GENERAL ANATOMY NBS REVIEW 2010

1) What is an example of a gomphosis?

-Teeth

2) The spiral groove is located on which bone?

- Humerus

3) What kind of cells line the Upper Respiratory Tract?

- pseudo stratified ciliated columnar cells

4) What is the function of a Kupffer Cell?

- Phagocyte of the liver

5) Alveoli type II secrete which of the following?

- Surfactant

6) Which nerve has been interrupted when flexion of the thumb can no longer occur?

- Median Nerve

7) Examples of sydesmoses are?

- distal ulna/radius and distal tibia/fibula

8) Which of the following processes are located on the ulna and mandible?

- coronoid process

9) What structure does Human Chorionic Gonadotrophin maintain?

- corpus luteum

10) What is the primary muscle of hip abduction?

- Gluteus Medius

11) What muscle is responsible for plantar flexion of the foot

- peroneous longus

12) Which is located in the middle mediastinum?

- pericardium

13) What is the origin of the coracobrachialis?

- acromion

14) Which covers the entire surface of a muscle fiber?

- endomysium

15)What bones form the squamous suture?

- parietal and temporal bones

16) The linea aspera is located?

-Posterior femur

17) What nerve supplies the medial thigh

- obturator nerve

18)Please choose the correct arterial order

-aortic ,brachiocephalic, r. common carotid

19) Which muscle borders the anatomical snuff box

-Extensor Pollicus longus

20) What does the major calyce empty into?

- the renal pelvis

21) Which is a triangular sheath that extends from the sustentaculum talli to the posterior inferior surface of the navicular bone?

-plantar calcaneonavicular ligament

22) What is the primary function of the papillary muscles?

- prevents backflow from the right vein to the right atrium

Left vein to the left atrium

( when there are 2 possible answers pick the first answer)

23) Which is parallel to the floor?

-

24) All are rotator cuffs except?

-Teres major

25) The supraglenoid tubercle is located where?

- Scapula

SPINAL ANATOMY NBS REVIEWS 2010

1) Where is the origin of the adrenal medulla

-neural crest

2) Schwann Cells produce myelin where?

- PNS

3) Oligodendrocytes produce myelin sheath where?

-CNS

4) Telencephelon gives rise to?

-forebrain

5) Which ligament limits flexion and extension?

-IVD

6) Which is the inferior border of the IVF?

-pedicle

7) Which muscle is NOT apart of the erector spinae group?

-semispinalis (I LOVE SPINES)

8) Which muscle is responsible for abduction of the eye?

- lateral rectus

9) Which is not apart of occipital triangle?

- rectus minor

10) Which nuclei is associated with taste CN VII (ant. 2/3rd)

-superior salvatory

11) Which structure transverses through foraman spinosum?

- middle meningeal artery

12) CN IV exits via?

- Superior Orbital Fissure

13) Radial nerve branches from which cord?

-posterior cord

14) Sinus drains great vein of Galen?

- Straight Sinus

15) Connection between the 3rd an 4th ventricle?

- Cerebral Aqueduct Sylvius

16) Vertebral level that the spinal cord ends?

-L1/L2

17) What cord of the brachial plexus controls extension of the arm?

- Posterior cord

18) Which joint creates the majority of rotation in the cervicals?

C1-C2

19) Which structure pierces the parotid gland?

-Buccinator

20) Thenar atrophy indicated which nerve entrapment?

- median

21) Parkinsons disease is associated with damage to what structure?

Substantia nigra (LEWY BODIES)

22) Superior colliculus is associated with what special sense?

-visual

23) From the atlas to the occiput the ALL is known as?

- atlanto-occipital joint

24) Carotid sinus is innervated by?

-Vagus nerve

PHYSIO 2010 BOARD REVIEW QUESTIONS

1) Which is produced in the zone of glomerulosa of the adrenal cortex?

- aldosterone

2) Damage of the live leads to….

- decrease in lipid digestion and synthesis and impaired blood sugar regulation

3) The quickest adapters…

-Pacinian Corpuscles

4) Which neurotransmitter is inhibitory?

- Dopamine (Nor. Epi. Glutamate are all excitatory..GABA is also inhibitory)

5) Decreased interpleural pressure causes…

-inspiration

6) Controls pace of the heart?

- SA NODE

7) What produces the first beat of the heart?

-AV valves closing

8) What is the function of the surfactant?

-decrease surface tension

9) Oxytocin stimulates…

- milk let down and uterine contraction

10) What point on the myosin protein does ATPase attatch ?

- the head

11) Vital Capacity includes

-Inspiratory Reserve + Tidal Volume + Expiratory Reserve

12) Which characteristics are similar to smooth and skeletal muscle?

- Calcium ions crucial for contraction

13) Myocardium plateau is due mainly to…

- sodium calcium exchange channels

14) The portion of the renal tubule does the majority of absorption take place?

PCT

15) Influx of Na causes..

-depolarization

16) A blood test finding respiratory acidosis

- decreased pH

17) Post synaptic contraction of the skeletal muscle is mainly due to…

- The release of Calcium from the SR

18) The juxtaglomerular apparatus releases renin in response to?

- decreased pressure of the afferent arteriole

19) Chromaffrin cells developed from\_\_\_\_\_\_\_\_\_\_\_\_ and are associated with the \_\_\_\_\_\_\_\_\_ part of the ANS

- neural crest, sympathetic

20) HYPERventilation causes?

- respiratory alkalosis

21) What is believed to be an important CNS neurotransmitter in pain sensation?

- Substance P (P/pain)

22) Stenosis of the mitral valve can result in hypertrophy of the \_\_\_\_\_\_\_\_\_ due to mechanical resistance during contraction.

Left atrium (pulmonary hypertension)

BIOCHEMISTRY 2010 BOARD REVIEW QUESTIONS

1) Which is not a nucleoside derivative of a catabolic pathway?

-NADPH (anabolic)

2) Which aids in conversion of RNA to a protein?

TRNA (topoisomerase and helicase break down double strand to a single strand)

3) IDENTIFY GLUCOSE AS A 6C ring ( PIC)

4) Acetyl coA +\_\_\_\_\_\_\_\_ = citrate

Oxaloacetate (Our Cousin Citrate)

5) If the cofactor is removed from an enzyme what is it termed?

Apoenzyme

6) What is a precursor to epinephrine?

- Tyrosine

7) Patient has a case of periodontal disease that is not healing, with Vitamin C available which should be used?

Zinc

8) Hydroxylation of phenylalanine oxidase creates?

- Tyrosine

9) What aids in the uptake of insulin?

- Chromium

10 )What transports (DRIVES) fatty acids into the mitochondria?

- Carnitine (CARnitine= DRIVE)

11) Which is indigestible?

Cellulose (beta bonds)

12) Which of the following are sulfur containing amino acids?

-Methionine and cysteine (MC sulfur)

13) Which is a cholesterol precursor?

HMG coA ( enzyme is HMG coA reductase)

14) During the initiation of lipogenesis acetate moiety of acetyl coA is covalently attach to CO2 and reducing hydrogen is provided by NADH to form?

Malonyl coA

15) ?

16) What enzymes playa crucial role in DNA replication?

-Topoisomerase (helicase)

17) Which will reduce to only two glucose molecules?

Maltose

18) What type of bond is formed in DNA synthesis?

-phosphodiester bonds (DNA synthesis)

19) What fatty acid is NOT produced by the body? (essential)

Linoleic

20) Actual production of ATP is referred to as?

- Oxidative phosphorylation (phosphorylation means production)

21) ?

22) Secondary structure of protein?

- Alpha Helix or Beta Bend

23) Gentle heating separates the double stranded DNA..single strand beads break by which bond?

- hydrogen bonds

24) The function of RNA polymerase II is to make what?

-make mRNA from DNA template

PATHOLOGY 2010 NBS BOARD REVIEW QUESTIONS

1) Necrosis of the brain tissue results in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

- Liquefaction degeneration

2) A patient with air in the lungs is suffering from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-pneumothorax

3) 5 year old boy presents with pseudo hypertrophy of calf muscles increased CPK of 300..what is the diagnosis?

Muscular dystrophy

4)All are characteristics of myasthenia gravis except

Autoimmune disease

Symptoms include physis and diplopia

Primarily affects females

**PRIMARILY AFFECTS MALES**

5) Which of the following regarding reflex sympathetic dystrophy syndrome is correct?

-CAUSES ANYHYDROSIS

6) Wallerian degeneration of an axon occurs\_\_\_\_\_\_\_\_\_\_\_\_

-distal to proximal

7) What is a finding of Tophiin a gout patient?

-Helyx of the ear (if this is not a choice pick big toe)

8) Patient presents with pannus formation..this patient most likely has?

Rheumatic arthritis

9) Which malignant tumor gives a “sunburst” periosteal reaction?

- Osteosarcoma

10) The most common primary malignancy of bone is \_\_\_\_\_\_\_\_\_\_\_\_

-Osteogenic sarcoma (osteosarcoma)

11) Which antibody activates the classic complementary pathway, is thefirst response and is the largest immunologic?

-IgM

12) What is the most clinically significant progression of osteotitis deformans?

- Osteosarcoma (if not a choice pick canal stenosis)

13)Malignancy found in a child kidney?

Wilms Tumor (Poor Willy Wilms)

14) Long stand RA term

-Feitys syndrome

15) Prinzmetal angina is caused by

-vasospasm of the coronary artery

16) Very tall patient presents with arachnodactyly, hyper extensibility and aortic arch fragility…what is your diagnosis?

-Marfan’s

17) Patients with a pheochromocytoma would exhibit \_\_\_\_\_\_\_\_\_\_\_\_\_

“sympathetic rushes”

18) All of the following cause PID except

N. Gonnerhea

E. Coli

Chlamydia Trochomatis

**ANTHRACOSIS (BLACK LUNG DISEASE)**

19) A cell type change from one type to another is known as?

-metaplasia

20) “Skip lesions” is associated with which disease?

Regional enteritis ( Crohn’s Disease)

21) Patients with celiac disease has an intolerance to which of the following?

Gluten (no wheats)

22) Multiple Myeloma has which periosteal response?

NO RESPONSE

23) Which leukocyte increases with viral infections?

Lymphocytes

24) Increase in adrenocoticotropic hormone will cause moon face, hirtuism, purple striae and buffalo hump…what is your diganosis?

CUSHINGS

MICROBIOLOGY 2010 BOARD REVIEW QUESTIONS

1) A grape like odor with tissue color change to “blue green” puss in a burn victim indicates \_\_\_\_\_\_\_\_\_\_\_\_\_

-Pseudomonas Argenosis

2) The mating proces of one gram negative bacteria to another involving the pilus is \_\_\_\_\_\_\_\_\_\_\_\_

-Conjugation

3) In 1928 the foundation of modern molecular genetics began by this discovery of transfusion in bacteria by which discoverer?

-Griffith

4) Which following hypersensitivity indicates a transfusion reaction?

-Type II

5) What percentage of adults smoke?

-25%

6) Which medium is best used to grow a virus?

-Tissue culture

7) Staphylococcus Aureus physical characteristics are best described as

-cluster like

8) Gram + bacteria that causes impetigo?

-staphylococcus

9) Grayish pseudo membrane across the lumen of the throat is diagnosed as?

-diptheria

10) Frothy foul smelling and green yellow discharge is the diagnosis for which of the following?

-Trichomonas

11) Necater Americanas is transmitted through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Walking on fecal infested sand barefoot

12) The 2nd stage of treponema pallidum is \_\_\_\_\_\_\_\_\_\_\_\_

-generalized rash (contagious)

13) Sporothrix Schenkii is transmitted primarily by?

-transcutaneous

14) Which is a vector for plasmodium vivax?

- mosquito

15) Which is a sphirochetal agent that transmits Lyme disease?

- Borrelia Burgdorferi

16) The anal cellophane scotch tape test was used to discover \_\_\_\_\_\_\_\_\_\_\_\_\_

-If a patient contracted enterobius vermicular is

17) Consumption of undercooked beef causes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Taenia saginata (if thisis not a choice pick Hymenolepis Nana)

18) Necrotic pneumonia possibly leading to death caused by mycoses is known as\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Aspiragallos M.

19) The annual cost in the U.S. for alcohol abuse is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-170 billion dollars

20) The most common STD in the U.S. is?

Chlymadia

21) Which intracellular protozoa causes 30% chance of fetal damage?

-Taxoplasma Gondi (Taxoplasmosis)

22) Which immunologic crosses the placenta?

- Ig G

23) Polio vaccine that is live and attenuated?

-Sabin

24) Which diseases describes “Mothers Milk”

-Natural Passive

25) B, T and null cells are all considered ?

lymphocytes