in blood concentration oh hydrogen in the arterial blood from 40 (PH 7.4) to 50 (PH 7.3) would

#### Increase the conc oh HCO3 in arterial blood

9) which of the following substance will be concentrated more at the end of the proximal tubule that at the beginning of the proximal tubule

#### A)creatinine

B)Glucose

C)Na

D)bicarbonate

E)Amino acid

10)using the following
urinary flow =1.5L
urinary NH4=20
Urinary HCO3=4
Titratable acid=10
How much bicarbonate (bicarbonate gain( is being formed 39mg/day

11)reghaarding acid base balance all of the following are true except In metabolic acidosis arterial hco3 decreases as a compensatory response

12)most of the reenal vascular resisrance resides in **Efferent** 

13)regarding GFR all are true expect

Constriction of efferent arterioles always leads to increase GFR

14)minimum obligatory urine output in a 6 y old child 20kg body wight is equal to **300 ml/m2 body surface area** 

15)in the presence oh high conc of ADH, most of th fileered H2O is reabsorbed in **Porximal tubules NOT THE COLLECTING TUBULES AND DUCTS** \*momken yjeblna high aldosterone

16)in metabolic acidosis caused by diabbetic ketoacidosis ,which of the following would be less than normal

Conc of plasma hco3

17) Which cause increase in GFR **Dilation of the afferent** 

18)Destruction in supraoptic nuclei (not sure mn esmha), will produce : **Increase in urinary volume and very dilute urine** 

19) The effective renal plasma flow , which equal the clearance of PAH is less Than the true plasma flow because

# The plasma enter in the renal v contain small amount of PAH

20)Use the data to calculate the net amount of substance x secreted by the kidney , Clearance of inuline+130 Urine conc=10 Plasma con of x=0/1 Urine flow=1.5

### 2mg/min

21) Using the following ,how much glucose is reabsorbed by this normal kidney Urinary flow rate =1 Plasma creatinine-96 Plasma creatinine= 0.8 Plasma Glucose 120

## 144mg/min