

8. Receptor -> sensory nerve -> interneuron -> _____ -> effector organ

Complete the flow chart of reflex arc.

9. Rakesh had seen a snake and is afraid of it. He then took a stick and thrashed it. What is the hormone that helps him in this situation?

10. What do this logo stands for?



11 and 12. Complete the paragraph.

_____ is the body's method of ridding itself of unwanted or harmful substances from the stomach. The _____ movements of the stomach and oesophagus reverse their normal direction and the food is expelled.

SECTION - II

8X 1= 8 MARKS

Note: Answer all the questions. Each question carries 1 marks.

13. Define synapse.

14. Write the phenotypic and genotypic ratios of monohybrid cross.

15. Write a few questions on disaster management to ask NDRF personnel.

16. Draw a rough sketch of bread mould you observed under microscope.

17.

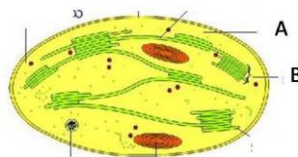
Type of teeth	Number
Molars	3
Premolars	2
Canines	1
Incisors	2

Write the dental formula for the above data.

18. Raju's blood pressure reads 140/90. What are the values of systolic pressure and diastolic pressure?

19.

label A and B.



20. Gaseous exchange takes place in alveoli. Appreciate the role of alveoli in gaseous exchange.

SECTION – III

8X 2= 16 MARKS

Note: Answer all the questions. Each question carries 2 marks.

21. What do you call the substances produced in the plant body which are not required for growth of the plant? Give two examples.
22. What is global warming? What are the causes of global warming?
23. Raju wanted to know about reproduction in amoeba. List out the questions he should ask his teacher about reproduction in amoeba.
24. Ovary secretes oestrogen. What happens if oestrogen is not secreted?
25. Varsha prepared a stethoscope using matchstick. Write the procedure she might have followed to prepare that stethoscope.
26. study the table:

Gas	% in inhaled air	% in exhaled air
Oxygen	21	16
Carbon dioxide	0.04	4
Nitrogen	79	79

Answer the following:

- a) Which gas is utilized between inhalation and exhalation?
b) What is the percentage of carbondioxide that is released in excess to inhaled air?
27. Anand was asked to prepare slogans to participate in a rally to create awareness on conservation of soil. Help him and write the slogans.
28. Development and conservation can coexist in harmony. Can you support the statement? Write your reasons.

SECTION – IV

5X 4= 20 MARKS

Note: Answer all the questions. Each question carries 4 marks.

29. Compare the structure and functions of arteries and veins.

OR

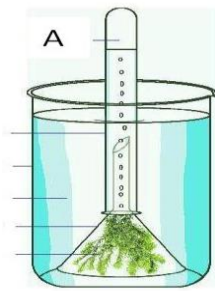
What are ecological pyramids? Explain pyramid of numbers using an example.

30. What are the advantages of conservation of forests and wild life?

OR

Write any four differences between photosynthesis and respiration.

31.

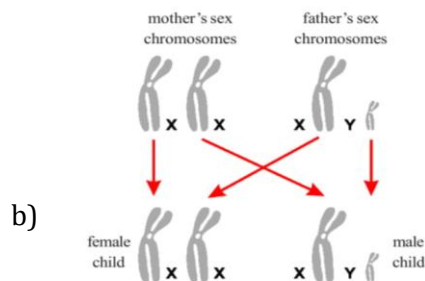


OR

- What is the aim of the given experimental setup?
- how do you test the gas that is released?
- What is the alternative plant that can be used for the plant given in the figure?

What is the procedure you followed to test the action of saliva on flour? What is the enzyme that is present in saliva?

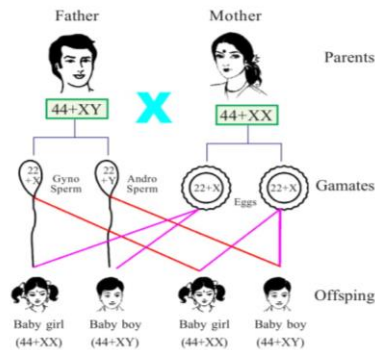
32.



b)

From the given flow chart, answer the following:

- What is the sex chromosome in ovum?
- What is the combination of sex chromosomes for male?
- Who decides the sex of the baby mother or father?
- Does sex is determined by Mendel's law of dominance?



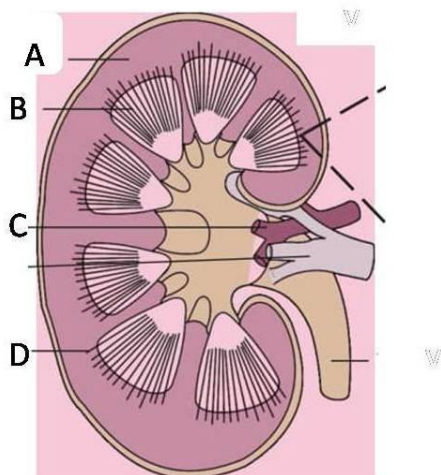
OR

Part of the brain	Functions
Cerebrum	<ul style="list-style-type: none"> i) Seat of mental abilities, controls thinking, memory, reasoning, perception, emotions and speech. ii) Interprets sensations and responds to cold, heat, pain and pressure.
Diencephalon	<ul style="list-style-type: none"> i) Relay centre for sensory impulses, such as pain, temperature and light. ii) Reflex centre for muscular activities. iii) Centre for certain emotions such as anger. iv) Centre for water balance, blood pressure, body temperature, sleep and hunger. v) The hypothalamus controls the pituitary gland, which functions as the master gland.
Midbrain	It relays motor impulses from the cerebral cortex to the spinal cord and relays sensory impulses from the spinal cord to the thalamus, reflexes for sight and hearing.
Cerebellum	<ul style="list-style-type: none"> i) Maintains posture, equilibrium and muscle tone. ii) Coordinates voluntary movements initiated by cerebrum.
Medulla oblongata	<ul style="list-style-type: none"> i) Contains centre for cardiac, respiratory and vasomotor activities. (Vasomotor refers to actions upon a blood vessel which alter its diameter) ii) Coordinates reflexes like swallowing, coughing, sneezing and vomiting.

Answer the following:

- a) Name the part that has center for emotions.
- b) What is the relay center for sensory and motor impulses between brain and spinal cord?
- c) Write any one function of cerebellum.
- d) Which part of the brain coordinates swallowing reflex?

33.



Identify the parts. What are the structural and functional units of kidney?

OR

Draw a neat and well labeled diagram of structure of flower. Write the names of the male parts of the flower.