Multiple-Choice Questions (MCQs)

Asexual Reproduction

- **1.** Which of the following is an example of binary fission?
 - a) Hydra
 - b) Amoeba
 - c) Yeast
 - d) Rhizopus
 - Ans: b) Amoeba
- 2. In which type of reproduction are the offspring genetically identical to the parent? a) Sexual reproduction
 - b) Budding
 - c) Fragmentation
 - d) Both b and c
 - Ans: d) Both b and c
- 3. Which of these reproduces by spore formation?
 - a) Hydra
 - b) Plasmodium
 - c) Penicillium
 - d) Amoeba
 - Ans: c) Penicillium
- 4. Hydra reproduces asexually by:
 - a) Binary fission
 - **b**) Spore formation
 - c) Budding
 - d) Fragmentation
 - Ans: c) Budding
- 5. What is the name of the specialized cells used in spore formation in Rhizopus?
 - a) Zoospores
 - **b)** Gametes
 - c) Sporangia
 - d) Conidia
 - Ans: c) Sporangia
- 6. Which organism reproduces by multiple fission?
 - a) Amoeba
 - b) Paramecium
 - c) Plasmodium
 - d) Hydra
 - Ans: c) Plasmodium
- 7. The process in which a new organism develops from an outgrowth of a parent is called:
 - a) Regeneration
 - **b**) Budding

- c) Fragmentation
- d) Spore formation
- Ans: b) Budding
- 8. Vegetative propagation in potato occurs through:
 - a) Leaves
 - b) Roots
 - c) Stem tubers
 - d) Bulbs
 - Ans: c) Stem tubers
- 9. Which part of Bryophyllum helps in vegetative propagation?
 - a) Flowers
 - **b) Roots**
 - c) Leaves
 - d) Stem
 - Ans: c) Leaves
- 10. The process of asexual reproduction in which a parent body divides into two equal halves is known as:
 - a) Budding
 - **b) Binary fission**
 - c) Spore formation
 - d) Fragmentation
 - Ans: b) Binary fission

Sexual Reproduction in Plants

11. In flowering plants, the male gametes are produced in: a) Ovary **b)** Pollen grains c) Ovule d) Stigma **Ans: b) Pollen grains** 12. The transfer of pollen from anther to stigma is called: a) Fertilization b) Pollination c) Germination d) Budding **Ans: b) Pollination** 13. The process of fusion of male and female gametes is known as: a) Pollination **b)** Fertilization c) Germination d) Fragmentation Ans: b) Fertilization

14. What is double fertilization in flowering plants?

- a) Fusion of two male gametes
- b) Fusion of male gametes with two different nuclei
- c) Fusion of one male gamete with two egg cells
- d) None of these
- Ans: b) Fusion of male gametes with two different nuclei
- 15. Which of the following is an agent of cross-pollination?
 - a) Wind
 - b) Water
 - c) Insects
 - d) All of the above
 - Ans: d) All of the above
- 16. Which structure develops into fruit after fertilization?
 - a) Ovule
 - b) Ovary
 - c) Stigma
 - d) Petals
 - Ans: b) Ovary
- 17. Which part of the flower protects it during the bud stage?
 - a) Sepals
 - **b)** Petals
 - c) Ovary
 - d) Filament
 - Ans: a) Sepals
- 18. Which of the following flowers has both male and female reproductive structures?
 - a) Papaya
 - b) Mustard
 - c) Watermelon
 - d) Mulberry
 - Ans: b) Mustard
- 19. Which is the male reproductive organ of a flower?
 - a) Ovary
 - b) Stigma
 - c) Stamen
 - d) Ovule
 - Ans: c) Stamen
- **20.** The ovule of a flower contains:
 - a) Pollen grains
 - b) Egg cell
 - c) Anther
 - d) Sepals
 - Ans: b) Egg cell

Human Reproduction

- 21. Which organ in males produces sperm?
 - a) Prostate gland
 - b) Penis
 - c) Testes
 - d) Scrotum
 - Ans: c) Testes
- 22. What is the role of the fallopian tube in females?
 - a) Sperm production
 - b) Fertilization of egg
 - c) Attachment of embryo
 - d) Hormone production
 - **Ans: b) Fertilization of egg**

23. Which hormone is responsible for secondary sexual characteristics in males?

- a) Estrogen
- b) Testosterone
- c) Progesterone
- d) Oxytocin
- Ans: b) Testosterone
- 24. What is the function of the placenta?
 - a) Excretes waste from the embryo
 - b) Transports nutrients and oxygen to the embryo
 - c) Protects the embryo
 - d) Facilitates fertilization
 - Ans: b) Transports nutrients and oxygen to the embryo
- 25. Where does fertilization occur in the human female reproductive system?
 - a) Ovary
 - b) Uterus
 - c) Fallopian tube
 - d) Cervix
 - Ans: c) Fallopian tube
- 26. Which of the following is an example of external fertilization?
 - a) Humans
 - b) Frogs
 - c) Birds
 - d) Insects
 - Ans: b) Frogs
- 27. Which hormone triggers ovulation in females?
 - a) FSH
 - b) LH
 - c) Progesterone
 - d) Oxytocin
 - Ans: b) LH
- 28. Which is the site of implantation of the fertilized egg?
 - a) Ovary

b) Fallopian tube c) Uterus d) Vagina Ans: c) Uterus 29. Which of the following is a contraceptive method? a) Oral pills b) Copper-T c) Condom d) All of the above Ans: d) All of the above **30.** The structure formed by fertilization of an egg and sperm is called: a) Embryo b) Zygote c) Blastula d) Foetus Ans: b) Zygote

Miscellaneous

31. Which of the following organisms can regenerate their lost body parts?

a) Hydra

b) Planaria

c) Starfish

d) All of the above

Ans: d) All of the above

32. What is the chromosome number in a human sperm cell?

- a) 46
- **b) 44**

c) 23

d) 22

Ans: c) 23

33. Which method of reproduction involves two parents?

a) Sexual reproduction

- **b) Budding**
- c) Spore formation

d) Binary fission

Ans: a) Sexual reproduction

34. DNA copying during reproduction is essential because it:

a) Helps the organism grow

b) Helps in repair

c) Ensures the transfer of traits

d) Produces variations

Ans: c) Ensures the transfer of traits

35. Which plant can propagate through its roots?
a) Mango
b) Dahlia
c) Potato
d) Bryophyllum
Ans: b) Dahlia