

INTEGRATIVE BIOLOGY 131 – FALL 2005
EXAMINATION #1 – OCTOBER 17
BLUE VERSION “B”

Please give the BEST answer.

1. The anterior fontanelle is between what two bones?
 - a. frontal and temporal
 - b. ethmoid and zygomatic
 - c. sphenoid and frontal
 - d. parietal and frontal

2. Capillaries are lined with
 - a. cuboidal endothelial cells
 - b. squamous endothelial cells
 - c. columnar cells
 - d. collagenous fibers

3. The external iliac becomes the femoral artery at the level of the
 - a. 4th lumbar vertebra
 - b. sacroiliac joint
 - c. inguinal ligament
 - d. pubic tubercle

4. Which is not a bony attachment of the trapezius?
 - a. humerus
 - b. scapula
 - c. clavicle
 - d. occipital bone

5. Phlebitis is a condition concerned with
 - a. plaques in the arteries
 - b. inflammation of venous valves
 - c. inflammation of the tunica intima in veins and blood clotting and is very painful
 - d. inflammation in arteries

6. The renal and gonadal arteries come off the abdominal aorta between the
 - a. superior mesenteric and esophageal
 - b. superior mesenteric and inferior mesenteric
 - c. common iliac and inferior mesenteric
 - d. common iliac and internal iliac

7. The tibia and fibula both articulate with the
- calcaneus
 - talus
 - first metatarsal
 - femur
8. Which vessel (s) carries (y) oxygenated blood?
- pulmonary artery
 - pulmonary veins
 - superior vena cava
 - internal jugular vein
9. Hemopoietic tissue forms
- only erythrocytes
 - only leukocytes
 - both a and b
 - only platelets
10. Which of the following is incorrect?
- the apex of the heart is in the 5th intercostal space
 - the heart is the size of the spleen
 - the heart is 2/3 to the right of the midline
 - the base is inferior to the sternal angle
11. Which is not correct in the pelvic floor?
- the anus is between the coccyx and the median raphe
 - the vagina is posterior to the urethra
 - the urethra is between the vagina and the pubic bone
 - the levator ani muscle originates from the ischium and the pubic bone
12. The vagus nerve provides
- sympathetic input to the heart
 - increased speed to the heart beat
 - the coronary sinus with innervation
 - parasympathetic input to the heart which slows the beat
13. The mastoid process is a projection behind the ear and connects to the
- nasal cavity
 - middle ear
 - posterior orbit
 - maxillary sinus

14. Two muscles which close the jaw are the
- buccinator and temporalis
 - masseter and zygomaticus
 - temporalis and masseter
 - oricularis oris and buccinator
15. The pericardial cavity is
- lined with mesothelial cells and filled with fluid
 - contains platelets to prevent clotting
 - is surrounded with cuboidal cell linings
 - is continuous with the right atrium
16. Which is not a function of the external oblique?
- aids in breathing
 - aids in defecating
 - helps to support the floor of the pelvic cavity
 - aids in child birth
17. Which combination is true?
- the auricle and the atrium are the same structure
 - the foramen ovale was formerly the fossa ovale
 - the pectinate muscles are the same as the trabeculae carneae
 - the pulmonary trunk and the pulmonary arteries both carry venous blood
18. Which is correct?
- endocardium consists of two layers of endothelial cells
 - endocardium is sometimes called visceral endocardium
 - endocardium is continuous with epithelial cells in the blood vessels
 - epicardium and endocardium are synonymous
19. Which does not apply to the frontalis muscle?
- connects to the galea aponeurotica
 - raises the eyebrows
 - has no bony attachment
 - raises the eyelids
20. Which is not correct?
- the internal carotid artery terminates in the middle cerebral artery
 - the anterior cerebral artery supplies Broca's area
 - the internal carotids supply 75% of the blood to the brain
 - the vertebrals supply 25% of the blood to the brain

21. Which is not part of the appendicular skeleton?
- a. scapula
 - b. clavicle
 - c. pubic bone
 - d. sternum
22. Which muscle closes the eyelid?
- a. orbicularis oris
 - b. orbicularis oculi
 - c. levator palpebrae
 - d. buccinator
23. The parietal layer of the pericardium is
- a. adherent to the visceral layer
 - b. adherent to the outer, thick fibrous layer
 - c. consists only of tough fibers
 - d. is also called the epicardium
24. Which is incorrect?
- a. kyphosis is accentuation of the thoracic curve
 - b. lordosis is accentuation of cervical curve
 - c. scoliosis is lateral deviation of the vertebral column
 - d. lordosis is accentuation of the lumbar curve
25. The lub component of the heart beat means the
- a. closure of all the semilunar valves
 - b. opening of the bicuspid valve
 - c. opening of the tricuspid valve
 - d. closure of the bicuspid and tricuspid valves
26. The roof of the orbit is made up of which bone?
- a. ethmoid
 - b. sphenoid
 - c. maxilla
 - d. frontal
27. The orbicularis oris inserts on the
- a. squamous portion of the temporal bone
 - b. contralateral side of the cheek
 - c. contralateral side of the mouth
 - d. same side of the mouth as the buccinator

28. The aponeurosis of the external oblique is not involved with the
- inguinal ligament
 - superficial ring of the inguinal canal
 - iliac spine
 - mediastinum
29. The pectoralis major does not originate on the
- clavicle
 - sternum
 - humerus
 - costal cartilages
30. Which is correct? Purkinje fibers
- form the conduction mechanism of the heart
 - form the AV node
 - do not form the bundle of His
 - line the tricuspid valve
31. Which is not correct about the rectus abdominis?
- originates on the pubic bone and symphysis
 - flexes the vertebral column
 - is surrounded by three layers of aponeurosis both superior and inferior to the umbilicus
 - inserts on the xiphoid process as well as on the 5, 6 and 7 costal cartilages
32. The straight sinus connects the _____ with the superior longitudinal sinus
- cavernous sinus
 - transverse sinus
 - inferior longitudinal sinus
 - sigmoid sinus
33. Which is not an elastic artery?
- brachiocephalic
 - subclavian
 - common carotid
 - brachial
34. All facial bones articulate with the maxilla except the
- ethmoid
 - sphenoid
 - zygomatic
 - mandible

35. Endarterectomy is a procedure
- scraping off plaques from the tunica adventitia of the common carotid
 - commonly used in muscular arteries
 - only used in coronary arteries
 - used to scrape off plaques from the tunica intima in the common carotid arteries
36. Which is not correct regarding the triceps?
- inserts on the radial tuberosity
 - powerful extensor of the forearm
 - originates on the infraglenoid tubercle process of the scapula
 - originates on the humerus
37. The pace maker is in the
- left atrium
 - right atrium
 - coronary sinus
 - venous sinus
38. The entire body is made of four (4) major kinds of tissues. Which one is not correct?
- nervous
 - connective
 - capillaries
 - epithelial
39. During diastole which is correct?
- the AV valves are open
 - the AV valves are closed
 - the semilunar valves are open
 - the mitral (bicuspid) valve is closed
40. The matrix of bone is called _____ and is resilient because it has fibers.
- hydroxyapatite $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$
 - hydorxyapatite
 - osteapatite
 - hydroxyapatite $\text{Ca}_6(\text{PO}_4)_2(\text{OH})_{10}$
41. Which of the following constitutes the linea alba?
- aponeurosis
 - deep inguinal ring
 - round ligament
 - anterior iliac spine

42. Atherosclerosis
- begins in the tunica media
 - in coronary arteries causes one third of the deaths in America
 - never occurs at bifurcations of arteries
 - cannot be reduced in coronary arteries with the procedure called angioplasty
43. Since the latissimus dorsi inserts on the intertubercular groove of the humerus, it does not function to:
- medial rotate the humerus
 - adduct the arm
 - draw shoulder down and back
 - raise the arm
44. Venous blood from the brain runs in _____ to reach the internal jugular vein
- veins
 - capillaries
 - dural venous sinuses
 - smooth muscle channels
45. The sella turcica which surrounds most of the pituitary gland is part of what bone?
- ethmoid
 - sphenoid
 - maxilla
 - palatine
46. Which of the following is not an identifying characteristic of bone?
- fossa
 - foramen
 - pseudounipolar
 - trochanter
47. Heart valves are made of
- endocardium and smooth muscle
 - endocardium and connective tissue
 - epicardium and connective tissue
 - myocardium and epicardium
48. Neutrophils
- have one large nucleus
 - produce antibodies
 - are smaller than lymphocytes
 - enter infected areas and destroy bacteria by phagocytosis

49. Which bone is not part of the “cheek bone?”
- a. zygomatic process of the temporal
 - b. zygomatic process of the mandible
 - c. zygomatic bone
 - d. zygomatic process of the maxillary bone
50. After a fracture of the humerus, which of the following is not part of the healing process?
- a. blood clot forms between two sides of the fracture
 - b. periosteal fibroblasts form osteoclasts
 - c. a bony collar forms
 - d. a callus has some bony fragments

A CLIMBER’S CREED: THE GREATEST REWARDS COME FROM THE
GREATEST COMMITMENTS