

# exam-1-study-guide

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## Resources

- Quiz 1 Answer Key

## Topic outline

- History
  - Aristotle vs. Galen
  - Descartes

## Topic outline

- Methods
  - Structural vs. Functional
  - High spatial/temporal resolution vs. low

## Topic outline

- Neuroanatomy
  - Directional terms, slice planes
  - Forebrain, midbrain, hindbrain
  - Cortical landmarks
  - Supporting structures

## Topic outline

- Glial cell types & functions
- Why are neurons special
- Basic neuronal anatomy

## Topic outline

- The resting potential and the balance of forces
- The action potential

**The image illustrates what type of slice?**

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- Sagittal
- Horizontal
- Coronal
- Axial

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**All of the following structures can be seen in the figure EXCEPT**

- Cerebellum
- Corpus callosum
- Lateral ventricles
- Cerebral cortex

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**The figure illustrates which imaging method?**

- CT
- PET
- Magnetoencephalography (MEG)
- MRI

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**Descartes thought that this structure was the place where the soul influenced the human body's voluntary movements.**

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- The pituitary gland
- The pineal gland
- The reflexive complex

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- Inferior
- Superior
- Dorsal
- Medial

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Auditory information enters the CNS via the 8th (VIII) cranial nerve and projects through this sound-responsive nucleus of the midbrain tectum.

- lateral geniculate nucleus
- striatum
- substantia nigra
- inferior colliculus

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- hypothalamus
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- better; similar
- better; worse
- worse; better
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**Which of these landmarks separates the frontal from the parietal lobe?**

- Lateral fissure
- Longitudinal fissure
- Anterior cingulate gyrus
- Central sulcus

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**Gray matter is mainly composed of:**

- Axons
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- Myelin
- None of the above

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**Which of these is NOT a component of the forebrain?**

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- Basal ganglia
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- Medulla

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**Which brain lobe contains the primary and supplementary motor cortex?**

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- Occipital

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**During a threatening situation signals are sent through the amygdala to what brain structure that controls the ANS and the endocrine/hormal processes?**

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**Which of these of techniques relays on the hemodynamic response function in order to draw conclusions about brain activity?**

- fMRI
- PET
- Ca++ Imaging
- EEG

**Which of these of techniques relies on the hemodynamic response function (HRF) in order to draw conclusions about brain activity?**

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**What is the name of the area in the brain at the brainstem where the blood/brain barrier is thin?**

- Tectum
- Area Postrema
- Medulla Oblongata
- Tegmentum

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**Next time...**

- Exam 1