

SAINIK SCHOOL GOPALGANJ

SUB: BIOLOGY

CLASS - XII

ASSIGNMENT

Lesson: 1: Reproduction in organism

(Q1 – Q10) Given below are four options against each question. Choose the option which you consider the most appropriate as your answer.

1. Vegetative propagation in *Pistia* occurs by
 - (a) Sucker
 - (b) Offset
 - (c) Runner
 - (d) Rhizome
2. The term homothallic and monoceious are used to denote
 - (a) Unisexual condition
 - (b) Bisexual condition
 - (c) Staminate flowers
 - (d) Pistillate flowers
3. Identify the correct sequence of events
 - (a) Gametogenesis, Syngamy, Embryogenesis, Zygote
 - (b) Gametogenesis, Zygote, Syngamy, Embryogenesis
 - (c) Gametogenesis, Embryogenesis, Zygote, Syngamy
 - (d) Gametogenesis, Syngamy, Zygote, Embryogenesis
4. There is no natural death in single celled organisms like *Amoeba* and bacteria
 - (a) They can not reproduce sexually
 - (b) They reproduce by binary fission
 - (c) Parental body is distributed among the offspring
 - (d) They are microscopic
5. Development of unfertilized ovum into a new individual, is called
 - (a) Parthenogenesis
 - (b) Parthenocarp
 - (c) Fertilization
 - (d) None of these
6. Multiple fission occurs in.
 - a) *Amoeba*
 - (b) *Plasmodium*
 - (c) Fungi
 - (d) None of these
7. Asexual reproduction in fungi takes place by
 - a) Gemmule
 - (b) Conidia
 - (c) Binary fission
 - (d) None of these
8. Match the following

| Column I | Column II |
|-----------------|-------------------------|
| (Organism) | (Approximate life span) |
| A. Butterfly | 1.60 years |
| B. Crow | 2.140 years |

C.Parrot
D.Crocodile

3.15 years
4.1-2 weeks

The correct sequence is

(a) 3,1,4,2

(b) 4,3,2,1

(c) 3,2,1,4

(d) 2,3,1,4

9. A person which shows the secondary sexual characters of both male and female is called

(a) Intersex

(b) Hermaphrodite

(c) Bisexual

(d) Gyanandromorph

10. Offspring formed by sexual reproduction exhibit more variations 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.

11. Name the vegetative propagules in the following.

(i) Banana

(ii) Agave

(iii) Bryophyllum

(iv) Water Hyacinth

12. Differentiate between the following.

(a) Oviparous and viviparous

(b) Pre-fertilization and post-fertilization events

13. How is the sexuality of papaya plant different from a maize plant?

14. In which organisms gametes are non motile? How do they reach the female gamete for fertilization?

15. Give reasons:

(a) Rotifers are called Parthenogenic organisms.

(b) Mammals living in natural wild condition are seasonal breeders

(c) Water Hyacinth is called an invasive weed

(d) Bamboo plants are considered to have unusual flowering response.

(e) *Marchantia* is considered dioeciously.

16. Mention the advantages of sexual reproduction. State the different stages of organism's life span.

17. You must have seen your mother adding 3-4 globules of yeast to the idli paste she has prepared. Similarly, brewing industry uses yeast in the manufacture of alcohol.

(a) How does such a small amount of yeast added help to produce thousands of liters of alcohol? Explain how yeast multiplies so fast.

(b) Name the process carried out by yeast in these cases.

18. In nature, i.e. in the wild birds lay eggs seasonally during a particular time of the year but in poultry farm, eggs are produced throughout the year.

(a) Give reason for this observation.

(b) Is it ethically /morally correct in your opinion? Justify your argument.

19. Describe the different types of asexual reproduction exhibited by unicellular organisms.

20. Define external fertilization. Mention its disadvantages.
