# Chapter 1
# REPRODUCTION IN ORGANISMS

**ONE MARK QUESTIONS:**

1. Define reproduction. (K)
2. What is the significance of reproduction? (K)
3. What is life span? (K)
4. What is asexual reproduction? (K)
5. What is sexual reproduction? (K)
6. Offspring obtained from asexual reproduction are called clones. Why? (A)
7. Name the organism in which cell division itself is a mode of reproduction. (K)
8. Name the asexual reproductive structures in *Penicillium*. (K)
9. Name the asexual reproductive structures in *Chlamydomonas*. (K)
10. Name the asexual reproductive structures in *Hydra*. (K)
11. Name the mode of asexual reproduction in yeast. (K)
12. Name the asexual reproductive structures in sponges. (K)
13. Name the mode of asexual reproduction in *Amoeba*. (K)
14. Name the asexual reproductive spores produced by *Amoeba*. (K)
15. Name a fungus that undergoes asexual reproduction by means of conidia. (K)
16. Name a fungus that undergoes asexual reproduction by means of budding. (K)
17. Name an animal that undergoes asexual reproduction by means of budding. (K)
18. Name an organism that undergoes asexual reproduction by means of zoospores. (K)
19. Name organisms that undergo asexual reproduction by means of gemmules. (K)
20. Name the organism which undergoes asexual reproduction by means of encystation and sporulation. (K)
21. What is encystation? (K)
22. What are gemmules? (K)
23. What are vegetative propagules? (K)
24. Name the vegetative propagule in potato. (K)
25. Name the vegetative propagule in ginger. (K)
26. Name the vegetative propagule in water hyacinth. (K)
27. Name the vegetative propagule in *Agave*. (K)
28. Name the vegetative propagule in onion. (K)
29. Name the vegetative propagule in *Bryophyllum*. (K)
30. Mention an example for a plant which produces tuber as vegetative propagules. (K)
31. Mention an example for a plant which produces rhizome as vegetative propagules. (K)
32. Mention an example for a plant which produces bulb as vegetative propagules. (K)
33. Mention an example for a plant which produces offset as vegetative propagules. (K)
34. Mention an example for a plant which produces bulbil as vegetative propagules. (K)
35. Mention an example for a plant which produces adventitious leaf buds. (K)
36. What is juvenile phase of life span? (K)
37. What is reproductive phase of life span? (K)
38. What is senescent phase of life span? (K)
39. Give the scientific name of the plant which produces flowers once in 12 years. (K)

40. Name the plant that flowers only once in its life time. (K)
41. Name the reproductive cycle that occurs in females which are seasonal breeders. (K)
42. Name the reproductive cycle that occurs in females which are continuous breeders. (K)
43. Name the type of reproductive cycle that occurs in non-primate mammals. (K)
44. What are seasonal breeders? (K)
45. What are continuous breeders? (K)
46. Define gametogenesis. (K)
47. What are homogametes or isogametes? (K)
48. What are heterogametes? (K)
49. What are homothallic organisms? (K)
50. What are heterothallic organisms? (K)
51. What is a monoecious plant? (K)
52. What is a dioecious plant? (K)
53. Why *Cucurbita* plant is called a monoecious plant? (A)
54. Why papaya plant is called a dioecious plant? (A)
55. Why coconut palm is called a monoecious plant? (A)
56. Why date palm is called a dioecious plant? (A)
57. Mention an example for a monoecious plant. (K)
58. Mention an example for a dioecious plant. (K)
59. What is a staminate flower? (K)
60. What is pistillate flower? (K)
61. What are hermaphrodites? (K)
62. Mention an example for a hermaphrodite. (K)
63. Why tapeworm is considered as a hermaphrodite? (A)
64. Why leech is considered as a hermaphrodite? (A)
65. Why earthworm is considered as a hermaphrodite? (A)
66. Why sponges are considered as hermaphrodites? (A)
67. What are pre-fertilisation events? (K)
68. What are post-fertilisation events? (K)
69. What are meiocytes? (K)
70. If 2n = 40 in an organism, what would be the number of chromosomes in its meiocytes? (A)
71. Why the number of male gametes produced in majority of the organisms is several thousand times the number of female gametes produced? (A)
72. Define fertilization or syngamy. (K)
73. Define parthenogenesis. (K)
74. What is internal fertilization? (K)
75. What is external fertilization? (K)
76. Give an example for an animal where fertilization is external. (K)
77. Give an example for an animal group where fertilisation is internal. (K)
78. Give an example for a plant group where fertilisation is internal. (K)
79. Why external fertilization is disadvantageous to animals when compared to internal fertilization? (A)
80. Why internal fertilization is advantageous to the animal when compared to external fertilization? (A)
81. What type of cell division occurs in zygote of organisms with haplobiontic life cycle? (K)

82. What type of cell division occurs in the zygote of organisms with diplontic or haplo-diplontic cycle? (K)
83. Define embryogenesis. (K)
84. What are oviparous animals? (K)
85. What are viviparous animals? K
86. Why the chances of survival of young ones are more in viviparous animals than in oviparous animals? (A)
87. Name the protective wall of fruit. (K)
88. What is pericarp? (K)

**TWO MARK QUESTIONS:**

1. Mention any two differences between asexual reproduction and sexual reproduction. (K)
2. Water hyacinth is known as "terror of Bengal". Justify the statement. (A)
3. What are vegetative propagules? Mention two examples. (K)
4. Mention any two vegetative propagules of angiosperms. (K)
5. Mention the vegetative propagules of *Agave* and ginger (K)
6. Name the asexual reproductive structures in *Penicilliium* and *Hydra*. (K)
7. Name the asexual reproductive structures in *Chlamydomonas* and sponges. (K)
8. Name the asexual reproductive structures in *Amoeba* and yeast. (K)
9. Name the vegetative propagules in potato and ginger. (K)
10. Name the vegetative propagules in onion and ginger. (K)
11. Name the vegetative propagules in onion and potato. (K)
12. Name the vegetative propagules in *Eichhornia* and potato. (K)
13. Name the vegetative propagules in *Eichhornia* and ginger. (K)
14. Name the vegetative propagules in *Eichhornia* and onion. (K)
15. Name the vegetative propagules in *Bryophyllum* and potato. (K)
16. Name the vegetative propagules in *Bryophyllum* and onion. (K)
17. Name the vegetative propagules in *Bryophyllum* and ginger. (K)
18. Name the vegetative propagules in *Bryophyllum* and *Agave*. (K)
19. Name the vegetative propagules in *Bryophyllum* and *Eichhornia*. (K)
20. Name the vegetative propagules in *Eichhornia* and *Agave*. (K)
21. Name the vegetative propagules in onion and *Agave*. (K)
22. Name the vegetative propagules in potato and *Agave*. (K)
23. Name the vegetative propagules in ginger and *Agave*. (K)
24. Name the asexual spores produced by *Amoeba* and *Chlamydomonas*. (K)
25. Name the asexual spores produced by *Amoeba* and *Penicillium*. (K)
26. Name the asexual spores produced by *Penicillium* and *Chlamydomonas*. (K)
27. Give two examples for plants which exhibit unusual flowering phenomenon. (K)
28. Differentiate between menstrual cycle and estrous cycle. (U)
29. Differentiate seasonal breeders from continuous breeders. (U)
30. Name the reproductive cycle that occurs in females which are seasonal breeders. Give an example for a seasonal breeder. (K)
31. Name the reproductive cycle that occurs in females which are continuous breeders. Give an example for a continuous breeder. (K)
32. Distinguish between homogametes and heterogametes. (U)

33. What are heterogametes? Mention an organism which produces heterogametes. (K)
34. What are homogametes? Mention an organism which produces homogametes. (K)
35. Distinguish between monoecious plants and dioecious plants. (U)
36. Distinguish between homothallic plants and heterothallic plants. (U)
37. What are homothallic organisms? Mention an example. (K)
38. What are heterothallic organisms? Mention an example. (K)
39. Distinguish between pistillate and staminate flowers. (U)
40. What are hermaphrodites? Mention one example. (K)
41. What is fertilization? Mention the types. (K)
42. What is external fertilization? Why is it disadvantageous compared to internal fertilization? (U)
43. What is internal fertilization? Why is it advantageous compared to external fertilization? (U)
44. Differentiate internal fertilization and external fertilization. (U)
45. What is parthenogenesis? Name two organisms which exhibit this. (K)
46. Differentiate between gametogenesis and embryogenesis. (U)
47. What is embryogenis? Mention two important events that occur during embryogenesis. (K)
48. Differentiate oviparous animals from viviparous animals. (U)
49. What are oviparous animals? Why ovipary is disadvantageous? (U)
50. What are viviparous animals? Why vivipay is advantageous? (U)

**THREE MARK QUESTIONS:**

1. Differentiate asexual reproduction from sexual reproduction. (U)
2. What is asexual reproduction? Explain encystation and sporulation in *Amoeba*. (U)
3. What are vegetative propagules? Name the vegetative propagules in potato and ginger. (K)
4. What are vegetative propagules? Name the vegetative propagules in onion and ginger. (K)
5. What are vegetative propagules? Name the vegetative propagules in onion and potato.(K)
6. What are vegetative propagules? Name the vegetative propagules in *Eichhornia* and potato. (K)
7. What are vegetative propagules? Name the vegetative propagules in *Eichhornia* and ginger. (K)
8. What are vegetative propagules? Name the vegetative propagules in *Eichhornia* and onion. (K)
9. What are vegetative propagules? Name the vegetative propagules in *Bryophyllum* and potato. (K)
10. What are vegetative propagules? Name the vegetative propagules in *Bryophyllum* and onion. (K)
11. What are vegetative propagules? Name the vegetative propagules in *Bryophyllum* and ginger. (K)
12. What are vegetative propagules? Name the vegetative propagules in *Bryophyllum* and *Agave*. (K)
13. What are vegetative propagules? Name the vegetative propagules in *Bryophyllum* and *Eichhornia*. (K)
14. What are vegetative propagules? Name the vegetative propagules in *Eichhornia* and *Agave*. (K)
15. What are vegetative propagules? Name the vegetative propagules in onion and *Agave*. (K)
16. What are vegetative propagules? Name the vegetative propagules in potato and *Agave*. (K)
17. What are vegetative propagules? Name the vegetative propagules in ginger and *Agave*. (K)
18. Name the vegetative propagules in onion, potato and ginger. (K)
19. Name the vegetative propagules in onion, potato and Agave. (K)
20. Name the vegetative propagules in onion, potato and *Bryophyllum*. (K)
21. Name the vegetative propagules in onion, potato and *Eichhornia*. (K)
22. Name the vegetative propagules in onion, ginger and *Eichhornia*. (K)
23. Name the vegetative propagules in onion, ginger and *Agave*. (K)

24. Name the vegetative propagules in onion, ginger and *Brophyllum*. (K)
25. Name the vegetative propagules in onion, *Agave* and *Bryophyllum*. (K)
26. Name the vegetative propagules in onion, *Agave* and *Eichhornia*. (K)
27. Name the vegetative propagules in onion, *Bryophyllum* and *Eichhornia*. (K)
28. Name the vegetative propagules in potato, ginger and *Agave*. (K)
29. Name the vegetative propagules in potato, ginger and *Bryophyllum*. (K)
30. Name the vegetative propagules in potato, ginger and *Eichhornia*. (K)
31. Name the vegetative propagules in potato, *Agave* and *Bryophyllum*. (K)
32. Name the vegetative propagules in potato, *Agave* and *Eichhornia*. (K)
33. Name the vegetative propagules in potato, *Bryophyllum* and *Eichhornia*. (K)
34. Name the vegetative propagules in ginger, *Agave* and *Bryophyllum*. (K)
35. Name the vegetative propagules in ginger, *Bryophyllum* and *Eichhornia*. (K)
36. Name the vegetative propagules in *Agave*, *Bryophyllum* and *Eichhornia*. (K)
37. Explain the distinct phases of life span in organisms. (U)
38. Distinguish between homogametes and heterogametes. Give an example each of organisms producing these. (U)
39. Distinguish between homothallic and heterothallic organisms. Give an example for each. (U)
40. Distinguish between monoecious plants and dioecious plants with an example for each. (U)
41. Define fertilization. Differentiate external fertilization and internal fertilization. (U)

**FIVE MARK QUESTIONS:**

1. Describe any five modes of asexual reproduction. (U)
2. Describe sexuality in organisms. (U)
3. Write a detailed account of fertilization as an event during sexual reproduction in organisms. (U)

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