the CNS. It carries impulses to and from the CNS.

- The somatic (voluntary) nervous system is the part of the peripheral nervous system that is involved in the movement of the skeletal muscles and in carrying information from the sense organs.
- The autonomic (involuntary) nervous system is the part of the peripheral nervous system that is concerned with involuntary activities such as heartbeat, digestion, secretion from glands and excretion.

Exercises

A. Fill in the blanks.

1. Some neurons have a myeline sheath around their axons.
2. The junction of two neurons is called a Synapse.
3. The brain is lodged in the cranium.
4. CSF cushions the brain against shocks. (CSF = cerebrospinal fluid)
5. The meninges are membranes surrounding the brain and the spinal cord.
6. The anterior part of the brain is called the cerebrum.
7. The cerebellum helps maintain balance and posture.
8. The medulla oblongata controls involuntary action.

B. Choose the correct option.

1. The neurons that carry impulses from the body to the brain are called
   (a) sensory neurons
   (b) sense organs
   (c) motor neurons
   (d) effector organs

6. The narrow canal within the spinal cord is called the
   (a) cerebrospinal fluid
   (b) synapse
   (c) central canal
   (d) myelin
7. Mixed nerves carry impulses
   (a) to the sensory organs
   (b) to the CNS
   (c) to and from the CNS
   (d) to the effector organs

C. Write 'true' or 'false'. If false, write the correct statement.

1. A nerve cell is called a ~~cyton~~ neuron. F
2. Myelinated axons transmit impulses faster than unmyelinated axons. T
3. Information passes from one neuron to another at a synapse. T
4. Motor neurons carry impulses to the ~~sense organs~~ effector organs. F
5. Cerebrospinal fluid surrounds the ~~skull~~ brain. F
6. The cerebral hemispheres are concerned with learning. T
7. The cerebellum helps us learn new movements. T medulla oblongata.
8. The autonomic nervous system is controlled by the ~~cerebellum~~. F
9. Nerves are made up of bundles of axons. T

D. Match the following.

4. Motor neurons carry impulses to the ~~sense organs~~. effector organs F
5. Cerebrospinal fluid surrounds the ~~skull~~. brain F
6. The cerebral hemispheres are concerned with learning. T
7. The cerebellum helps us learn new movements. T ~~T~~ medulla oblongata.
8. The autonomic nervous system is controlled by the ~~cerebellum~~. F
9. Nerves are made up of bundles of axons. T

D. Match the following.

Column A	Column B
1. Dendron	a. Controlled by the medulla oblongata (6)
2. Vertebral column	b. Carry impulses to effector organs (7)
3. Impulses	c. Irregular folds on outer surface (9)
4. Effector organs	d. Nerve (5)
5. Bundles of axons	e. Fatty white substance covering an axon (8)
6. Swallowing	f. Distributes nutrients to the brain (10)
7. Motor nerves	g. Glands and muscles (4)
8. Myelin sheath	h. Has many branches (1)
9. Cerebrum	i. Messages encoded as electrical signals (3)
10. Cerebrospinal fluid	j. Protects the spinal cord (2)

E. Answer the following.

1. What is myelin? How are myelinated neurons different from unmyelinated neurons?
2. What is an impulse?

28 MARCH

SATURDAY 088-278 2020

MARCH 2020

Sun	1	8	15	22	29
Mon	2	9	16	23	30
Tue	3	10	17	24	31
Wed	4	11	18	25	
Thu	5	12	19	26	
Fri	6	13	20	27	
Sat	7	14	21	28	

The Nervous System

Answer the following in short

1) Which two systems control and co-ordinate the various activities of the body?

Ans: The Nervous System and The endocrine System control and co-ordinate the various activities of the body.

2) What is a neuromascular junction?

Ans: A Synapse between a motor neuron and a muscle fibre is called a neuromascular junction.

3) What are the three types of nerves?

Ans: The three types of nerves are —

i) Sensory nerves.
ii) Motor nerves.
iii) Mixed nerves.

4) What are ventricles?

Ans: The interior of the cerebrum has three interconnected cavities called ventricles that are filled with cerebrospinal fluid (CSF).

5) How do sensory and motor nerves differ?

Ans: Sensory nerves are made up of axons of sensory neurons and carry impulse from sense organs to the brain or the spinal cord. while motor nerves are made up of axons of motor neurons and they carry impulses from the brain or the spinal cord to the effector organs.

29 SUNDAY

The nice thing about teamwork is that you always have others on your side.

NOVEMBER 2020

OCTOBER 22

2020 THURSDAY

Nervous System

A. Answer the following

1. What do you mean by reflex action?

Ans: Reflex action is an automatic/quick/immediate involuntary action of any organ or part of the body in response to a particular stimulus without involvement of brain. It is mainly controlled by spinal cord.

2. Define meninges.

Ans: Meninges are the protective covering of brain and spinal cord. It is consists of three thin layered membranes.

3. Write down the full name of CSF.

Ans: Cerebrospinal fluid.

4. Write down the main function of CSF.

Ans: Cerebrospinal fluid is present between the membranes of the meninges. CSF acts like a cushion to protect the brain from shock. It provides mechanical protection and nourishment to the brain.

5. What is an impulse?

Ans: Impulse is the signal transmitted along a nerve fibre. It is an electrical phenomenon that occurs because of a difference in electrical charge across the plasma membrane of neurons.

6. State the main function of medulla oblongata.

Ans: Medulla oblongata controls all the involuntary actions of the body. It contains the centre for cardiac, respiratory and vasomotor activities. It also co-ordinates reflexes for swallowing, coughing, sneezing and vomiting.

An error gracefully acknowledged is a victory won.

23 OCTOBER

FRIDAY 2020

OCTOBER 2020

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

7) Write the full form of the following -

(a) CSF (b) CNS (c) PNS (d) ANS

Ans a) CSF - cerebrospinal fluid

b) CNS - Central Nervous System

c) PNS - Peripheral Nervous System

d) ANS - Autonomic Nervous System.

8) Differentiate between cerebrum and cerebellum.

Cerebrum	Cerebellum
Structure:	
1) It is the largest part of the central nervous system	1) It is smaller than the cerebrum
2) It is consists of 2 cerebral hemispheres each of lobes on each hemisphere.	2) It is consists of 2 cerebellar hemispheres which are connected to the brain stem
Functions:	
1) It is the site of intelligence, consciousness and will power. It controls all the voluntary actions	1) It co-ordinates the muscular activity and maintain the balance of the body.

9) Write down the functions of spinal cord.

Ans: Functions of spinal cord

1) Spinal cord controls the movement below the neck

2) conducts sensory impulse from the skin and muscles to the brain

3) conducts motor responses from the brain to the muscles

The greatest work of all happiness is health.

NOVEMBER 2020

						1
2	3	4	5	6	7	8
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30						

10) Name the

(a) Three typ

Ans: Sensory

neurons

(b) Three typ

Ans: Sensory

(c) Three lay

Ans: Dura

(d) Two type

Ans: neuro

(e) Two maj

Ans: Sympat

(f) The fluid

Ans: cerebr

(g) The cen

Ans: Ventric

The centra

is filled

11) Define

a) corpus

Ans: The

that co

callosum

cerebral

b) Ganglia

Ganglia

from ve