

Question = Answer :-

1. Define reproduction.

A:- The process by which an organism produces new organism of its own kind is known as reproduction.

2. What is asexual reproduction?

A:- When a single parent is involved in the formation of new generations, without the fusion of gametes it is called asexual reproduction.

3. Give the types of asexual reproduction with examples.

A:-
Fission (Binary - Amoeba, Leishmania)
Multiple fission - Plasmodium,
Budding - Hydra, spore formation)
(Rhizopus)

Regeneration - Planaria - fragmentation - spirogyra
and Propagation.

4. Reproduction is essential phenomenon that is not for survival of an individual
OR

Why do organisms reproduce.

A:- The new organisms are produced from existing organisms of its own kind through reproduction.

- Unlike other essential life processes such as nutrition, respiration, excretion, etc. also reproduction is not necessary to maintain the life of an individual organism.
- Every organism has limited life span and each one will die.
Organism produces - limited life span and each one will die.
- Organism produces new off spring of its kind by reproduction. Existing organisms continue this chain.
- Through the reproduction, new members of each species are produced and continuity of life is maintained.

Q. How do organisms create exact copies of themselves through reproduction?

A:- Organisms of same species look similar because their body designs are similar. Reproduction at its most basic level will involve making copies of the blue-print

of body design.

- The chromosome in the nucleus of a cell contain information for inheritance of features from parents to next generation in the form of DNA molecules.
- The DNA present in the cell nucleus is the source of information for protein synthesis. The types of protein synthesized in cell are responsible for characters that are formed.
- Organisms of same species have specific DNA and this DNA is inherited to next generation through reproduction. According to information of DNA, protein are made. So organisms create exact copy of themselves with some variation.

6. What is the importance of DNA copying in reproduction?

Ans- Importance of DNA copying in reproduction:

→ Transmission of hereditary information of parent to offspring.

→ Formation of variation by changing in DNA lead to evolution of species over a period of time.