

Source: Chapter-01 Reproduction in organisms

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(Adopted for educational social service purpose only).

1. In which of the following mammal estrous cycle is absent:
(a) cow (b) horse (c) monkey (d) rabbit
Ans: c
2. Identify the incorrect statement.
a. In asexual reproduction, the offspring produced are morphologically and genetically identical to the parent
b. Zoospores are sexual reproductive structures
c. In asexual reproduction, a single parent produces offspring with or without the formation of gametes
d. Conidia are asexual structures in Penicillium
Ans: b
3. Asexual reproductive structure of sponge:
(a) Gemmules (b) conidia (c) bulb (d) none of these
Ans: a
4. Which of the following is developed by parthenogenesis:
(a) Drones (b) queen honey bee (c) worker honey bee (d) both b and c
Ans: a
5. ----- is formed immediately after fertilization
(a) morula (b) blastula (c) zygote (d) foetus
Ans: c
6. The process which results the formation of zygote
(a) Isogamy (b) Anisogamy (c) Triple fusion (d) Syngamy
Ans: d
7. Which of the following is not an asexual reproductive structure?
(a) zoospores (b) pollen (c) buds (d) conidia
Ans: b

8. Parthenogenesis is the development of an organism directly from:
(a) Female gametes (b) Vegetative cells (c) Fertilized ovum (d) none of these
Ans: a
9. Which of the following organism reproduces by multiple fission?
(a) Euglena (b) Paramecium (c) Trypanosoma (d) Plasmodium
Ans: d
10. Which type of stem modification is seen in banana?
(a) stem tuber (b) bulb (c) corn (d) rhizome
Ans: d
11. Which animals have developed capacity of regeneration ?
(a) Hydra, Starfish (b) Plasmodium (c) Leech (d) Paramoecium
Ans: a
12. Sporulation occurs in
(a) Plasmodium (b) Hydra (c) Starfish (d) Spongilla
Ans: a
13. Which plant reproduces vegetatively by roots ?
(a) Oxalis (b) Bryophyllum (c) Onion (d) Dahlia
Ans: d
14. Which plant performs vegetative reproduction with the help of floral buds ?
(a) Agave (b) Bryophyllum (c) Ginger (d) Asparagus
Ans: a
15. Which part of the plant Bryophyllum performs vegetative reproduction ?
(a) Stem (b) Floral buds (c) Underground roots (d) Buds on leaf margin
Ans: d

16. Juvenile phase represents the period of
a. Growth b. Death c. Birth d. None
Ans: a
17. Either male or female reproductive organs are found in the body
a. Monoecious b. Dioecious c. Meicyte d. Syngamy
Ans: b
18. Propagules are used to raise--
a. growth b. new plants c. old plants d. all the above.
Ans: b
19. Find the monoecious plant
a. Coconut b. Cucurbits c. Both a and b d. Papaya
Ans: c
20. Identify the mis-match statement regarding post-fertilization events from the following statements.
(a) Wall of ovary is converted into pericarp
(b) Outer integument is converted into inner endocarp
(c) Triploid nucleus develops as endosperm
(d) Ovary is developed as fruit
Ans: b
21. In these organisms, gametes are released in the surrounding medium
a. Fishes b. Amphibians c. Mammals d. Both a and b
Ans: d
22. Choose the correct statement from amongst the following:
a. Dioecious (hermaphrodite) organisms are seen only in animals
b. Dioecious organisms are seen only in plants
c. Dioecious organisms are seen in both plants and animals
d. Dioecious organisms are seen only in vertebrates
Ans: c
23. There is no natural death in single celled organisms like Amoeba and bacteria because:
a. They cannot reproduce sexually

b. They reproduce by binary fission

c. They are not diploid

d. They are microscopic

Ans: b

24. Amoeba reproduces by

(a) Binary fission (b) Budding (c) Sporulation (d) Both a and c

Ans: d

25. What are ciliated spores ?

(a) Non-motile spores (b) Zoospores (c) Homospores (d) Heterospores

Ans: b

26. Non-flagellated spores are called conidia . In which organism they are seen ?

(a) **Pencilium** (b) Hydra (c) Amoeba (d) Chlamydomonas

Ans: a

27. Which animals reproduce by exogenous budding?

(a) Hydra (b) **Spongilla** (c) Plasmodium (d) Amoeba

Ans: b

28. Some unicellular organisms shift to sexual method of reproduction, before the onset of adverse conditions, because

a) Sexual reproduction is a simple method

b) it involves gametes

c) Survival chances are more in sexual reproduction due to variations

d) **None of these**

Ans: d

29. During which process cyst is formed ?

(a) Binary fission (b) Multiple fission (c) **Sporulation** (d) Budding

Ans: c

30. In which method of reproduction, pseudopodiospores are formed ?

(a) Binary fission (b) Multiple fission (c) **Sporulation** (d) Budding

Ans: c

31. Antherozooids are the gametes formed in
a) Algae b) Bryophytes c) Pteridophytes d) Both b and c
Ans: d
32. During which process cyst is formed ?
(a) Binary fission (b) Multiple fission (c) Sporulation (d) Budding
Ans: b
33. In which method pseudopodiospores are formed ?
(a) Binary fission (b) Multiple fission (c) Sporulation (d) Budding
Ans: c
34. In which organism multiple fission is seen ?
(a) Paramecium (b) Plasmodium (c) Hydra (d) Planaria
Ans: b
35. Which of the following is not a natural method of vegetative reproduction ?
(a) Suckers (b) Cutting (c) Runners (d) Offsets
Ans: b
36. Which type of fission takes place in Euglena ?
(a) Transversal Binary fission (b) Longitudinal Binary fission
(c) Peripheral Binary fission (d) Radial Binary fission
Ans: b
37. The plants which bears two types of heterospores during Sporophytic stage is known as.....
(a) Aplanospores (b) Somatic spores (c) Homosporous (d) Heterosporous
Ans: d
38. Which of the following group of animals show regeneration ?
(a) Planaria, Hydra, Starfish (b) Starfish, Amoeba, Plasmodium
(c) Amoeba, Hydra, Paramecium (d) Amoeba, Planaria, Starfish
Ans: a
39. A few statements describing certain features of reproduction are given below:
i. Gametic fusion takes place

- ii. Transfer of genetic material takes place
- iii. Reduction division takes place
- iv. Progeny have some resemblance with parents

Select the options that are true for both asexual and sexual reproduction from the options given below:

- (a) i and ii (b) ii and iii (c) ii and iv (d) i and iii.

Ans: c

40. The term 'clone' cannot be applied to offspring formed by sexual reproduction because:

- a. Offspring do not possess exact copies of parental DNA
- b. DNA of only one parent is copied and passed on to the offspring
- c. Offspring are formed at different times
- d. DNA of parent and offspring are completely different.

Ans: a

41. Which of the following is a post-fertilisation event in flowering plants?

- a. Transfer of pollen grains
- b. Embryo development
- c. Formation of flower grains
- d. Formation of pollen

Ans: b

42. A few statements with regard to sexual reproduction are given below:

- i. Sexual reproduction does not always require two individuals
- ii. Sexual reproduction generally involves gametic fusion
- iii. Meiosis never occurs during sexual reproduction
- iv. External fertilisation is a rule during sexual reproduction

Choose the correct statements from the options below:

- (a) i and iv (b) i and ii (c) ii and iii (d) i and iv

Ans: b

43. A multicellular, filamentous alga exhibits a type of sexual life cycle in which the meiotic division occurs after the formation of zygote. The adult filament of this alga has

- a. haploid vegetative cells and diploid gametangia
- b. diploid vegetative cells and diploid gametangia
- c. diploid vegetative cells and haploid gametangia
- d. haploid vegetative cells and haploid gametangia.

Ans: d

44. The male gametes of rice plant have 12 chromosomes in their nucleus. The chromosome number in the female gamete, zygote and the cells of the seedling will be, respectively—
a. 12, 24, 12 b. 24, 12, 12 c. 12, 24, 24 d. 24, 12, 24.

Ans: c

45. Given below are a few statements related to external fertilization. Choose the correct statements. i. The male and female gametes are formed and released simultaneously
ii. Only a few gametes are released into the medium
iii. Water is the medium in a majority of organisms exhibiting external fertilization
iv. Offspring formed as a result of external fertilization have better chance of survival than those formed inside an organism

(a) iii and iv (b) i and iii (c) ii and iv (d) i and iv

Ans: b

46. The statements given below describe certain features that are observed in the pistil of flowers
i. Pistil may have many carpels
ii. Each carpel may have more than one ovule
iii. Each carpel has only one ovule
iv. Pistil have only one carpel Choose the statements that are true from the options below:

(a) i and ii (b) i and iii (c) ii and iv (d) iii and iv

Ans: a

47. Which of the following situations correctly describe the similarity between an angiosperm egg and a human egg?

- i. Eggs of both are formed only once in a lifetime
ii. Both the angiosperm egg and human egg are stationary
iii. Both the angiosperm egg and human egg are motile
iv. Syngamy in both results in the formation of zygote

Choose the correct answer from the options given below:

(a) ii and iv (b) iv only (c) iii and iv (d) i and iv

Ans: a

48. Appearance of vegetative propagules from the nodes of plants such as sugarcane and ginger is mainly because:

- a. Nodes are shorter than internodes
b. Nodes have meristematic cells

- c. Nodes are located near the soil
- d. Nodes have non-photosynthetic cells

Ans: b

49. Which of the following statements, support the view that elaborate sexual reproductive process appeared much later in the organic evolution.

- i. Lower groups of organisms have simpler body design
- ii. Asexual reproduction is common in lower groups
- iii. Asexual reproduction is common in higher groups of organisms
- iv. The high incidence of sexual reproduction in angiosperms and vertebrates

(a) iii and iv (b) iv only (c) ii and iv (d) i and ii

Ans: c

50. Offspring formed by sexual reproduction exhibit more variation than those formed by Asexual reproduction because:

- a. Sexual reproduction is a lengthy process
- b. Gametes of parents have qualitatively different genetic composition
- c. Genetic material comes from parents of two different species
- d. Greater amount of DNA is involved in sexual reproduction.

Ans: b