

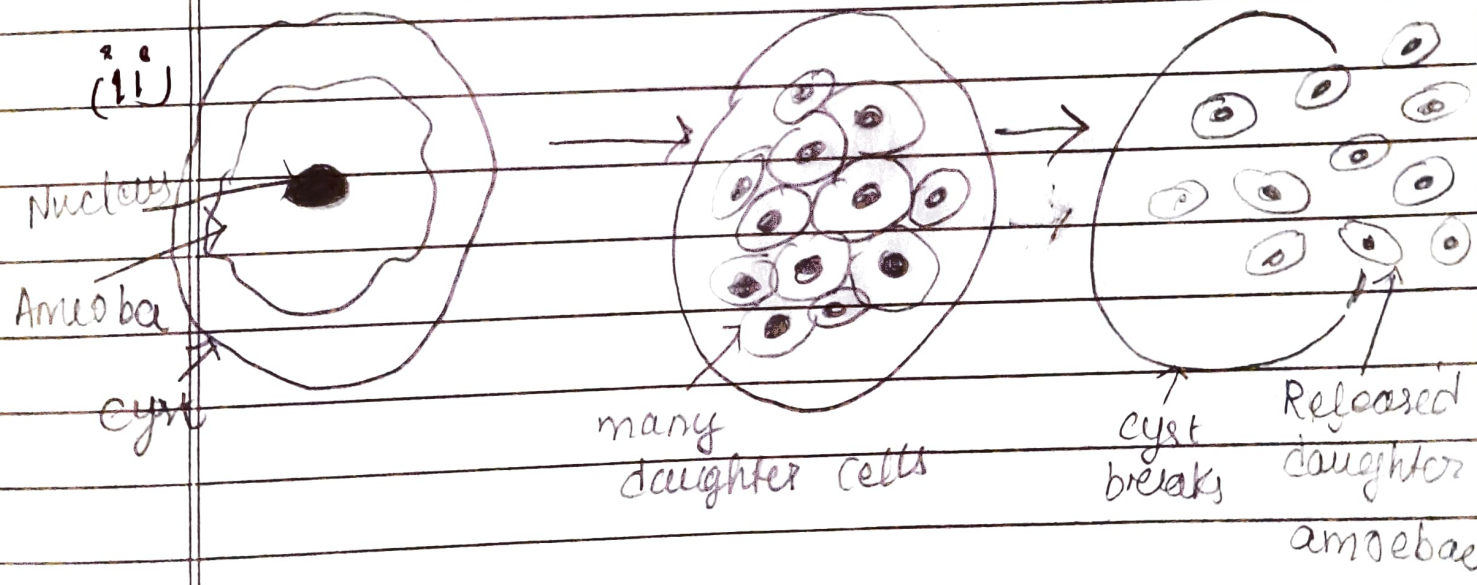
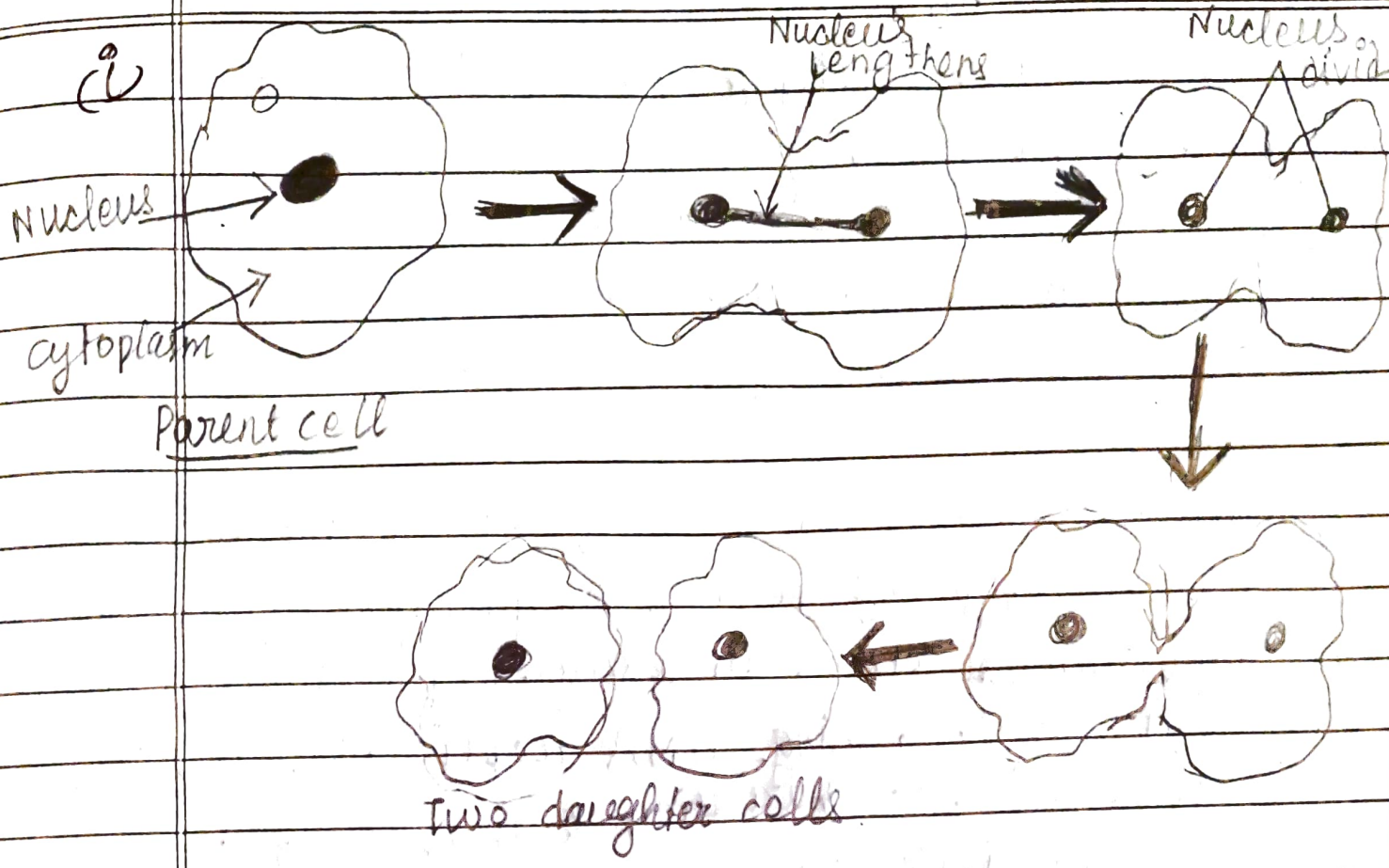
HOME ASSIGNMENTS

1. "Variations that confer an advantage to an individual organism only will survive in a population". Justify.

The great advantage of variation to a species is that it increases the chances of its survival in changing environment. The variations produced in organisms during successive generations get accumulated in the organisms. The significance of variation shows up only if it continues to be inherited by the offspring for several generations. For example, the accumulation of heat resistant variation in some bacteria will ensure its survival even when the temp. in its environment rises too much due to a heat wave. On the other hand, the bacteria which didn't have this variation to withstand heat would not survive.

2. Illustrate the following with the help of suitable diagram -

- (i) Binary fission in Amoeba
- (ii) Multiple fission in Amoeba



3. What is reproduction? What are its two types? Which one of the two confers new characteristics on the offsprings and how?
 Reproduction is the process by which

all organisms multiply in number and increase their population.

Types -

- Asexual reproduction
- Sexual reproduction

Sexual reproduction confers new characteristics on the offspring because the process of DNA replication occurs in sexual reproduction. Mutation occurs during DNA replication which give rise to variation & thus confers new characteristics on the offspring.