

MEDICAL SCANS
JANUARY 17, 2007

Choose the best answer out of the choices given.

1. If you suspect someone has Alzheimer's disease, which of the following scans would be most likely to conclusively diagnose the condition?
 - a. Cranial CT Scan
 - b. Cranial MRI
 - c. Cranial PET Scan
 - d. Bloodwork
2. To check if someone has liver cancer, which of the following scans would be used?
 - a. Abdominal MRI
 - b. Abdominal PET Scan
3. Which of the following may be used to study the activity of someone's brain as they perform a task?
 - a. Cranial CT Scan
 - b. Cranial MRI
 - c. Cranial PET Scan
 - d. Bloodwork
4. Anatomical proof of brain cancer is most commonly achieved with which of the following scans?
 - a. Cranial CT Scan
 - b. Cranial MRI
 - c. Cranial PET Scan
 - d. Bloodwork
5. A patient is found to have 10 mmol/L carbon dioxide levels in his blood. What other symptom would you expect to find in this patient?
 - a. Frequent headaches
 - b. Muscle fatigue
 - c. Brown urine
 - d. Severe indigestion
6. Which of the following completes the following analogy: _____ is to 2 dimensions as _____ is to 3 dimensions.
 - a. voxel...pixel
 - b. loxel...voxel
 - c. pixel...loxel
 - d. pixel...voxel
7. A large, red spot on a PET scan of a person's brain usually indicates which of the following?
 - a. Nothing
 - b. Brian cancer
 - c. Patient is dead
 - d. Patient is sleeping
8. Cushing's disease would most likely be diagnosed by which of the following methods?
 - a. Cranial CT Scan
 - b. Cranial MRI

- c. Cranial PET Scan
 - d. Bloodwork
9. If a patient is suspected to have a minor pneumothorax, which of the following scans would be used to confirm the diagnosis?
- a. Cranial CT Scan
 - b. Cranial MRI
 - c. Cranial PET Scan
 - d. Bloodwork
10. Neither the CT, MRI, ultrasound, nor PET scans are able to confirm any type of infectious disease caused by a pathogenic organism.
- a. True
 - b. False
11. Which of the following is the mRNA start codon in most cases?
- a. UUG
 - b. AUG
 - c. GUA
 - d. CCU
12. The glands that secrete cortisol are located in which of the following areas?
- a. Adrenal medulla
 - b. Hepatic duct
 - c. Adrenal cortex
 - d. Cardiac sphincter
13. Which of the following completes this sentence: The _____ controls food entry to the stomach, while the _____ controls food exit.
- a. pyloric sphincter...cardiac sphincter
 - b. hepatic sphincter...pyloric sphincter
 - c. cardiac sphincter...pyloric sphincter
 - d. hepatic sphincter...anal sphincter
14. A PET scan would be expected to fail in a patient with which of the following conditions?
- a. Severe smoker
 - b. Morbidly obese
 - c. Type I Diabetes
 - d. Gigantism
15. The physical expression of a person's genes is known as which of the following?
- a. Genotype
 - b. Phenotype
 - c. Translation
 - d. Transconduction