

## **ANIMAL REPRODUCTION QUESTIONS**

1. Explain the difference between sexual and asexual reproduction.
2. In which form of reproduction does the new organism most resemble its parent/s. Why?
3. What are some advantages and disadvantages of each form of reproduction?
4. Do all hermaphrodites self-fertilise? Explain.
5. Give one example of each of the following: (a) binary fission (b) budding (c) spore formation (d) fragmentation (e) regeneration (f) parthenogenesis.
6. It has been suggested that in species of micro-organism that reproduce by binary fission, some individuals never die. Explain.
7. Assume one bacterium is placed in an ideal environment and that the bacterial cells can reproduce every 20 minutes and do not die. How many bacteria would there be after 3 hours?
8. Some organisms can reproduce sexually and also asexually. Give an example of a plant and an animal which do this.
9. What is the difference between internal and external fertilisation? Give examples.
10. What types of organisms use internal fertilisation?
11. Fish reproduce by external fertilisation. Explain why large numbers of fertilised fish eggs are produced, but few develop into adults.
12. For a butterfly, the stages of the life cycle are egg, caterpillar, pupa and adult insect.
  - (a) What are the stages in the life cycle of a frog?
  - (b) Why is it called a cycle?
13. Define: (a) gamete (b) gonad.
14. What distinguishes a gamete from all other cells?
15. What are the features of a sperm?
16. Trace the path of a sperm from the testis to its release through the penis.
17. What are the functions of: (a) testes (b) epididymis (c) vas deferens or sperm duct (d) penis?
18. Where is the seminal fluid produced, and what purpose does it serve?
19. What are the features of an ovum?

20. Trace the path of an unfertilised ovum from the ovary to its release through the vagina.
21. What are the functions of: (a) ovary (b) fallopian tube or oviduct (c) uterus (d) cervix (e) vagina?
22. Describe the following: (a) puberty (b) menopause.
23. Describe the events that occur in the menstrual cycle.
24. Why does a pregnant woman not menstruate?
25. What is the difference between fertilisation and copulation?
26. What distinguishes a zygote from all other cells?
27. Briefly list the stages of gestation that occur from conception to birth of a human baby?
28. Distinguish between oestrus and the menstrual cycle.
29. Explain the difference between identical and non-identical twins.
30. What are the advantages and disadvantages of each of the following reproductive characteristics:
  - (a) the production of shelled eggs
  - (b) early development within the body of a parent
  - (c) a long gestation period
  - (d) extended care of the young
  - (e) different roles for the two parents in reproduction
  - (f) the production of a large number of offspring?
31. Name 3 examples of reproductive behaviour that would improve the chances of survival of offspring.
32. The gestation periods amongst mammals varies. How do you interpret the differences between species?
33. Viruses are not regarded by biologists as living organisms. How do viruses duplicate?