## LESSON NO 5: GOOD HEALTH

New Words

1. components	8. stagnate
2. proteins	9. insecticides
3. pyramid	10. vaccination
4. roughage	11. vaccines
5. cereals	12. immunity
6. dehydration	13. posture
7. communicable	14. vaccination

#### Answer The Following Questions

Q. 1)- Explain communicable diseases with examples?

Ans.)- Communicable diseases spread from one person to other.

> They are caused by germs.

	Micro-organism/ Germs	Disease
1.	Protozoa	Malaria, amoebic dysentery, leprosy
2.	Bacteria	Pneumonia, typhoid, cholera
3.	Virus	Common cold, flu, chickenpox
4.	Fungi	Infection in eyes, ears, skin and hair

Q. 2)- Write the ways by which communicable disease spread along with examples?

Ans.)- Communicable diseases spread by the following ways:

- (i) Through direct contact and air: Example: Common cold, Flu, Measles.
- (ii) Through Infected food and water: Example: Diarrhoea, Typhoid, Jaundice.
- (iii) Through Insects & Animals: Example: Malaria, dengue, plague.
- (iv) Through infected equipment: Example: AIDS, jaundice
- Q. 3)- Write the ways to prevent the spread of infectious diseases.

### <u>Ans.)</u>-

- 1. Keep yourself and surroundings clean.
- 2. Spray insecticides to kill insects.
- 3. Stay away from infected people.
- 4. Get vaccinated.

<u>Q. 4</u>)- Explain what are non-communicable disease with examples?

Ans.)-Non- communicable diseases do not spread from one person to other.

Example: Deficiency diseases, Allergy, Diabetes, Asthma.

Q.5)-Why do we need exercise and rest?

Ans.)-(i) Exercise helps to maintain right posture and remain active throughout the day.

(ii) Rest- Our body needs rest to recover and repair. We must have 8 hours of sleep every night to wake up fresh and ready for next day.

## FOR CBE BASED WORKSHEET, CLICK ON THE GIVEN LINK.



## LESSON NO 4: THE NERVOUS SYSTEM

#### New Words

nervous
nerve
cerebrum
Spinal cord
cerebellum
brain stem
sensory
motor
reflex
medulla

11. vibration
12. Voluntary
13. co-ordination
14. eyelid
15. iris
16. pupil
17. lens
18.funnel

#### **Answer the Following Questions:**

Q. 1) What is a Nervous System? Name its parts.

<u>Ans.</u>)-The nervous system is a complex network of nerves, that carry messages to and from the brain and spinal cord to various parts of the body

It consists of following main parts-

- BrainSpinal cord
- ➢ Nerves

Q.2) Explain the functions of Nervous system.

Ans.)- Functions of Nervous system:

- (i) It is the control centre of the entire body.
- (ii) It controls all the system in our body.
- (iii) It sends messages to body and receives messages

from body.

- (iv) It controls our sense organs.
- Q.3) Describe the parts of Nervous system.
- Ans.)- Parts of Nervous system:
  - Brain: It is protected by the skull, and acts like a computer.
  - Spinal cord: It is a thick bundle of nerves, acts like a thick cable.
  - Nerves: They act like thin wires connecting all the body parts with the brain and spinal cord.

Q.4) Explain the regions of the brain with the help of a diagram.

Ans.) The three regions of the brain are:

- A. Cerebrum:
  - i) It is the largest part of the brain.
  - ii) Controls memory, thoughts, intelligence, learning, speech and sense organs.
- B. Cerebellum:
  - i) It is located at the back of the brain below cerebrum.
  - ii) It controls the movement of muscles. It helps to keep our body balanced.
- C. Medulla (Brain Stem):
  - i) It is the lower portion of our brain. It connects the brain to spinal cord.
  - ii) It controls involuntary actions such as swallowing, breathing and circulation.



 $\underline{Q.5}$ ) Explain the three types of nerves.

#### Ans.)

(i) Sensory nerves: carry messages from sense organs to the brain and spinal cord.

(ii) Motor nerves: carry messages away from the brain and spinal cord to muscles and glands.

(iii) Mixed Nerves: carry messages from sense organs to the brain and spinal cord as well as away from the brain and spinal cord to muscles and glands.

✤ Carry messages in both the directions.

## Q.6) What is reflex action?

Ans.) A reflex action, is an automatic and immediate action in response to a stimulus (a sudden external change).

- > They are automatic actions which are controlled by spinal cord.
- > The brain is not involved.
- > Spinal cord senses the danger and takes action immediately, to avoid any damage to the body.



Q.7) Explain the structure of eye with the help of a diagram.

<u>Ans.</u>) Eyes are the organs of sense of sight. It works with brain, together they enable us to see things, differentiate colours, shapes, sizes and distances of objects around us.



- > Cornea: It is the transparent covering present in the front.
- ➢ Iris: It is the coloured part of the eye.
- > Pupil: The pupil is the small hole. Light enters the eye through pupil.
- > Lens: Behind the pupil, there is a lens. It helps to bend the light rays and focus on Retina.
- > Retina: Image is formed on retina.
- > Optic nerve: It connects the eye to the brain. The messages are sent to the brain through optic nerves.

## **REVISION LINK:-**



## LESSON NO 1 MORE ABOUT PLANTS

#### NEW WORDS

- 1. Reproduction
- 2. Cotyledon
- 3. Dicotyledonous
- 4. Dicot
- 5. Monocotyledonous
- 6. Monocot
- 7. Embryo
- 8. Germination
- 9. Condition
- 10. Hypocotyl
- 11. Radicle
- 12. Epicotyl
- 13. Seedling
- 14. Plumule
- 15. Dispersal
- 16. Struggle
- 17. Explosion
- 18. Spores
- 19. Agriculture
- 20. Rabi crop
- 21. Legumes
- 22. Kharif crops
- 23. Ploughing
- 24. Enrichment
- 25. Manure
- 26. Fertiliser
- 27. Sowing
- 28. Irrigation
- 29. Pesticides
- 30. Harvest
- 31. Perishable
- 32. Contour

#### ANSWER THE FOLLOWING QUESTIONS

Q1. What is germination?

Ans. Germination is a process by which a seed produces a baby plant or seedling in the presence of air, water and warmth.

Q2. Define agriculture.

Ans. Agriculture is the practice of growing plants on a large scale for food or other purposes.

Q3. Name the essential elements, other than soil for the growth of a seed.

Ans. Air, water and warmth

Q4. Which special feature of a potato helps in growing its new plant?

Ans. The small buds present on the potato help in growing its new plants.

Q5. Explain the structure of a seed with the help of a diagram.

Ans. A seed has the following parts:

- > Seed coat: it protects the seed from being damaged.
- > Cotyledons (seed leaves): they store food for the baby plant.
- Embryo: it is the baby plant inside the seed. It has a root and a shoot.



Q6. Define crops. Name the main types of crops grown in India.

Ans. Large quantities of fruits, vegetables, cereals and pulses grown in a season in a particular place by a farmer are called crops.

> The two main types of crops grown in India are kharif and rabi crops.

Q7. Define harvesting and irrigation.

Ans. Harvesting is the cutting and gathering of crops when they are ripe and ready.

Irrigation is the supply of water to the fields through pipes and channels so that crops get sufficient water for growth.

Q8. Differentiate between monocot and dicot seeds.

Ans.

Monocot seeds	Dicot seeds
These seeds have only one cotyledon.	These seeds have two cotyledons.
Eg maize, rice, wheat	Eg pea, kidney beans

Q9. Define seed dispersal. Describe the different ways of seed dispersal.

Ans. Seed dispersal is the process of scattering of seeds away from the mother plant.

- **U**ifferent ways of seed dispersal are
- i) Dispersal by wind

- Seeds which are light in weight or have hair or wings fly away and scatter with the wind.
- > Eg dandelion seed and drumstick seeds
- ii) Dispersal by water
- Seeds or fruits that grow in or near flowing water has a fibrous covering or they are spongy. Such seeds get dispersed by water.
- Eg. Lotus, coconut
- iii) Dispersal by animals
- > Seeds that have spikes or hooks or stiff hairs are dispersed by animals. Eg cocklebur
- > Human beings eat fruits and throw away the seeds on the ground. Eg mango, jamun.
- Sometimes, birds and animals eat the fruits with the seeds which later come out with their droppings. Eg fig, banyan fruit
- iv) Dispersal by explosion
- > Fruits of some plants explode on ripening and shoot out the seeds.
- Eg pea and poppy seeds

Q10. Write the stages of agriculture.

Ans. i) ploughing ii) enrichment of soil iii) sowing seeds iv) irrigation v) spraying insecticides and pesticides vi) harvest and storage vii) transportation

Q11. Show the process of germination with the help of a diagram.

Ans.



Q12. Give two examples of the following.

- i) Growing plants from stem: hibiscus, sugarcane Underground stem: potato, onion, ginger
- ii) Growing plants from roots: sweet potato, carrot, turnip
- iii) Growing plants from leaves: bryophyllum, begonia
- iv) Growing plants from spores: mushroom, ferns

Q13. Give reason.

- i) Tea cannot be planted in plains.
- Ans. Tea needs humidity and rain for its proper growth. This is why tea cannot be planted in plains.
- ii) Soil is ploughed before sowing seeds.
- Ans. Soil is ploughed before sowing seeds to loosen the soil so that sufficient air gets into it and stones and pebbles are properly removed.

#### FOR CBE BASED QUESTIONS CLICK ON THE BELOW GIVEN LINK.

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## LESSON NO 2 ANIMALS AND THEIR ADAPTATIONS

#### NEW WORDS

- 1. Vertebrates
- 2. Invertebrates
- 3. Locomotion
- 4. Exoskeleton
- 5. Flapping
- 6. Reptiles
- 7. Ventral
- 8. Hindlimb
- 9. Forelimb
- 10. Hooves
- 11. Surefooted
- 12. Spiracles
- 13. Trachea
- 14. Nares
- 15. Blowhole
- 16. Quills
- 17. Camouflage

#### **ANSWER THE FOLLOWING QUESTIONS**

Q1. Name any three animals that have webbed feet.

Ans. Duck, turtle, crocodile

Q2. How do insects breathe? Ans. Most insects breathe through spiracles.

Q3. Name any three animals that use lungs to breathe. Ans. Dog, cat, humans

Q4. Name any four organs of movement in animals. Ans. Fins, legs, scales, wings

Q5. Why is the body of fish streamlined?

Ans. The body of fish is streamlined to help it swim easily.

Q6. Explain movements in different types of birds.

Ans.

1) Birds that can fly have well developed wings, feathers and strong flight muscles.

- > Their body is light weight because of hollow bones.
- > These birds can fly by flapping their wings.
- 2) Aquatic birds like ducks have webbed feet to swim in water.
- 3) Penguin cannot fly due to very heavy body, but can swim very fast.

4) Ostrich can run very fast using its hind limbs.

Q7. Explain the body covering in various animals.

Ans.

- i) Feathers- birds have feathers which keep them warm and help them fly.
- ii) Scales- fish have overlapping scales to stop water from entering the body.
  - > Reptiles like snakes and lizards have scales for protection.
- iii) Shell- oysters, tortoises and snails have a shell to protect their soft bodies.
- iv) Fur and wool- sheep have wool and polar bear and Arctic fox have fur to keep their bodies warm.

Q8. What is camouflaging? Give examples.

Ans. Camouflage is a process of blending with surrounding so that they cannot be spotted. Eg: Tigers have stripes on the body to blend with forest background.

Q9. How do the following animals protect themselves? Ans.

- i) Porcupines: have needle like quills for protection.
- ii) Armdillos: have hard armour like plates for protection.

Q10. Describe how different vertebrates breathe.

Ans.

- i) Fish and baby amphibians breathe through gills.
- ii) Adult amphibians- lungs and skin
- iii) Reptiles, birds and mammals- lungs

- > Birds have small holes known as nares on both the sides of their beaks to inhale air.
- > Whale and dolphins have blowhole for breathing.

Q11. What is migration? Give examples.

Ans. The seasonal movement of the birds and the animals from one place to another in search of food and to avoid harsh seasonal changes is called migration.

Eg.

- i) Dragonflies migrate to southern part of Asia during winter season.
- ii) Monarch butterflies migrate from North America to southern part of California to spend winter season.

## FOR CBE BASED QUESTIONS CLICK ON THE BELOW GIVEN LINK.

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# LESSON NO 3 THE SKELETAL AND MUSCULAR SYSTEM

#### **NEW WORDS**

- 1. Skeleton
- 2. Collapse
- 3. Bone marrow
- 4. Vertebrae
- 5. Vertebral column
- 6. Spinal cord
- 7. Femur
- 8. Ribs
- 9. Breast bone
- 10. Sternum
- 11. Humerus
- 12. Hinge
- 13. Ligament
- 14. Ball and socket
- 15. Gliding
- 16. Triceps
- 17. Voluntary
- 18. Cardiac
- 19. Pivot
- 20. Striated
- 21. Striped
- 22. Cranium

## ANSWER THE FOLLOWING QUESTIONS.

## Q1. Write the functions of the skeletal system.

Ans. Our skeletal system

- 1. Gives shape and support to our body.
- 2. Protects soft internal organs like brain, heart, lungs.
- 3. Bones have bone marrow where the blood cells are produced.
- 4. The muscles attach to bones help in movement of various body part.

## Q2. Answer the following in one or two words.

- 1. Number of bones in
  - ➤ Skull- 22
  - ➢ Upper part of skull- 8
  - ➢ Our face- 14

- ➢ In backbone (vertebrae) − 33
- Pair of ribs- 12 pair
- 2. Organs protected by
  - Skull- brain
  - Rib cage- heart, lungs
  - Backbone- spinal cord
- 3. The other name of the backbone- spine or vertebral column
- 4. Thin, flat, curved bones that form a cage around the heart and lungs- ribs
- 5. The other name of the breast bone- sternum
- 6. Pair of ribs that are not attached to sternum- floating bones/ ribs.

## Q3. Name the following.

- 1. Bone present at the upper half of the leg- femur
- 2. The longest bone in our body- femur
- 3. Bone present at the lower half of the leg-
- shin bone- tibia
- calf bone- fibula
- 4. Bone present at the upper arm- humerus
- 5. The stretchy bands that hold the bones at joints- ligament
- 6. The tough band of tissues that attach muscles to bones- tendons.
- 7. The round part of the skull that holds the brain- cranium
- 8. The last two pairs of ribs that are not attached to sternum- floating ribs
- 9. Muscles present only in heart- cardiac muscles
- 10. Muscles present in stomach, intestine etc- smooth muscle
- 11. The other name of voluntary muscles- striated muscle
- 12. The other name of involuntary muscles- non- striated muscle

Q4. Define joints. Name the four types of joints and give two examples of each.

Ans. Joints are place where two or more bones are joined together.

The four types of joints are

- 1. Ball and socket joint- eg. hip joint, shoulder joint
- 2. Hinge joint- eg. Knee joint, elbow joint
- 3. Pivot joint- joint between the first two vertebrae of the backbone.
- 4. Gliding/ sliding joint- eg wrist and ankle joints.

## Q5. Write the difference between voluntary and involuntary muscles. Give one example of each.

Ans.

Voluntary Muscles	Involuntary Muscles
These muscles are in our control.	These muscles are not in our control.
Eg. Muscles in arms and legs.	Eg. Muscles in heart and stomach

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