

DR.RAMENDRA KUMAR SINGH

Senior Assistant Professor

P.G.Dept.of Psychology

M.B.R.R.V.Pd.Singh College, Ara

LOBES & FUNCTION

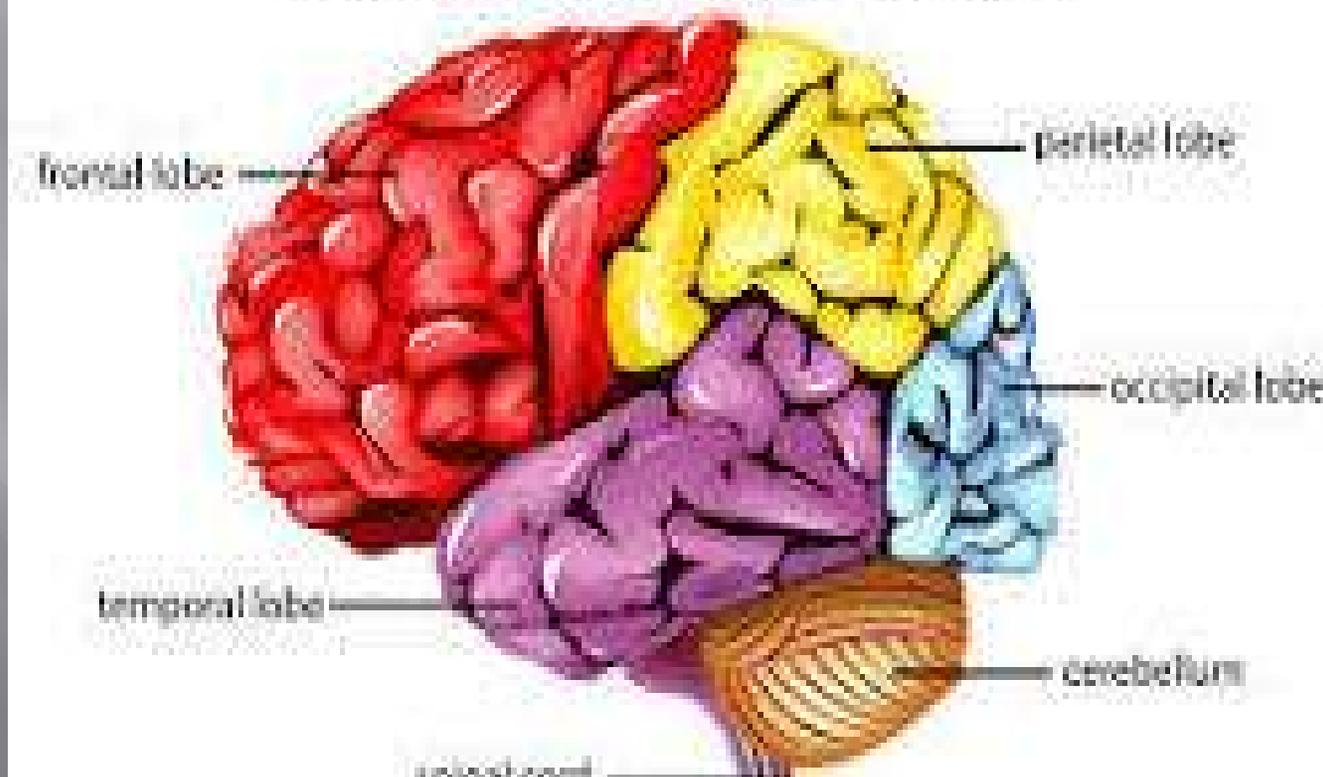
- ▣ U.G.Sem – 6
- ▣ MJC Paper – 11
- ▣ Biopsychology

Lobes and function

- ▣ The brain's cerebral cortex is the outermost layer that gives the brain its characteristic wrinkly appearance. The cerebral cortex is divided lengthways into two cerebral hemispheres connected by the corpus callosum. Traditionally, each of the hemispheres has been divided into four lobes: frontal, parietal, temporal and occipital.

Cont...

Parts of the Human Brain



Cont...

▣ **FRONTAL LOBE**

- ▣ The frontal lobe is separated from the parietal lobe by a space called the central sulcus, and from the temporal lobe by the lateral sulcus.

Cont....

- ▣ The frontal lobe is generally where higher executive functions including emotional regulation, planning, reasoning and problem solving occur.

Cont...

▣ **PARIETAL LOBE**

- ▣ The parietal lobe is behind the frontal lobe, separated by the central sulcus. Areas in the parietal lobe are responsible for integrating sensory information, including touch, temperature, pressure and pain.

Cont...

- ▣ Because of the processing that occurs in the parietal lobe, we are able to, for example, discern from touch alone that two objects touching the skin at nearby points are distinct, rather than one object.

Cont...

▣ TEMPORAL LOBE

- ▣ Separated from the frontal lobe by the lateral fissure, the temporal lobe also contains regions dedicated to processing sensory information, particularly important for hearing, recognizing language, and forming memories.

Cont...

- ▣ The temporal lobe contains the primary auditory cortex, which receives auditory information from the ears and secondary areas, and processes the information so we understand what we're hearing (e.g. words, laughing, a baby crying).
- ▣ Certain areas in the temporal lobe make sense of complex visual information including faces and scenes.

Cont..

The medial (closer to the middle of the brain) temporal lobe contains the hippocampus, a region of the brain important for memory learning and emotions.

- ▣ **OCCIPITAL LOBE**

- ▣ The occipital lobe is the major visual processing center in the brain.