



BIOLOGY

BOOKS - ICSE MODEL PAPER

SAMPLE PAPER 2022

Section I

1. Name the following:

The respiratory pigment found in erythrocytes.



Watch Video Solution

2. Name the following:

The organ that produces urea.



Watch Video Solution

3. Name the following:

The part of the chloroplast where the light reaction of photosynthesis takes place.



Watch Video Solution

4. Name the following:

The Vehicular Standard for controlling air pollution.



[Watch Video Solution](#)

5. Name the following:

The part of the ovary that produces progesterone.



[Watch Video Solution](#)

6. State whether the following statements are true or false. If false, rewrite the correct form of the statement by changing the first word only:

Cones are photoreceptor cells that are sensitive to dim light.



[Watch Video Solution](#)

7. State whether the following statements are true or false. If false, rewrite the correct form of the statement by changing the first word

only:

The Beta cells of the pancreas secrete insulin.



[Watch Video Solution](#)

8. State whether the following statements are true or false. If false, rewrite the correct form of the statement by changing the first word only:

Tubectomy is the surgical method of sterilization in man.



[Watch Video Solution](#)

9. State whether the following statements are true or false. If false, rewrite the correct form of the statement by changing the first word only:

Guttation is the loss of water in the form of water droplets from hydathodes.



Watch Video Solution

10. State whether the following statements are true or false. If false, rewrite the correct form

of the statement by changing the first word only:

Nephrons are the basic unit of the brain.



[Watch Video Solution](#)

11. Give technical terms for the following:

Plasma devoid of fibrinogen.



[Watch Video Solution](#)

12. Give technical terms for the following:

Movement of water molecules across the cell membrane from hypertonic to hypotonic solution.



Watch Video Solution

13. Give technical terms for the following:

The stage where chromosomes lie on the equator of the achromatic spindle.



Watch Video Solution

14. Give technical terms for the following:

Alternative form of a gene on a pair of homologous chromosome.



Watch Video Solution

15. Give technical terms for the following:

complete development of a foetus into an embryo



Watch Video Solution

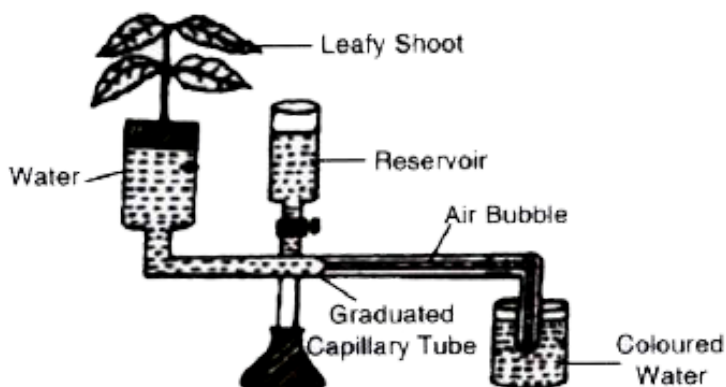
16. Given below are five sets with four terms each. In each set one term is odd. Choose the odd one out of the following terms given and name the category to which the others belong:

SET	ODD TERM	CATEGORY
(i) Sneezing, coughing, blinking, typing		
(ii) ADH, TSH, NADPH, ACTH		
(iii) Detergents, sewage, X-rays; oil spills.		
(iv) Stoma, stroma, lamellae, quantosome.		
(v) Basophil, neutrophil, Eosinophil, lymphocyte.		



Watch Video Solution

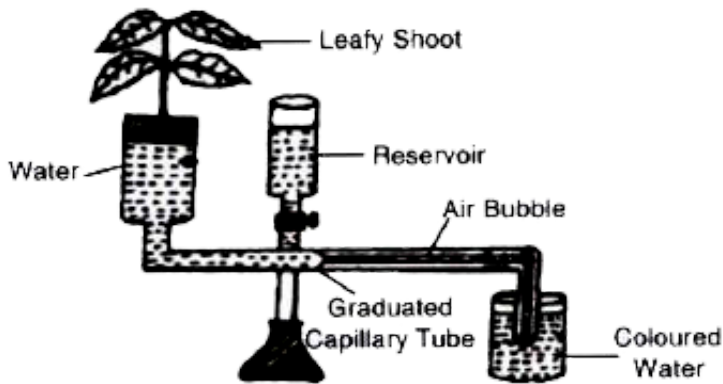
17. The diagram of an apparatus given below demonstrates a particular process in plants. Study the same and answer the questions that follow :



Name the apparatus.

[Watch Video Solution](#)

18. The diagram of an apparatus given below demonstrates a particular process in plants. Study the same and answer the questions that follow :

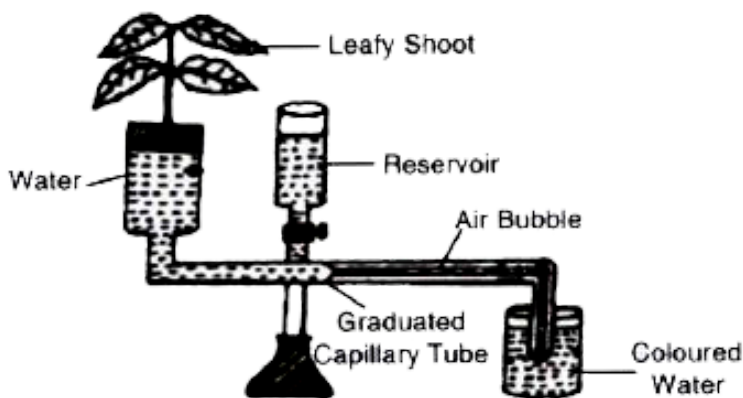


State two limitations of using this apparatus.



Watch Video Solution

19. The diagram of an apparatus given below demonstrates a particular process in plants. Study the same and answer the questions that follow :

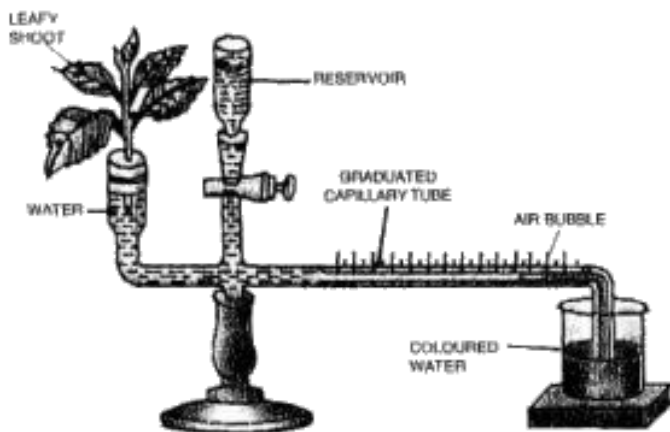


Which phenomenon is demonstrated by this apparatus?



Watch Video Solution

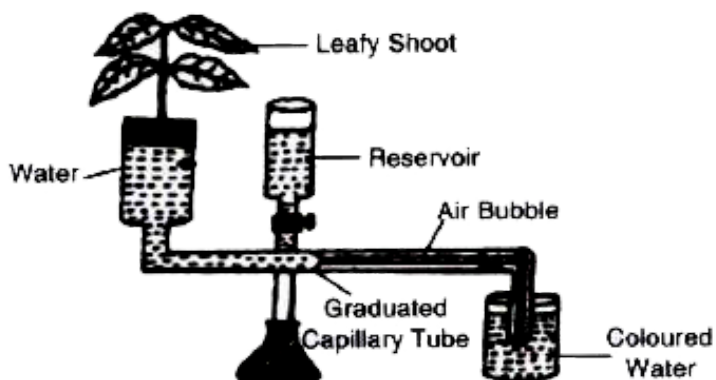
20. Given below is an apparatus used to study a particular process in plants. Study the same and answer the questions that follow:



What is the function of the part marked reservoir?

 [Watch Video Solution](#)

21. The diagram of an apparatus given below demonstrates a particular process in plants. Study the same and answer the questions that follow :



What is the importance of the air bubble in the experiment ?



Watch Video Solution

22. The number of daughter cells formed at the end of meiosis from a cell are.

A. 2 Haploid cells

B. 2 Diploid cells

C. 4 Haploid cells

D. 4 Diploid cells.

Answer:



Watch Video Solution

23. Which of the following is not a part of the female reproductive system in human beings?

A. Uterus

B. Ovary

C. Ureter

D. Fallopian tube.

Answer:



Watch Video Solution

24. Ovulation occurs:

- A. at the beginning of menstrual cycle
- B. in the mid of the menstrual cycle
- C. at the end of the menstrual cycle
- D. during any time of the menstrual cycle.

Answer:



Watch Video Solution

25. Phototrophic mode of nutrition requires:

- A. Chlorophyll
- B. Sunlight
- C. CO_2 and water
- D. All the above

Answer:



Watch Video Solution

26. Plasmolysis identifies the process of:

A. Imbibition

B. Diffusion

C. Active transport

D. Osmosis

Answer:



Watch Video Solution

27. Given below are five sets of terms. In each case, arrange and rewrite each set so as to be in logical sequence.

Tympanum, stapes, malleus, incus, fenestra ovalis



Watch Video Solution

28. Given below are five sets of terms. In each case, arrange and rewrite each set so as to be in logical sequence.

Graafian follicle, uterus, oviducal funnel,
fallopian tube, ovum



[Watch Video Solution](#)

29. Given below are five sets of terms. In each case, arrange and rewrite each set so as to be in logical sequence.

Soil, water, root hair, xylem, cortex, endodermis



[Watch Video Solution](#)

30. Given below are five sets of terms. In each case, arrange and rewrite each set so as to be in logical sequence.

Association neuron, effector, motor neuron, receptor, sensory neuron.



Watch Video Solution

31. Given below are five sets of terms. In each case, arrange and rewrite each set so as to be

in logical sequence.

Lens, pupil, conjunctiva, yellow spot, cornea.



[Watch Video Solution](#)

32. Explain the following terms:

Antiseptic



[Watch Video Solution](#)

33. Explain the following terms:

Photolysis



Watch Video Solution

34. Explain the following terms:

Growth rate of population



Watch Video Solution

35. Explain the following terms:

Pollutant



Watch Video Solution

36. Explain the following terms:

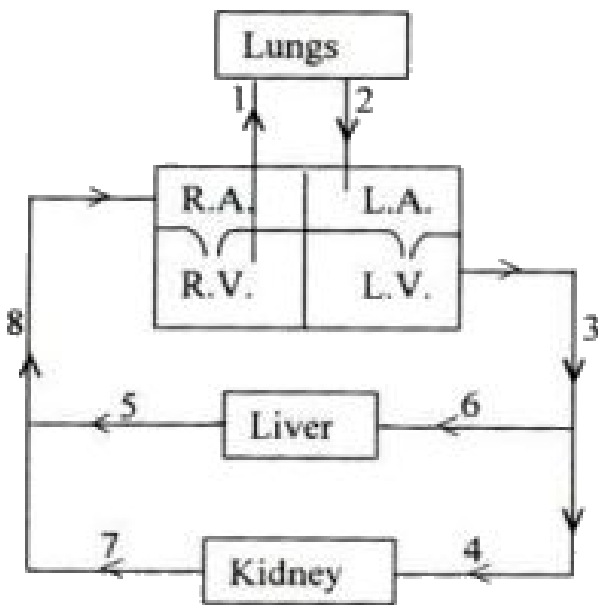
Trophic hormone.



Watch Video Solution

Section II

1. Given below is a diagrammatic representation of a certain part of the process of circulation of blood in man. Study the same and then answer the questions that follow:

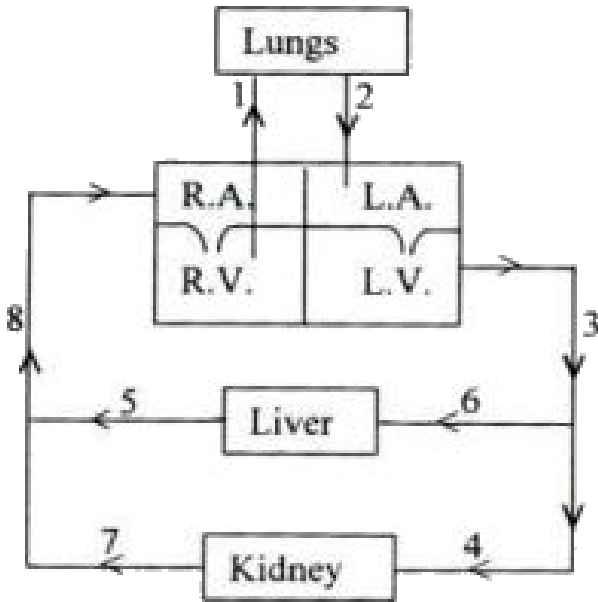


Name the parts labelled 1, 2, 4 and 6.

[Watch Video Solution](#)

2. Given below is a diagrammatic representation of a certain part of the process

of circulation of blood in man. Study the same and then answer the questions that follow:

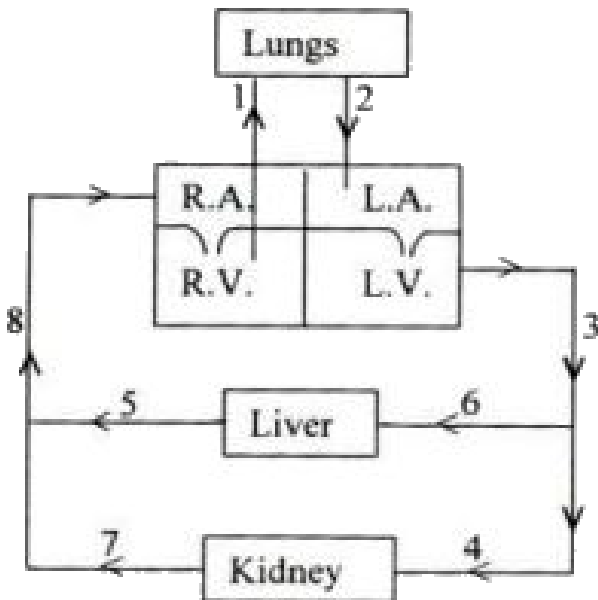


Give the number and name of the vessel which contains the maximum amount of urea a few hours after a protein rich meal.



[Watch Video Solution](#)

3. Given below is a diagrammatic representation of a certain part of the process of circulation of blood in man. Study the same and then answer the questions that follow:

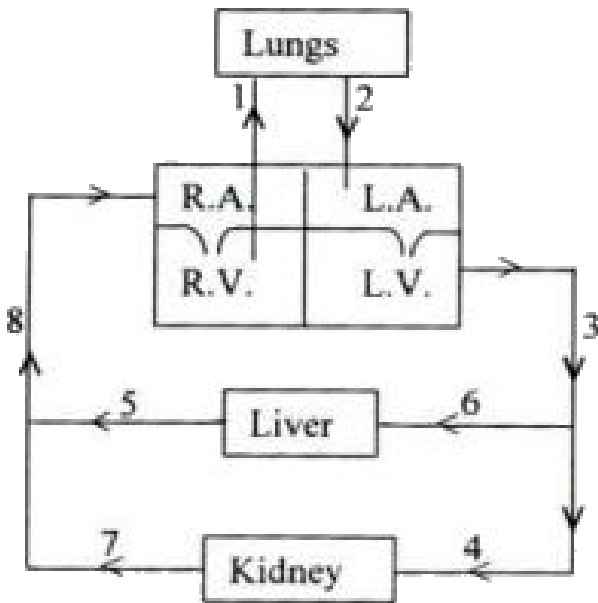


Draw a neat, labelled diagram of the cross sectional view of the blood vessel numbered 3.



[Watch Video Solution](#)

4. Given below is a diagrammatic representation of a certain part of the process of circulation of blood in man. Study the same and then answer the questions that follow:



Mention two structural differences between blood vessels '3' and '8'.

 [Watch Video Solution](#)

5. Differentiate between the following pairs on the basis of what is given in brackets:

Lymphocytes and Neutrophils. (structure of the nucleus)



Watch Video Solution

6. Differentiate between the following pairs on the basis of what is given in brackets:

Beginning of the ventricular systole and the

end of ventricular systole. (type of heart sound)



[Watch Video Solution](#)

7. Differentiate between the following pairs on the basis of what is given in brackets:

Prostate gland and Cowper's gland. (the nature of secretion)



[Watch Video Solution](#)

8. Give one difference between the following pairs on the basis of what is given in brackets :

Rods and Cones (Pigment present)



Watch Video Solution

9. Differentiate between the following pairs on the basis of what is given in brackets:

Simple goitre and exophthalmic goitre. (cause of the disorder)



Watch Video Solution

10. Complete the following table by filling in the numbered blanks with an appropriate term/answer:

Gland	Hormone produced	Function
Thyroid	1	2
3	4	Dilates pupil of eye
5	Insulin	6
7	ADH	8
9	10	Conversion of glycogen to glucose



Watch Video Solution

11. Draw a neat diagram of a single Malpighian capsule and label the following parts in it:

Glomerulus, Bowman's capsule, Afferent arteriole and Efferent arteriole



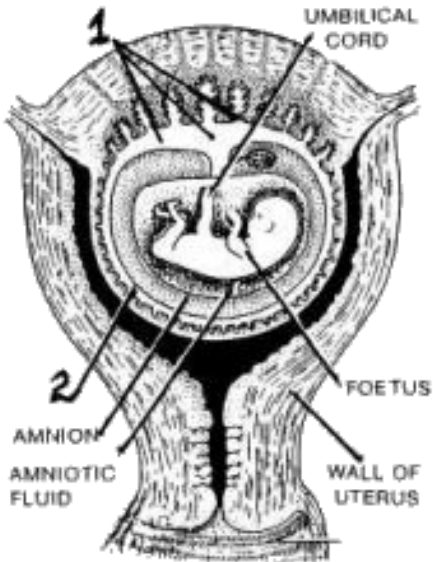
Watch Video Solution

12. Name and define the process that occurs in the Glomerulus.



Watch Video Solution

13. Study the diagram given below and then answer the questions that follow:

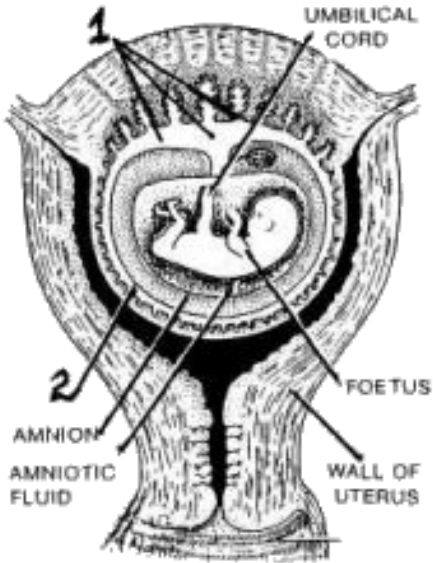


Name the parts labelled 1 and 2. State the functions of each part.



Watch Video Solution

14. Study the diagram given below and then answer the questions that follow:

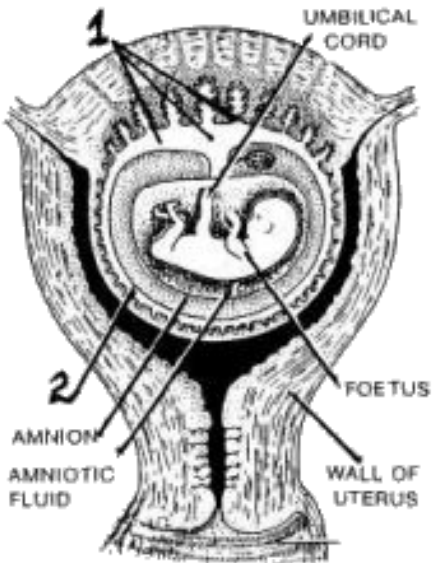


State any two functions of the amniotic fluid.



[Watch Video Solution](#)

15. Study the diagram given below and then answer the questions that follow:

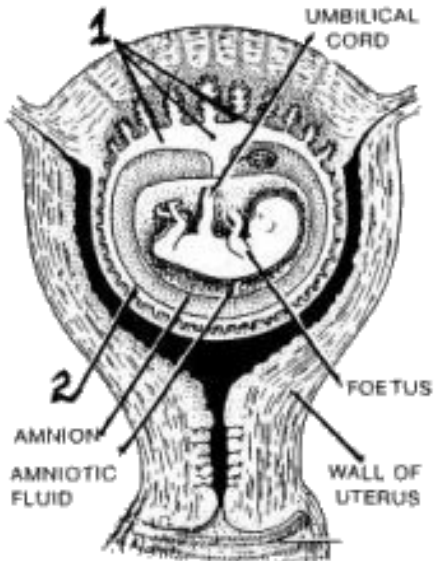


What is the role of the umbilical cord in the development of the foetus?



[Watch Video Solution](#)

16. Study the diagram given below and then answer the questions that follow:



Name the part in the diagram which is endocrine in nature.



Watch Video Solution

17. State Mendel's law of Independent assortment.



Watch Video Solution

18. A homozygous Tall plant (T) bearing red coloured (R) flowers is crossed with a homozygous Dwarf plant (t) bearing white flowers (r):-

(1) Give the Genotype and Phenotype of the F_1 generation.

(2) Give the possible combinations of the

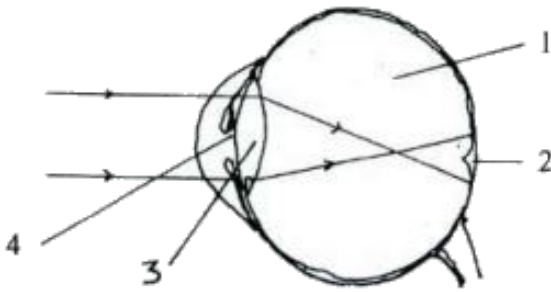
gametes that can be obtained from the F_1 hybrid.

(3) Give the dihybrid ratio and the phenotype of the offsprings of the F_2 generation when two plants of the F_1 generation above are crossed.



[Watch Video Solution](#)

19. Given below is a diagram depicting a defect of the human eye. Study the same and then answer the questions that follow:

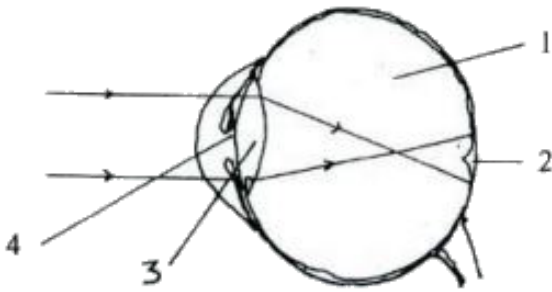


Name the defect shown in the diagram.



Watch Video Solution

20. Given below is a diagram depicting a defect of the human eye. Study the same and then answer the questions that follow:

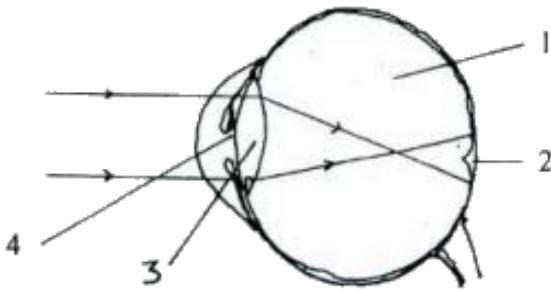


Name two possible reasons for this defect of the eye in human beings.



Watch Video Solution

21. Given below is a diagram depicting a defect of the human eye. Study the same and then answer the questions that follow:

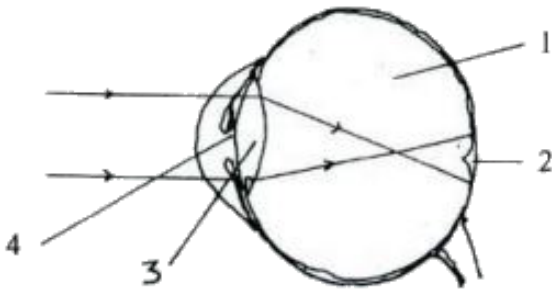


Name the parts labelled 1 to 4.



Watch Video Solution

22. Given below is a diagram depicting a defect of the human eye. Study the same and then answer the questions that follow:



Draw a labelled diagram to show how the above mentioned defect is rectified using an appropriate lens.

 [Watch Video Solution](#)

23. Mention three reasons for the increase in population in India.

 [Watch Video Solution](#)

24. Write the full forms of NADP and BCG.



Watch Video Solution

25. Explain the term antibiotic. Give an example of an antibiotic.



Watch Video Solution

26. State any three functions of the World Health Organization.



Watch Video Solution

27. Explain the term Plasmolysis. Give one application of this phenomenon in our daily lives.



Watch Video Solution

28. Enumerate the steps involved in testing a green leaf for the presence of starch.



Watch Video Solution

29. Mention any three causes of soil pollution.



Watch Video Solution

30. Draw a labelled diagram of inner ear. Name the part of the inner ear that is responsible

for static balance in human beings.



Watch Video Solution

31. Name the tube which connects the cavity of the middle ear with the throat.



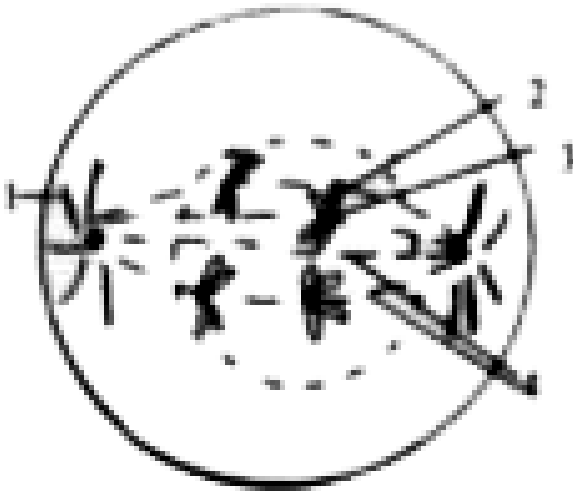
Watch Video Solution

32. Name any two microbial diseases and the vaccines used as preventive measures for each.



Watch Video Solution

33. Given diagram representing a stage during mitotic cell division in an animal cell:

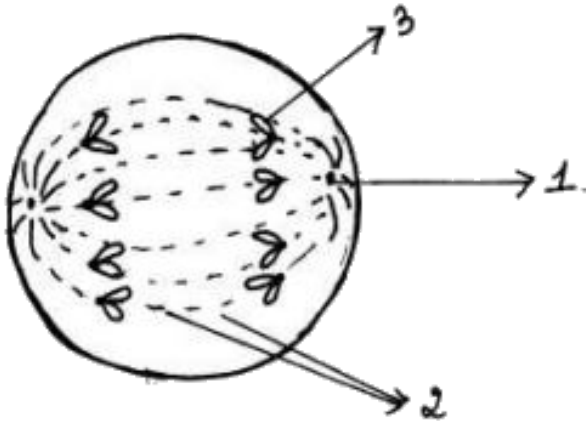


Identify the above stage. Give a reason to support your answer.



Watch Video Solution

34. The diagram given below represents a stage during mitotic cell division in an animal cell:-

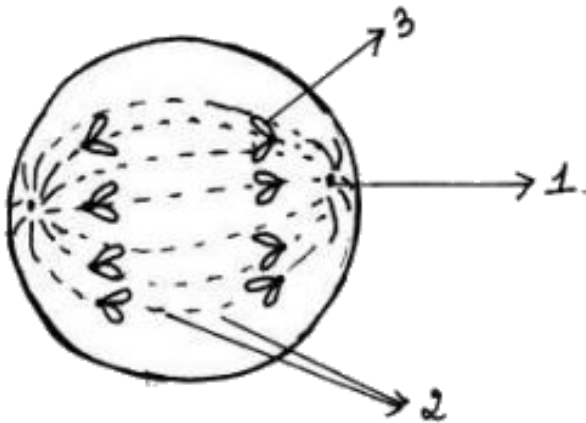


Name the parts labelled 1, 2 and 3.



[Watch Video Solution](#)

35. The diagram given below represents a stage during mitotic cell division in an animal cell:-

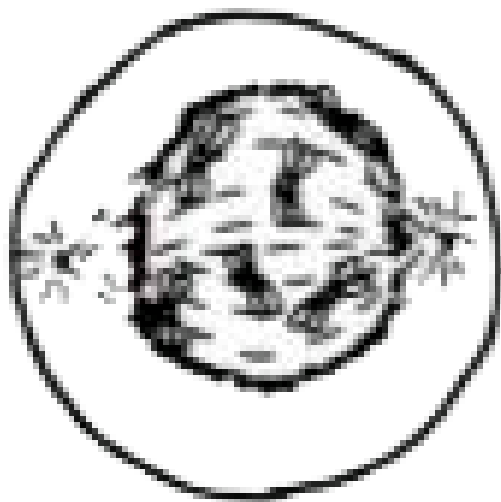


What is the chromosome number of the cell?



[Watch Video Solution](#)

36. The given diagram shows a stage during mitotic division in an animal cell:



Draw a neat labelled diagram of the cell as it would appear in the next stage. Name the stage.



Watch Video Solution

37. Give reasons :

Plants begin to die when excess of soluble fertilizers are added to the soil.



Watch Video Solution

38. Give biological reasons for the following :

Injury to Medulla oblongata results in death.



Watch Video Solution

39. Gametes have a haploid number of chromosomes.



Watch Video Solution

40. Give reason for the following

Green leaves are thin and broad.



Watch Video Solution

41. Give reasons for the following:-

There is a need to check the present rate of

urbanisation.



Watch Video Solution