

AP2, Exam 2 – Vocabulary & Essays for Exam 2

Having command of these terms and being able to answer these questions thoroughly will help you perform well on exam 2.

Blood pressure (BP)
Blood flow (BF)
Peripheral resistance (PR)
Arterioles
Viscosity
Systolic pressure
Diastolic pressure
Pulse pressure
Mean arterial pressure (MAP)
Vasomotor center
Vasomotor tone
Epi & NE,
ACh,
ANP (aka ANH),
Renin
ADH (aka vasopressin)
Angiotensinogen, angiotensin I
Angiotensin II
ACE and ACE inhibitors
Aldosterone
Diuretics

Tissue perfusion
Capillary exchange
Circulatory shock
 Compensated shock
 Progressive shock
 Irreversible shock
Hypovolemic shock
Precapillary sphincters
Angiogenesis
Hydrostatic pressure (HP)
Osmotic pressure (OP)
Net filtration pressure (NFP)

Explain the factors influencing PR and how PR is normally adjusted.

Use 2 different formulas to calculate the MAP of a patient with a systolic pressure of 146 and a diastolic pressure of 92.

How is vasomotor tone created and adjusted and in which vessels are we doing most of the adjusting?

Explain the NFBM involving baroreceptors in the regulation of BP.

Explain the NFBM involving chemoreceptors in the regulation of BP.

Explain the fast acting but short term response of the kidneys to a sudden, dramatic drop in BP.

Explain the slower but longer lasting response of the kidneys to low BP via ADH.

Suppose farmer Bob loses his arm in an accident involving his hay baler. He passes out quickly and no one is around to help him. Explain the progression of circulatory shock that will lead to his death.

Predict what a person should do to help Bob in the field and predict what you should do to help Bob if he is transported to an ER.

Explain how BF is regulated at the 'local' level, not systemic.

Explain the balance of forces involved in capillary exchange (aka 'capillary dynamics')

Innate (nonspecific) immunity
Adaptive (specific) immunity
B cells (B lymphocytes)
T cells (T lymphocytes)
Immunocompetent (-tence)
Humoral response
Cell-mediated response
Immunological memory
Antigens
Antigenic determinants
Antigen-presenting cells (APCs)
 (aka dendritic cells)
Major histocompatibility complexes (MHCs)
MHC class I vs MHC class II
Antibodies
Cloning
Antigen-antibody complexes
Neutralization
Agglutination
Precipitation
Complement
Lysis
Plasma cells
Memory cells
Primary response
Secondary response
Vaccine & vaccination
CD4 T cells vs. CD8 T cells
Helper Ts
Cytotoxic Ts
Suppressor Ts
Perforins
Chemotaxis
Phagocytosis
AIDS
HIV
CD4 count
Cytokines
Interferon
Interleukins
Antibiotics
Immunosuppressive drugs
Hypersensitivities (aka allergies)
 "Acute" vs. "Delayed"
Allergens
Asthma
Anaphylactic shock
Bronchodilators
Allergic contact dermatitis
More terms in various tables you were
 directed to in lecture

Describe the sequence of events in the B cell (humoral) response to an antigen. Is this most effective against intracellular or extracellular antigens?

Describe the T cell (cell-mediated) response to an antigen. Is this most effective against intracellular or extracellular antigens?

What is the benefit of immunological memory?

Why does it matter whether a cell presents and antigenic marker with MHC class I or class II?

Describe several ways antibodies help you defeat antigens.

What is the benefit of vaccines and how is this accomplished?

What do AIDS patients typically die from and why?

Explain why the recipient of a transplanted organ typically needs to take immunosuppressive drugs. What is the disadvantage to this?