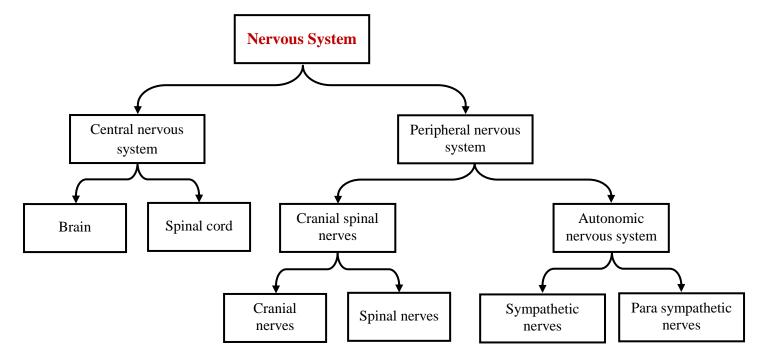


# Lecture Sheet: 02 Science (Chapter-10: Co-ordination) Class: X

# Nervous System:

The system, through which the animal responds to stimuli, maintains connections of various organs, co-ordinates various activities, physiological process and maintains relations with the environment, is called the nervous system



# Central nervous system

Central nervous system consists of brain and spinal cord.

#### Brain:

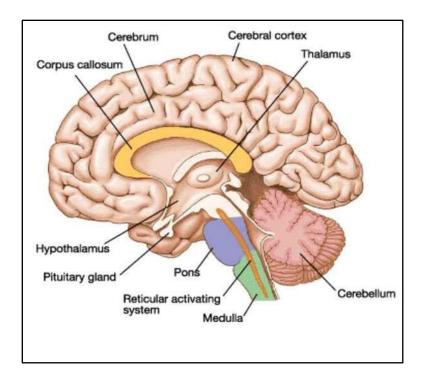
The swollen part of the nervous system, which is at the top of the spinal cord and remains in the skull, is called the brain.

- Brain is the manager of the nervous system.
- The brain is divided into three parts, such as
  - a) Fore brain or Prosencephalon
  - b) Mid brain or Mesencephalon
  - c) Hind brain or Rhombencephalon

Q. Why is brain called the manager of nervous system?

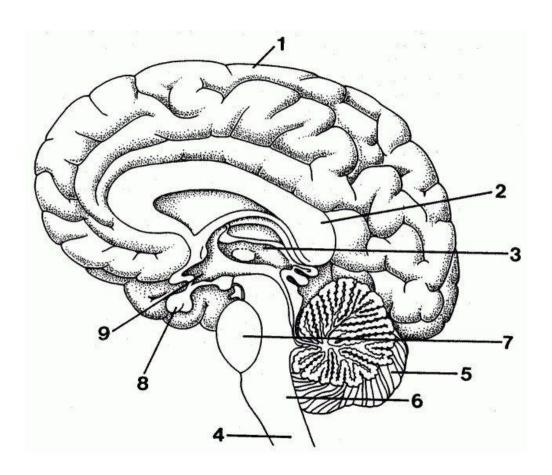
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## Human Brain

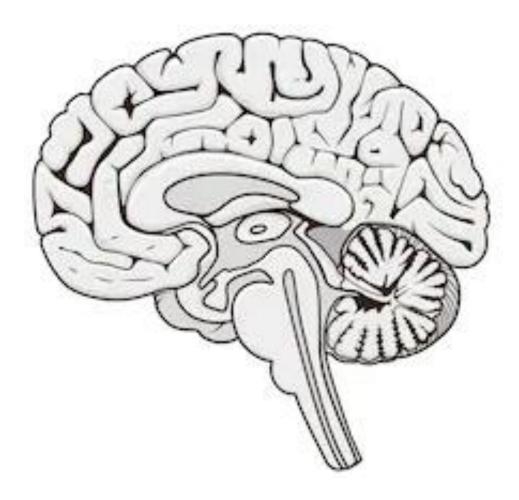


# Q. Select the names of the parts of the heart from the box below and write next to the number.

Pons, Corpus callosum, Thalamus, Cerebrum, Pituitary gland, Hypothalamus, Medulla oblongata, Cerebellum



# Q. In the picture below, identify and write the different parts of the human brain.



# Interesting Facts about the Brain

There are many amazing facts about the brain that we are not aware of. Some interesting brain facts are given below.

# Fact No. -1

The human brain cannot feel any pain has it have pain receptors. It contains about 86 billion nerve cells.

# Fact No. -2

The human brain can survive for about 5 to 10 minutes without oxygen, 2 days without water, 11 days without sleeping and 20 days without food.

## Fact No. -3

A human brain is more active and works faster when we are tired and during the night times when we are sleeping. Hence it is advised to have a proper sleep of 7 to 8 hours which improves the brain's life.

# Fact No. -4

Our brain continues to grow until the age of 18 and it has a memory capacity equivalent or more than the four terabytes on a hard drive.

# Fact No. -5

The weight of the human brain is around 3 pounds which comprise 60% of fat. Therefore, it is the fattest organ in the human body occupies 2% of a total body's weight.

#### Fact No. -6

The brain can absorb around 0.025 kilowatts of energy, which is enough to illuminate a standard electric light bulb.

#### Fact No. -7

Neurons in the brain multiply more than 200000 neurons per minute during the time of pregnancy.

#### Fact No. -8

There are around 75 to 100 billion neurons present in the brain and the length of each blood vessels present in the brain are almost 100000 miles.

## Fact No. -9

The human brain is faster than the computer and it is capable of solving problems more efficiently.

# Fact No. -10

Seafood is the most beneficial diet for the human brain, as it contains fatty acid which can increase the brain's performance up to 15%.

#### Fact No. -11

The older we grow, it becomes more difficult in remembering things. This is because our brain and nerve cells shrink along with our age and are not able to filter and remove old memories which prevent it from absorbing new ideas.

#### Fact No. -12

New brain connections are created every time a person learns something new. The human brain has about 70000 thoughts per day out of which 70% are believed to be negative.

## Fact No. -13

Both left and right-hand side brain always work together and there is no division between them.

#### Fact No. -14

During any brain surgery, a part of the human brain is removed, which has no effect on memory or personality.

#### Fact No. -15

As per the recent studies, the smell of chocolate increases the brain waves, which trigger relaxation in the brain cells.

# Q. Draw a figure of human brain and identify the following parts.

Pons, Corpus callosum, Thalamus, Cerebrum, Pituitary gland, Hypothalamus, Medulla oblongata, Cerebellum