

Reproduction in Organisms

1.0 Introduction

1. 'Nothing lives forever, but life continues'. What does it mean?
 - (a) Older die but new are produced due to reproduction.
 - (b) Nothing can produce without death.
 - (c) Death has nothing to do with the continuation of life.
 - (d) Parthenogenesis is must for sexual reproduction.
 (1995)

1.1 Asexual Reproduction

2. Offsets are produced by
 - (a) meiotic divisions
 - (b) mitotic divisions
 - (c) parthenocarpy
 - (d) parthenogenesis.
 (NEET 2018)
3. Which one of the following statements is not correct?
 - (a) Offspring produced by the asexual reproduction are called clone.
 - (b) Microscopic, motile, asexual reproductive structures are called zoospores.
 - (c) In potato, banana and ginger, the plantlets arise from the internodes present in the modified stem.
 - (d) Water hyacinth, growing in the standing water, drains oxygen from water that leads to the death of fishes.
 (NEET-II 2016)
4. Which of the following pairs is not correctly matched?

Mode of reproduction	Example
(a) Binary fission	<i>Sargassum</i>
(b) Conidia	<i>Penicillium</i>
(c) Offset	Water hyacinth
(d) Rhizome	Banana

 (2015)
5. In ginger, vegetative propagation occurs through
 - (a) bulbils
 - (b) runners
 - (c) rhizome
 - (d) offsets.
 (2015 Cancelled)

6. Which one of the following is correctly matched?
 - (a) Onion–Bulb
 - (b) Ginger–Sucker
 - (c) *Chlamydomonas*–Conidia
 - (d) Yeast–Zoospores
 (2012)
7. Which one of the following pairs is wrongly matched while the remaining three are correct?
 - (a) *Penicillium* – Conidia
 - (b) Water hyacinth – Runner
 - (c) *Bryophyllum* – Leaf buds
 - (d) *Agave* – Bulbils
 (Mains 2011)
8. The “eyes” of the potato tuber are
 - (a) root buds
 - (b) flower buds
 - (c) shoot buds
 - (d) axillary buds.
 (2011)
9. Vegetative propagation in *Pistia* occurs by
 - (a) stolon
 - (b) offset
 - (c) runner
 - (d) sucker.
 (Mains 2010)
10. Vegetative propagation in mint occurs by
 - (a) offset
 - (b) rhizome
 - (c) sucker
 - (d) runner.
 (2009)
11. During regeneration, modification of an organ to other organ is known as
 - (a) morphogenesis
 - (b) epimorphosis
 - (c) morphallaxis
 - (d) accretionary growth.
 (2001)
12. Vegetative reproduction of *Agave* occurs through
 - (a) rhizome
 - (b) stolon
 - (c) bulbils
 - (d) sucker.
 (1991)
13. For union between stock and scion in grafting which one is the first to occur?
 - (a) Formation of callus
 - (b) Production of plasmodesmata
 - (c) Differentiation of new vascular tissues
 - (d) Regeneration of cortex and epidermis
 (1990)

1.2 Sexual Reproduction

14. In some plants, the female gamete develops into embryo without fertilisation. This phenomenon is known as
(a) parthenogenesis (b) autogamy
(c) parthenocarp (d) syngamy. (NEET 2019)
15. Which of the following flowers only once in its lifetime?
(a) Bamboo species (b) Jackfruit
(c) Mango (d) Papaya (NEET 2018)
16. Which one of the following generates new genetic combinations leading to variation?
(a) Vegetative reproduction
(b) Parthenogenesis
(c) Sexual reproduction
(d) Nucellar polyembryony (NEET-II 2016)
17. Match column I with column II and select the correct option using the codes given below.
- | Column I | Column II |
|---------------------------------|-------------------|
| A. Pistils fused together | (i) Gametogenesis |
| B. Formation of gametes | (ii) Pistillate |
| C. Hyphae of higher ascomycetes | (iii) Syncarpous |
| D. Unisexual female flower | (iv) Dikaryotic |
- (a) A-(iv), B-(iii), C-(i), D-(ii)
(b) A-(ii), B-(i), C-(iv), D-(iii)
(c) A-(i), B-(ii), C-(iv), D-(iii)
(d) A-(iii), B-(i), C-(iv), D-(ii) (NEET-II 2016)
18. Flowers are unisexual in
(a) China rose (b) onion
(c) pea (d) cucumber. (2015)
19. Product of sexual reproduction generally generates
(a) new genetic combination leading to variation
(b) large biomass
(c) longer viability of seeds
(d) prolonged dormancy. (NEET 2013)
20. Meiosis takes place in
(a) gemmule (b) megaspore
(c) meiocyte (d) conidia. (NEET 2013)
21. Which one of the following is monoecious?
(a) *Marchantia* (b) *Cycas*
(c) *Pinus* (d) Date palm (Mains 2010)
22. Which one of the following plants is monoecious?
(a) *Pinus* (b) *Cycas*
(c) Papaya (d) *Marchantia* (2009)
23. Why is vivipary an undesirable character for annual crop plants?
(a) It reduces the vigour of the plant.
(b) It adversely affects the fertility of the plant.
(c) The seeds exhibit long dormancy.
(d) The seeds cannot be stored under normal conditions for the next season. (2005)
24. In oogamy, fertilisation involves
(a) a small non-motile female gamete and a large motile male gamete
(b) a large non-motile female gamete and a small motile male gamete
(c) a large non-motile female gamete and a small non-motile male gamete
(d) large motile female gamete and a small non-motile male gamete. (2004)
25. The process of series of changes from larva to adult after embryonic development is called
(a) regeneration (b) growth
(c) metamorphosis (d) ageing. (1999)
26. The oestrous cycle is a characteristic of
(a) human females only
(b) mammalian females other than primates
(c) human males only
(d) mammalian males other than primates. (1995)
27. The sexual reproduction is absent in
(a) *Spirogyra* (b) *Nostoc*
(c) *Ulothrix* (d) *Volvox*. (1995)
28. Parthenogenesis is
(a) development of embryo without fertilisation
(b) development of fruit without fertilisation
(c) development of fruit without hormones
(d) development of embryo from egg without fertilisation. (1988)

ANSWER KEY

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|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (a) | 2. (b) | 3. (c) | 4. (a) | 5. (c) | 6. (a) | 7. (b) | 8. (d) | 9. (b) | 10. (c) |
| 11. (b) | 12. (c) | 13. (a) | 14. (a) | 15. (a) | 16. (c) | 17. (d) | 18. (d) | 19. (a) | 20. (c) |
| 21. (c) | 22. (a) | 23. (d) | 24. (b) | 25. (c) | 26. (b) | 27. (b) | 28. (d) | | |