

A. Give the formula for cardiac output and name two different and unique factors that affect **EACH** part of the equation.

B. Regarding Blood Pressure (BP)

a. Give the normal accepted values with their units: \_\_\_\_\_

b. Name two *indirect* ways to measure BP:

i.

ii.

c. Name a direct way to measure BP: \_\_\_\_\_

d. Give the formula for the following:

i. Mean Arterial BP \_\_\_\_\_

ii. Pulse pressure \_\_\_\_\_

e. What type of receptor monitors BP? \_\_\_\_\_

f. Where are these receptors located? (give location) \_\_\_\_\_

g. Name a problem that can occur with BP: \_\_\_\_\_

C. Regarding Blood Flow (BF):

a. Give the formula for local BF (to the tissues): \_\_\_\_\_

b. How does this local BF formula relate to the whole body BF of cardiac output? [Hint: see if you can combine both formulas]

c. Which blood vessel (type) controls BF into the capillary system? \_\_\_\_\_

D. Regarding Capillaries:

a. Give their general function: \_\_\_\_\_

b. Name the most common [histological] type of capillary: \_\_\_\_\_

c. Name the four capillary dynamic pressures and indicate which way the fluid is moving:

1)

2)

3)

4)

E. Name two hormones that affect BP by giving their source, target, and action at the target cell/tissue.

a.

b.

F. Name two hormones that come from blood vessel lining and give their functions.

G. Completely and properly define the following terms:

a. osmosis

b. portal vessels

c. edema

d. anastomosis

H. Properly fill in the chart using a different example for each area/region

<i>Region/Area/ or Structure</i>	<i>Unique and different blood vessel example</i>
Venous return from the face	
Arterial supply to the brain	
Branch from aortic arch	
Superficial venous return from arm	
Arterial supply to chest	
Venous return from the heart wall	
Venous Portal System	
Arterial supply to the GI tract	
Superficial venous return from the leg	
Anastomosis	