

Short Answer Type Questions

1. In a bisexual flower inspite of the young stamens being removed artificially, the flower produces fruit. Provide a suitable explanation for the above situation.
2. Can you consider cell division as a type of reproduction in unicellular organism? Give one reason.
3. What is a clone? Why do offsprings formed by asexual reproduction exhibit remarkable similarity?
4. Explain how, offspring and parents of organisms reproducing sexually have the same number of chromosomes?
5. Colonies of yeast fail to multiply in water, but multiply in sugar solution. Give one reason for this.
6. Why does bread mould grow profusely on a moist slice of bread rather than on a dry slice of bread?
7. Give two reasons for the appearance of variations among the progeny formed by sexual reproduction.
8. Would a Planaria cut vertically into two halves regenerate into two individuals? Complete Figure 8.2 D and E by indicating the regenerated regions.

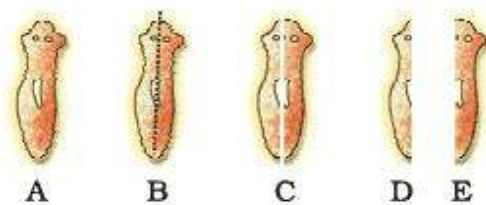


Fig. 8.2

9. From the internet, gather information about the chromosome numbers of five animals and five plants. Correlate the number with the size of organism and answer the following questions.
 - (a) Do larger organisms have more number of chromosomes/cells?
 - (b) Can organism with fewer chromosomes reproduce more easily than organisms with more number of chromosomes?

- o (c) More the number of chromosomes/cells greater is the DNA content. Justify.
10. In tobacco plant, the male gametes have twenty four chromosomes. What is the number of chromosomes in the female gamete? What is the number of chromosomes in the zygote?
 11. Why cannot fertilisation take place in flowers if pollination does not occur?
 12. Is the chromosome number of zygote, embryonal cells and adult of a particular organism always constant? How is the constancy maintained in these three stages?
 13. Where is the zygote located in the flower after fertilization?
 14. Reproduction is linked to stability of population of a species. Justify the statement.
 15. How are general growth and sexual maturation different from each other?
 16. Trace the path of sperm during ejaculation and mention the gland and their functions associated with the male reproductive system.
 17. What changes are observed in the uterus if fertilisation does not occur?
 18. What changes are observed in the uterus subsequent to implantation of young embryo?
 19. What are the benefits of using mechanical barriers during sexual act?
 20. In the given Figure 8.3 label the parts and mention their functions



Fig. 8.3

21. What would be the ratio of chromosome number between an egg and its zygote? How is the sperm genetically different from the egg?

Long Answer Type Questions

1. Why are budding, fragmentation and regeneration all considered as asexual types of reproduction? With neat diagrams explain the process of regeneration in Planaria.
2. Write two points of difference between asexual and sexual types of reproduction. Describe why variations are observed in the offspring formed by sexual reproduction.
3. Distinguish between pollination and fertilisation. Mention the site and product of fertilisation in a flower.
Draw a neat, labelled diagram of a pistil showing pollen tube growth and its entry into the ovule.
4. Distinguish between a gamete and zygote. Explain their roles in sexual reproduction.
5. Draw the diagram of a flower and label the four whorls. Write the names of gamete producing organs in the flower.
6. What is placenta? Mention its role during pregnancy?
7. What are various ways to avoid pregnancy? Elaborate any one method.
8. How does fertilisation take place? Fertilisation occurs once in a month. Comment.
9. Reproduction is essentially a phenomenon that is not for survival of an individual but for the stability of a species. Justify.
10. Describe sexually transmitted diseases and mention the ways to prevent them.