The nervous system can also be divided on the basis of its functions, but anatomical divisions and functional divisions are different. The CNS and the PNS both contribute to the same functions, but those functions can be attributed to different regions of the brain (such as the cerebral cortex or the hypothalamus) or to different ganglia in the periphery. There are two ways to consider how the nervous system is divided functionally. First, the basic functions of the nervous system are sensation, integration, and response. Secondly, control of the body can be somatic or autonomic—divisions that are largely defined by the structures that are involved in the response. Similar books and articles. Analytics. Added to PP index 2015-02-13. Total views 0. Recent downloads (6 months) 0. How can I increase my downloads? Downloads. Nervous System Functions. Maintains homeostasis Provides for sensation, higher mental functioning, and emotional response Activates muscles and glands. Organization of the Nervous System. Structural. Central Nervous System (CNS). Brain and spinal cord. Peripheral Nervous System (PNS). Nerves and ganglia. Functional. Motor and association neurons. Neuron Physiology. A nerve impulse is an electrochemical event. Various stimuli causes a change in the plasma membrane permeability. Peripheral Nervous System Made up of long axons and dendrites, it contains all parts of the nervous system other than the brain and spinal cord. Central Nervous System Consists of the brain and spinal cord. Somatic Division (Voluntary) Specializes in the control of voluntary movements and the communication of information to and from the sense organs. The nervous system is the part of the body that coordinates the voluntary and involuntary actions and transmits signals between different parts of its body. It consists of two main parts, the central nervous system (CNS) and the peripheral nervous system (PNS). The central nervous system is consisting of the brain and the spinal cord.